

Education Baseline in Africa November 2021



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Expanding the coverage of CESA indicators

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Published in 2021 by:

UNESCO Institute for Statistics P.O. Box 6128, Succursale Centre-Ville Montreal, Quebec H3C 3J7 Canada Tel: +1 514-343-6880 Email: uis.publications@unesco.org http://www.uis.unesco.org

Ref: UIS/2021/LO/RR/07 ISBN: 978-92-9189-271-6



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Education Baseline in Africa: Expanding the coverage of CESA indicators

Executive Summary

Agenda 2063 "The Africa We Want" was adopted at the January 2013 African Union Summit and reflects the aspirations of the African continent for the post–2015 development agenda. In 2016, the African Union (AU) adopted a framework for transforming education systems in the region: the Continental Education Strategy for Africa (CESA 16–25) which consists of 12 Strategic Objectives (SOs). Alignment and coherence between targets and indicators of the SDG global framework and CESA 16–25 is an important enabling factor in monitoring and implementing the Education 2030 Agenda. While both frameworks focus on monitoring and improving learning outcomes, as well as inclusion and sustained access, CESA gives special importance to the targets considered as means of implementation in the global framework, with its three first SOs dedicated to teachers and school infrastructure. CESA also gives special attention to TVET and tertiary education in three SOs.

In general, there is overall alignment between targets of the 2 frameworks: however, only 17 monitoring indicators are common to both. There are 41 indicators exclusive to CESA, and 23 to SDG 4. In addition to the seven global benchmarked indicators, there are seven more in Africa to complete the other priorities of the continent.

The major findings of the report are as follows:

- SO 1 Teachers: In Central Africa, there are significant disparities in the proportion of teachers with the minimum required qualifications. Northern Africa has the highest proportions and Southern Africa also reports high proportions.
- SO 2 Infrastructure: In Africa, there is great disparity between the regions in the provision of drinking water, toilets, and handwashing facilities. Eastern and Western Africa have higher proportions of schools offering these basic services. In a few countries, especially in Eastern and Western Africa, less than 50% of the schools offer handwashing facilities.
- SO 3 Information and Communication Technology (ICT): Northern and Eastern Africa reported the highest proportions of schools with computers and internet. In all regions, the proportion of primary schools with these services is lower than secondary schools. Countries with the lowest proportions are in Western Africa. Access to a source of electricity remains an important challenge in some regions, especially in primary.
- **SO 4 Skills and Completion Rates:** SO 4 is composed of many dimensions encompassing different SDG 4 targets. In primary, the average completion rate is above 50% for all regions; in lower secondary, only Northern Africa reaches this level and in upper secondary, none of the subregions do. Data on proficiency in literacy and numeracy are available mostly for the primary level. Values for reading and mathematics are slightly better in grades 2 to 3 than by the end of the primary. A companion publication assesses and explores the trends in learning proficiency in Africa¹.
- SO 5 Parity and Equity Adjusted gender parity index for completion rates show that girls are favored at the primary level while boys are favored at the secondary level. The average percentage of teachers who are female is above 50% in primary for all subregions but Western Africa. In primary, Southern Africa has the lowest rates of girls out of school while Eastern and Central Africa show some of the higher rates.
- SO 6 Literacy In all subregions, the elderly population has lower literacy rates compared to younger cohorts. A significant proportion of the population, both youth and adult, did not have access to literacy programmes in the region.

¹ Assessing Learning Proficiency Levels and Trends for Sustainable Development Goal 4.1: A focus on Africa. http://tcg.uis.unesco.org/ wp-content/uploads/sites/4/2021/11/Measuring-Learning-Proficiency-SDG-4-1_Oct-2021.pdf

- **SO 8 TVET** The proportion of students enrolled in secondary-level vocational programmes is lower than 25% for all countries with data available, with some variations across countries. For 13 out 28 countries, this percentage is lower than 10%, which reflects a low coverage of vocational education in the region.
- SO 9 Tertiary Education Among countries with available data, only one has a gross enrolment ratio (GER) in tertiary education higher than 50% and only 4 countries have a GER above 30%. Despite the lower coverage in most countries, there are clear trends of increasing coverage, particularly in Northern Africa. Inbound mobility ratios are generally low across the region compared to outbound ratios.
- SO 10 Peace and Non-violence Global citizenship education and education for sustainable development are generally covered across national policies, curricula, and teacher education and student assessments in the region. As for life skills-based HIV and sexuality education, there is significant country variation and the percentage is substantially higher at the lower and upper secondary levels.
- Finance indicators In terms of expenditure on education as a percentage of total government expenditure, Southern and Western Africa are close to the 15% threshold. As for the expenditure on education as a share of GDP, the average expenditure is above the 5% target only in Southern Africa and only seven countries are above the minimum threshold in 2019.

More effort is needed to produce indicators and data to efficiently monitor both the CESA and SDG frameworks. This data crisis particularly in Africa, was one of the concerns raised during the SDG 4 national consultations held in 2016-17. Available statistics for learning are not the exception and confirm that the measurement of learning is weak in the region compared to the rest of the world. In fact, many concerns were expressed in relation to benchmarking and setting national targets, policy implementation and reporting mechanisms for the CESA and the SDG 4 targets. Beyond the poor legal and institutional environments for data production, particularly a lack of dedicated education data policy, secured and adequate resources, all countries pointed the need of support to domesticate the CESA-SDG4 targets, establish a framework for monitoring their national targets, capacity building and support in the areas of data analysis and utilization to guide the development of their education systems. The same concerns were raised during the regional forum on the SDGs (Marrakech 2019, Victoria Falls 2020) and the Pan African Conference on Education (PACE 2018). Moreover, a recent report on the Pan-African Statistical Institute² highlights 3 gaps that would hamper efforts to realize the SDGs in African countries: information gap, quality gap and capacity gap. These gaps affect negatively the ability of countries, regional economic commissions and the continental bodies to gauge success and failures of development policies.

² https://au.int/sites/default/files/pages/32832-file-pas_au_institute_report.docx.pdf

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Foreword

Monitoring progress toward the Sustainable Development Goal 4 for education (SDG 4) is crucial to ensuring that children around the world have access to a quality education where they can learn and gain the skills they need to meet their full potential. The setbacks imposed by the COVID-19 pandemic on the SDG 4 objectives demonstrate that it is more important than ever to provide countries with the necessary data to inform effective and impactful policy solutions to the education crisis.

African countries have also established a comprehensive educational agenda for the continent. In 2016, the African Union (AU) adopted the Continental Education Strategy for Africa (CESA 16–25) as the framework for transforming education systems in the region. The CESA 16–25 consists of 12 Strategic Objectives (SOs) designed to involve the broadest coalition possible for education and training in Africa.

Building on the first report which bridged the global and the regional frameworks with one another, this report intents to set a baseline towards the objectives established by both the CESA and the SDG 4 frameworks. It also projects the increase of the coverage of CESA indicators framework, by exploring proxies among the SDG4 indicators, and the likelihood to collect additional ones through the existing annual school census templates for administrative data in 31 countries.

This report is part of a suite of products to ease the regular monitoring of the African countries' achievements on both Agenda 2030 and Agenda 2063 through its ten years implementation strategy (CESA 16-25). The current products set the baseline for education in the African continent and provide an overview of the implementation of the regional CESA 16-25 and global SDG 4 education frameworks since their adoption in 2015. This comes in compliance with the commitment taken in the Nairobi Declaration to produce biennial reports on education in Africa³

To further monitor regional progress, the UIS has created specific country tables which show, in graphic form, the national context of each country, along with their education system, and country profiles where national information is presented by SO and SDG4 targets, along historical data trends. A companion publication focused on learning progress on the continent completes the package: Assessing Learning Proficiency Levels and Trends for Sustainable Development Goal 4.1: A focus on Africa.

The report has been compiled and assembled by Tiago Vier who collaborated in the writing along with the support and inputs from Daniel Capistrano, the UIS team in Africa (Georges Boade – regional advisor) and Canada (Lina Ktaili and Adolfo Imhof).

Silvia Montoya

Director, UNESCO Institute for Statistics

³ African Union 2018a, §11, d.

Abbreviations and Acronyms

AU	African Union
AUC	African Union Commission
CESA 16-25	Continental Education Strategy for Africa 2016–2025
CONFEMEN	Conférence des ministres de l'Éducation des États et gouvernements de la Francophonie
ECLAC	Economic Commission for Latin America and the Caribbean
EMIS	Education Management Information System
EQAP	Educational Quality and Assessment Programme
EU	European Union
GDP	Gross Domestic Product
GER	Gross Enrolment Ratio
GPF	Global Proficiency Framework
GPIA	Adjusted Gender Parity Index
ICT	Information and Communications Technology
IPED	Pan-African Institute of Education for Development
ISCED	International Standard Classification of Education
PACE	Pan African Conference on Education
PacREF	Pacific Regional Education Framework
PEC	Política Educativa Centroamericana
RECs	Regional Economic Commissions
SAARC	South Asian Association for Regional Cooperation
SDG	Sustainable Development Goals
SDG 4	Sustainable Development Goal 4 for education
SEAMEO	Southeast Asia Ministers of Education Organization
SPC	Pacific Community
SO	Strategic Objective
STEM	Science, Technology, Engineering and Mathematics
TCG	Technical Cooperation Group
TVET	Technical and Vocational Education and Training
UIS	UNESCO Institute for Statistics

Introduction

This report is part of a broader initiative by the UNESCO Institute for Statistics (UIS) to connect and combine efforts at the national, regional and global levels towards monitoring the Agenda 2030.⁴ A first regional report on Africa, published in January 2021, focused on the regional priorities in that region in the context of the Sustainable Development Goal 4 (SDG 4) global targets and provided a first compilation of the data available at the UIS to monitor the Continental Education Strategy for Africa (CESA) framework. Other regional reports published on the same initiative considered the regional frameworks in the Asia-Pacific and Latin America and the Caribbean regions.

In Africa, it is a result of collaboration between the UIS and the African Union (AU), a materialization of the MoU signed in 2019, following the Pan African Conference on Education (PACE) in April 2018, co-organized by UNESCO and the AU. Member states called UNESCO/UIS and AUC/IPED to put in place a joint monitoring and reporting mechanism for CESA and SDG4 frameworks.

This SDG 4-CESA regional report provides an overview of the current progress of African countries in relation to Sustainable Development Goal 4 (SDG 4) for education and the Continental Education Strategy for Africa (CESA).

The first report focused on bridging the two frameworks, showing similarities and differences between them. Based on this exercise, a consultation process took place in 2021 between the UIS and the AU, to agree on the indicators for monitoring both frameworks, with an emphasis on CESA indicators. It is in this context that this report for both CESA and SDG 4 was prepared. Future comprehensive reports are scheduled for 2025 and 2030 with thematic reports in between, subject to available new data to generate more indicators to increase the coverage of CESA framework and post covid-19 era.

The report is divided into 12 sections. The first section recalls the main conclusions of the mapping exercise and the ongoing work on development of new indicators. Section 2 presents the benchmarking process that took place during 2021, the indicators selected for benchmarking, and the regional and sub-regional benchmarks that were defined for each indicator. Sections 3 to 12 present the baseline situation under a CESA strategic objective, including indicators available to monitor its achievement. In each section, the list of related indicators is recalled including a symbol to mark those selected for benchmarking. This is followed by a narration of the progress achieved under each available indicator. The report also includes in its appendix, tables that present in detail the relationship between CESA strategic objectives and SDG targets.

A databook is also shared along with the report. Country profiles are scheduled to be released by the end of 2021.

⁴ UNESCO 2016.

COVID impact on education data collection

The 2030 Agenda for Sustainable Development has incited an unprecedented series of plans and actions for the improvement of countries' statistical capacity.⁵ However, many of these processes were abruptly interrupted by the COVID-19 pandemic. International organisations and national governments had to focus on efforts to deal with the consequences of the pandemic, putting many of these developments on hold.

Regular data collection on education was directly affected by this disruption, due in part to the extra burden on planning and statistical units but, even more so, to school closures and their impact on the functioning of the whole education system.

A survey conducted by the UIS in 2020 mapped the situation of national statistical systems in education and assessed to what extent countries were succeeding in dealing with the challenges. The Survey of COVID-19 Pandemic Impacts on National Education Planning Units was launched in July and had the participation of 120 countries from all the regions of the world, 31 of them from the African continent.⁶

Among the CESA countries that took part in the survey, 57% declared that they did not need to stop or postpone education data collections in their countries. Conversely, 40% had to postpone data collection to later in 2020 or 2021.

The survey asked about the perception of planning units in relation to whether the pandemic had affected their ability to meet reporting requirements.

⁵ UIS 2017, 2019.

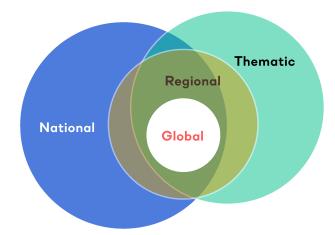
⁶ UIS 2020.

SDG 4 and CESA 16-25 joint monitoring

SDG 4 monitoring is based on universal principles and emphasizes a participatory framework in which all stakeholders (including civil society, business, academia and government) recognize their shared responsibility in achieving the Education 2030 Agenda. SDG 4 monitoring is also a multi-purpose framework based on global, thematic, regional and national levels.

At the regional level, various sets of indicators were developed (or are in development) to take into account the priorities and issues that are shared by countries in a particular region, as outlined in regional planning documents or frameworks. Regions and subregions had reached agreements on certain goals and targets even before the approval of the SDGs, and mapping these strategies and comparing them to the SDGs at the global level is a crucial step in promoting efficiency and avoiding duplication.

Figure 1: Regional indicators and the four levels of monitoring



There are multiple regional and subregional organizations that generate information and promote consensus in the field of education based on common goals. These institutions differ in their organizational structure and level of engagement with educational monitoring. In some agencies, member countries are represented by ministries of education. Others include representatives of civil society or officials appointed by member countries or governments.

These entities can also be part of a supra-regional organization. In general, the member countries of these organizations are linked by common features, such as geographic territory (AU, EU, SEAMEO, CARICOM), language (CONFEMEN), or a cultural or historical characteristic (OEI). These organizations have reached agreements on common education targets in the medium and long term.

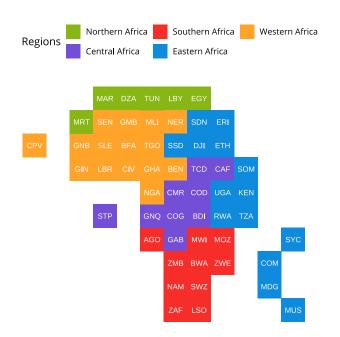
Their transnational commitments require national and regional coordination and monitoring mechanisms to identify progress and obstacles. At the same time, they have articulated, or have begun to articulate, their regional objectives regarding the SDG 4 targets and the Education 2030 Agenda.

Regional Monitoring in Africa

Agenda 2063 "The Africa We Want"⁷ was adopted at the January 2013 African Union Summit, reflecting the aspirations of the African continent for the post–2015 development agenda. To fast-track its implementation over the 50-year period, the First Ten-Year Implementation Plan was developed.

⁷ African Union Comission 2015.

African countries have also established a comprehensive educational agenda for the continent. In 2016, the African Union (AU) adopted the Continental Education Strategy for Africa (CESA 16–25) as the framework for transforming education systems in the region.⁸ CESA 16–25 consists of 12 Strategic Objectives (SOs) designed to involve the broadest coalition possible for education and training in Africa. At the subregional level, countries are grouped within development communities that meet regularly, but their education-related objectives are in alignment with CESA 16–25. The subregional organization is displayed in **Figure 2**.





Alignment and coherence between CESA and SDG 4 frameworks

Alignment and coherence between targets and indicators of the SDG global framework and CESA 16–25 constitute an important enabling factor for the monitoring and implementation of the Education 2030 Agenda. It means the optimization of monitoring frameworks and less effort to measure progress within and between countries and regions. One of the objectives of the Technical Cooperation Group on the Indicators for SDG 4 - Education 2030 (TCG) is to support the work of the Inter-agency and Expert Groups on SDG Indicators (IAEG-SDGs) and coordinate the harmonization of regional monitoring frameworks, assuring the coherence of these processes.

In late 2020, on behalf of the TCG, the UIS launched an exercise that consisted in "bridging" the different regional frameworks and the global SDG 4 framework, to fulfill their aspirations. The main objective of the exercise was to unveil the equivalence and coherence between the regional frameworks, but also to support the regions in their monitoring efforts by creating and delivering products that are fit for the purpose of monitoring education achievements at the regional level.

The African region was chosen as a priority, and, as a result, a report on the alignment and coherence of CESA 16–25 and the SDG4 framework was published in January 2021.⁹¹⁰

The CESA 16-25 framework is composed of 12 strategic objectives (SOs) and 59 indicators¹¹. It also takes

⁸ African Union 2016.

⁹ UIS 2021a.

¹⁰ The exercise was extended to other regions and three other reports, *Asia Pacific, Latin America and the Caribbean*, and *Europe, North America and the Caucasus Region* are being released in 2021.

¹¹ It includes 57 CESA 16-25 indicators and 2 regional benchmarked indicators: "Public expenditure on TVET" and "Proportion of young people not in employment, education or training"

into consideration the aspirations of the Agenda 2063, in particular Aspirations 1 and 6¹². The bridging exercise revealed that most of the SOs find correspondence with SDG 4 targets (**Figure 3**). The correlations between the CESA strategic objectives and indicators, and the indicators for reporting as per the agreement between the UIS and the AU are presented in **Figure 3**. The complete table can be found in **Table 41** in the Appendix.

That means that, by and large, both agendas are aligned and coherent. As a consequence, some data that are already collected through the SDG 4 framework can be readily available to measure progress in the CESA 16–25 implementation agenda. This is no coincidence, as the need for alignment has been shared at least since Africa's post-2015 education agenda and incorporated in the global Education 2030 Agenda. The region supported and endorsed the efforts on alignment at the regional level in the "*Nairobi Declaration and Call for Action on Education: Bridging Continental and Global Education Frameworks for the Africa We Want*". In the declaration, member countries call for the establishment of a joint CESA–SDG4 Education 2030 mechanism to "*ensure coordinated consultation, joint action, capacity strengthening, review, monitoring and reporting on both the continental and global education commitments by extending CESA 16–25 coordination structure to existing SDG 4 regional coordination mechanisms"*.¹³

Despite the overall alignment and coherence at the level of the specific objectives, the CESA framework is more ambitious than the SDG 4 equivalent and a significant number of indicators that were chosen for monitoring are not part of the SDG 4 framework. Some indicators are also not yet defined or tested. That is not exclusive to CESA, since some SDG indicators are also still under development. Nevertheless, it adds complexity to the monitoring task. As became clear during the benchmarking exercise (see next chapter), there is a need to update the data collection tools to avoid parallel data collection and reduce the burden to the respondents.¹⁴

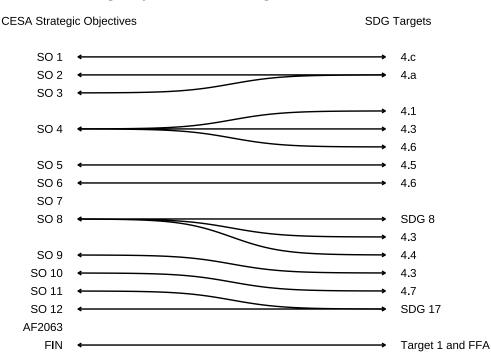


Figure 3: CESA 16–25 strategic objectives and SDG targets

A few points merit attention in terms of both similarities and differences between frameworks. For instance, the first three CESA strategic objectives focus on infrastructure and teachers, which are treated as means of implementation in the SDG 4 framework. Technical and Vocational Education and Training (TVET) and tertiary education is given special attention and indicators are split among three strategic objectives in the CESA framework. The objective on tertiary education integrates mobility indicators that are limited to SDG Target 4.b on development aid. Equity in the CESA indicators framework is limited to gender, and early childhood

¹² See more in https://au.int/en/agenda2063/aspirations

¹³ African Union 2018a.

¹⁴ UIS 2021b.

is somehow shadowed by other priorities in terms of access and quality. Moreover, the framework includes additional indicators to contemplate the vision conveyed by Africa 2063. Below are more detailed conclusions of the bridging efforts.

First, it is important to recall some specific features of the African strategy. While both frameworks focus on monitoring and improving learning outcomes, as well as inclusion and sustained access, the CESA 16–25 framework gives special importance to the targets that are considered means of implementation in the SDG framework. CESA SOs 1, 2 and 3 elaborate on teachers and school infrastructure, revealing the importance of these enabling factors to the overall education agenda in the region.

What is called Early Childhood Care and Education (ECCE) in the CESA framework is identified as a major challenge for Africa. However, SDG Target 4.2, which focuses on access and quality at this level of education, finds no direct correspondence in the CESA. The other two SDG 4 targets that focus on formal education, Targets 4.1 and 4.3, find correspondence with SO 4. This SO also aims at improving numeracy and literacy skills, which are monitored in Target 4.6 in the global framework, showing that such skills are understood as an integral part of the basic education.

Strategic Objectives 5 and 6 are aligned to the SDG 4 framework. However, SO 5 focuses primarily on gender parity while SDG target 4.5 has a broader scope for monitoring other equity dimensions. On the contrary, SO 6 has a few more specific indicators (see below).

SO 7 is related to the dissemination of science and math curricula in Africa. This objective can be considered as related to means of implementation since it aims primarily at measuring the capacity of teachers to deliver such contents. As such, there is no specific target in the SDG 4 framework that corresponds to this concern. For now, CESA monitoring finds some support in the UNESCO STEM/SAGA project¹⁵.

SO 8 focuses on TVET and it is aligned to SDG targets 4.4, on Information and Communications Technology (ICT) and digital literacy skills, and 4.3, a target that encompasses TVET and tertiary education. Although the alignment exists and the objective is coherent with the SDG framework, AU members opted for consolidating their agenda in one objective dedicated to TVET. This decision is coherent with the importance that TVET has in the region and in the way it is seen by the member countries. As per the CESA framework document, TVET is seen *"in its broadest sense to cover all aspects of training and skills acquisition and all types of training, whether formal, non-formal or informal"* and *"as a component of both the upper secondary education and the first tier of the tertiary education"*.¹⁶ In addition, a TVET strategy was developed to stress the importance that the continent attributes to the development of adequate skills to transform Africa.¹⁷ In that context, SO 8 is more comprehensive on the TVET component than the SDG equivalent and includes more indicators that are tailored to the African context (see below).

The focus of SO 9 is tertiary education, and, therefore, is aligned to SDG Target 4.3. However, the CESA framework goes beyond monitoring enrolment in tertiary education, one of the thematic indicators defined for the target in the SDG framework. As we can see in **Table 42** in the Appendix, the objective aims at monitoring degrees, investment, mobility and other tertiary-related accomplishments. In that perspective, it is also broader and more comprehensive than the SDG framework.

SO 10 aims at monitoring progress concerning an important issue for the region: peace and security. SDG Target 4.7 on global sustainability, citizenship, equality and human rights is aligned to SO 10, but the CESA's SO focuses on their regional manifestations. The alignment in this objective is, in that sense, partial, and the CESA framework develops monitoring indicators that are quite specific to the region.

Strategic Objectives 11 and 12 are specific to the African region and mostly concern capacity building and institutional reforms. As such, they relate more clearly to SDG 17, which focuses on implementation and partnerships and is transversal to all the other SDG targets.

SDG 4 Target 4.b is an objective coming from the OECD Development Assistance Committee framework that measures foreign assistance given to foreign countries in the form of scholarships. Therefore, it does not find direct correspondence in the CESA since most countries are recipients of aid. Student mobility is included in the objectives of tertiary education in SO 9.

¹⁵ Read more at https://en.unesco.org/saga

¹⁶ African Union 2016.

¹⁷ African Union 2018b.

AU countries also monitor the financial indicators agreed in the Incheon Declaration and Framework for Action for the implementation of the SDG 4.¹⁸

Lastly, CESA 16–25, and especially the Agenda 2063, encompasses an ambitious societal vision and a contents-based education and training strategy. Namely, the strategy aims "to create a new African citizen who will be an effective change agent for the continent's sustainable development". These aims are translated in the CESA as a set of additional indicators that are particular to the region.

Shared indicators and joint monitoring

Alignment and coherence between CESA strategic objectives and SDG 4 targets are necessary, but they are not sufficient to guarantee a common monitoring framework. Besides the alignment in high-level strategic objectives, a real correspondence between indicators is required to enable joint monitoring. Such alignment allows for a common understanding of the issues that are being monitored and by which metric, to reduce the burden of all individuals and stakeholders involved.

On that matter, more effort is required to produce indicators and data to efficiently monitor both the CESA and SDG frameworks. Among the almost 60 indicators that are described in the CESA Indicators Manual,¹⁹ the majority, 41, are exclusive to CESA. Only 17, or around 30% of indicators, are in both frameworks. Twenty-three indicators that are used in the SDG framework are not monitored in the CESA.

CESA SO	CESA Indicators	SDG Target	SDG Indicator
S0 1	1.1	4.c	4.c.1
30 1	1.4	4.c	4.c.7
S0 2	2.1	4.a	4.a.1
30 2	2.2	4.a	4.a.1
S0 3	3.1	4.a	4.a.1
	4.1	4.1	4.1.2
S0 4	4.5	4.1	4.1.1
	4.6	4.6	4.6.1
S0 5	5.1	4.6	4.5.1
	6.1	4.6	4.6.2
S0 6	6.2	4.6	4.6.2
	6.3	4.6	4.6.3
S0 8	8.3	4.3	4.3.1
30.6	8.6	4.3	4.3.3
S0 9	9.2	9.5	9.5.1
S0 10	10.3	4.7	4.7.1
	F.1	Financing	1.a
	F.3	Financing	FFA

Table 1: CESA 16-25 and SDG 4 indicators

¹⁹ African Union 2018c.

¹⁸ UNESCO 2016.

Nonetheless, 47% of the total indicators, which include those that are exclusively used in the CESA framework, can be used to monitor CESA progress.²⁰ The CESA-exclusive indicators are distributed in almost all strategic objectives. The exceptions are SOs 2, 3, 6 and the additional financial targets, for which there are no exclusive CESA indicators.

As can be seen in **Table 1**, out of the three indicators from SO 1, only Indicator 1.1 is also monitored in the SDG 4 framework. The two other indicators, related to teachers trained in STEM (Science or Technology or Engineering or Mathematics) and the existence of teacher development policy are not included in the SDG framework. **Table 42** in the appendix presents the detailed situation.

SO 4 has six indicators, half of which find correspondence in the SDGs. Skills and proficiency have direct correspondence, while gross intake ratio for final year of upper secondary is not collected. Among the exclusive indicators, two are related to institutional changes (national qualification framework and membership in the Network of African Learning Assessments) and the other is the distribution of graduates in the tertiary.

In SO 5, only the gender parity index for gross enrollment ratio is used in both frameworks. Information about female teachers, girls' completion and drop-out and the percentage of girls enrolled in STEM are exclusive to the CESA framework.

SO 7 is not part of the SDG framework, hence its only indicator is also exclusive to the CESA framework.

The indicators chosen by the AU for monitoring TVET and tertiary education objectives are perhaps where the most effort is required. In SO 8, on TVET, the six indicators are used exclusively in the CESA framework. For tertiary education, in SO 9, only one out of a total of eight indicators is shared between frameworks. The only indicator that is shared, the expenditure on research and development (R&D) as a percentage of the Gross Domestic Product (GDP), belongs to SDG 9 and, strictly speaking, does not belong to the Education Agenda.

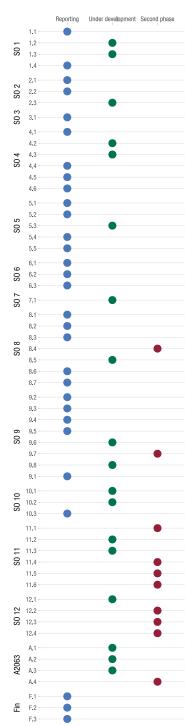
As mentioned above, for SO 10, the three indicators relating to peace and security are exclusive to CESA. One indicator, which measures progress on education for sustainable development, is shared between the frameworks, but data is very scarce as is seen in the section dedicated to SO 10. Strategic objectives 11 and 12 are not related directly to the SDG framework and no indicators are shared. The same is true of the indicators that monitor the Africa 2063-related indicators.

Development of CESA indicators

Some of the CESA indicators described above are already being reported, meaning that data is collected and available in the UIS database. But many others are not. Increasing the coverage of CESA-specific indicators necessitates the development of a complementary data collection tool considering the need to avoid parallel data collection mechanisms and to reduce the burden to the respondents.²¹ This work was initiated while this report was being written. Most of the indicators that were missing are under development and for some others, development will take place starting 2023.

Figure 4 summarizes the status of the development of the indicators. As can be seen, 29 indicators are already being reported. Among them are the 17





²⁰ UIS 2021b.

²¹ UIS 2021b.

that are shared between the two frameworks and 12 others that are collected by the UIS and are being compiled for CESA monitoring purposes. Seventeen indicators are under development, including three of the additional indicators related to the Africa 2063 aspirations. The development of ten indicators is planned for 2023. A detailed table **Table 43** can be found in Appendix.

The next sections present the expansion of coverage of CESA indicators and the benchmarking process that has taken place since 2019 and which aims at streamlining the monitoring into a few benchmarked indicators.

Expanding Coverage of CESA indicators

Currently, there are 17 indicators that are common to both the CESA and SDG 4 frameworks, and therefore are already reported in the UIS global database. Many other indicators (14) are generated by mining the data available at the UIS or using proxies available. Additional CESA specific indicators (9) could be collected in the future to increase the coverage of CESA indicators, provided Member States already collect them in their routine data production system. The table below provides a summary of the availability of data items required for the nine CESA indicators in the existing school census questionnaires that Member States administer to their schools every year.

Table 2 provides a summary of the availability of data items in the national school census templates of 31 countries that the UIS team in Africa has collected. It appears clearly that there is a room to increase the coverage of CESA indicators, but in the short term, doing so requires a dedicated additional module to the UIS annual survey in Africa. This approach will avoid the duplication of efforts and parallel data collections and is in line with PACE recommendation.

Indicator*	Pre primary Primary Lower secondar			econdary	Upper s	econdary	Ter	tiary	Voca	itional			
	Yes (Countries	Yes	Countries	Yes	Countries	Yes	Countries	Yes	Countries	Yes	Countries	
A.2 Percentage of pupils being taught using an African language as a medium of instruction													
Number of learners	1	28	100%	31	100%	31	100%	31	88%	8	100%	16	
Number of students taught by language used as medium of instruction	0	28	10%	31	3%	31	3%	31	0%	8	0%	16	
1.2 Percentage of teachers qualified in Science or Technology or Engineering or Mathematics by Sex													
Qualification of the teacher	88%	26	90%	29	90%	29	83%	29	88%	8	86%	14	
Record on individual teacher with taught subjects, qualification	19%	26	28%	29	72%	29	76%	29	50%	8	64%	14	
11.2 Your Government produces an Annual School Census Report: Last year available													
Annual School Census Report	1	24	100%	26	100%	26	100%	26	100%	5	91%	11	
11.3 School Census Return Rate													
No of School questionnaire filled and returned	1	28	100%	31	100%	31	100%	31	100%	8	100%	16	
No of schools by type (public and private) and by level registered in the current census year	1	28	100%	31	100%	31	100%	31	100%	8	100%	16	
5.3 Percentage of Female Head Teachers													
Record on head teachers by sex	85%	28	84%	31	84%	31	84%	31	88%	8	88%	16	
7.1 Percentage of teachers qualified to teach in So	cience or Ma	athematics	according	to national	standards								
Qualification according to national standards of the teacher	88%	26	90%	29	90%	29	86%	29	50%	8	87%	15	
Subjects or field in which a teacher is qualified to teach	15%	26	21%	29	31%	29	31%	29	25%	8	43%	14	

Table 2: Percentage of countries of metadata availability

*Source: UIS

Indicator*	Pre p	orimary	Pri	mary	Lower s	econdary	Upper s	econdary	Ter	tiary	Vocational	
	Yes	Countries	Yes	Countries	Yes	Countries	Yes	Countries	Yes	Countries	Yes	Countries
9.8 Proportion of Learners enrolled in (a) Distance Education, (b) Open learning, (c) E-Learning Programmes												
Number of learners enrolled in Open Learning	0%	31	0%	31	0%	31	0%	31	0%	8	0%	31
Number of learners enrolled in Distance Education	0%	31	0%	31	3%	31	3%	31	0%	8	3%	31
Number of learners enrolled in E-Learning Programme	0%	31	0%	31	0%	31	0%	31	13%	8	0%	31
Number of Learners in Higher and Tertiary education	0%	31	0%	31	0%	31	0%	31	75%	8	0%	31
A.3 Percentage of Learners learning an African la	nguage a	s a subject										
Number of learners	100%	28	100%	31	100%	31	100%	31	100%	8	100%	16
Number of learners per subject	0%	28	3%	31	16%	31	13%	31	38%	8	19%	16
5.4 Girls' drop out rate per reason of droup out												
Number of dropout	25%	28	45%	31	45%	31	45%	31	25%	8	50%	16
Number of dropout by reason	18%	28	29%	31	32%	31	32%	31	0%	8	31%	16
*Source: UIS												

It can be observed that 3 indicators have a reasonable rate of availability:

- Annual school census return rate (SO 11 Indicator 11.3) is an information that is available across countries and levels of education. UIS has collected this information before. It is a critical parameter to understanding the fluctuation of indicators over a period of time. Many countries report data as received without any imputation to compensate for missing schools, a potential source of inconsistencies when analyzing trends.
- Percentage of female teachers (SO 5 Indicator 5.2)
- Percentage of teachers qualified in STEM by sex (national standards) (SO 1 Indicator 1.2)

Box 1: CESA data resources

Sources of Education data of the African Union

The Pan-African Institute for Statistics (STATAFRIC)

Link: https://statafric.au.int/en

Based in Tunis, STATAFRIC is the African Union's specialized agency for the development and harmonization of statistics on the continent. It was established by Decision Assembly/AU/Dec.462 (XX) adopted by the Assembly of Heads of State and Government of the African Union in January 2013, in Addis Ababa, Ethiopia.

The mandate of STATAFRIC is to lead in the provision and promotion of harmonized quality statistical information and good practice in support and monitoring of the implementation of the Agenda 2063 for the integration and the development of Africa.

Despite its recent creation, STATAFRIC has led statistical activities in the continent. The most recent is the African statistics day, marked under the theme "Modernizing National Statistical Systems to support socio-cultural development in Africa".

However, many sectors including education are yet to be covered in the STATAFRIC data: https://statafric.au.int/en/statistics-theme

The Pan-African Institute of Education for Development (IPED)

Link: https://edu-au.org/agencies/iped

Pan-African Institute for Education for Development (IPED), is a specialized institution of the African Union, tasked with the responsibility to function as Africa's Education Observatory.

As such, IPED plays a central role in ensuring quality, and inclusive education development in Africa. Fulfilling this role is subject to availability of sound, accurate and timely information to provide evidence to policy making and strategic orientation for the development of the education, and therefore the development of human capital needed to stimulate and sustain the development of Africa. IPED/AUC effort to generate adequate statistics to inform the Agenda 2063 has been limited for several reasons. At the Pan-African Conference on Education (PACE) in 2018 in Nairobi (Kenya), member states called UIS and AUC to establish a join monitoring and reporting mechanism for both the Continental Education Strategy Africa (CESA) and SDG4 to avoid duplication and burden to countries respondents and statistical systems. This call has been operationalized through a letter of intent between AUC and UIS signed in 2019. So far, UIS and IPED (acting on behalf of AUC) has conducted a significant number of activities aimed at establishing a joint mechanism for monitoring and reporting on Agenda 2063 and Education 2030 Agenda. The most recent project is the regional benchmarking for the SDG4 and CESA: http://tcg.uis.unesco.org/benchmarks-dashboard/benchmark-africa/ IPED has the ambition to fulfill its mandate by putting in place a continental Education management information system. This ambitious program will be effective through partnership with technical agencies, particularly the UIS given its notorious expertise in the development of internationally agreed statistical norms and standards and statistical capacity building effort to integrate them in the national data production systems over decades.

As IPED develops and implements its strategic program to establish a continental database for education statistics, the main source for education data to inform CESA remains the UIS, through its annual surveys, to inform the global monitoring of the SDG4.

Box 2: UIS data resources

- A TCG Data Resources contains the list of SDG 4 and benchmark indicators, SDG 4 global and country data tables, data tree specifications for the extraction of data from the Bulk Data Services, and links to the UIS global education database and bulk data download service.
- B TCG Benchmarks:
 - Background contains background information, benchmark indicators and describes the technical process, the global and regional roadmaps. It also contains links to resources (publications, data and blogs) and meetings.
 - 2. Dashboards contains a summary of progress and global, regional and country dashboards.
 - 3. The description of the process of setting regional benchmarks and the outcomes. The regions currently available are Africa, Arab States, and Asia and the Pacific.

Source: UIS.

More UIS and UNESCO resources are available in the bibliography page.²²

²² GEMR 2021; UIS 2021c,d; UNESCO 2021.

Regional Benchmarking

The Education 2030 Framework for Action had called on countries to establish "appropriate intermediate benchmarks (e.g. for 2020 and 2025)" for the SDG indicators, seeing them as "indispensable for addressing the accountability deficit associated with longer-term targets" (§28), a request that remains unrealized. The extraordinary session Global Education Meeting in October 2020 reminded countries about this commitment. Its Declaration called on "UNESCO and its partners, together with the SDG-Education 2030 Steering Committee, to … accelerate the progress and propose relevant and realistic benchmarks of key SDG 4 indicators for subsequent monitoring" (§10). Fulfilling this neglected commitment to set benchmarks would help renew emphasis on achieving SDG 4.²³

To fill this gap and make countries accountable vis-a-vis the agreed global targets of the Education 2030 Agenda in education, seven global indicators were endorsed to benchmark the global framework against regional ones at the Sixth meeting of the Technical Cooperation Group on SDG 4 (TCG 6) in 2019 in Yerevan, Armenia. These seven indicators are discussed in the regional benchmarking process in order to take into consideration disparities of regions, subregions and countries. The proposal was based on a review by TCG members, which concluded that it would be possible to set benchmarks for 6 of the 43 SDG 4 indicators and the Framework for Action expenditure indicator based on past trends, country coverage, frequency of data and policy relevance. The seven SDG 4 global indicators are indicated in **Table 3**.

No.	Label	Benchmark Indicators	Level
1	4.1.1	Proportion of children and young people (a) in grades 2/3; (b) at the end of primary; and (c) at the end of lower secondary achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex	Global
2	4.1.2	Completion rate (primary education, lower secondary education, upper secondary education)	Global
3	4.1.4	Thematic	
4	4.2.2	Participation rate in organized learning (one year before the official primary entry age), by sex	Global
5	4.c.1	Proportion of teachers with the minimum required qualifications, by education level	Global
6	1.a.2 and FFA	Education expenditures as a share of GDP/total expenditure	Education 2030 Framework for Action
7	4.5	Gender gap for completion rate in upper secondary	Global

Table 3: Endorsed SDG 4 indicators for global benchmarking

Benchmarked Targets and Indicators in Africa

As reported in the previous chapter, both CESA and the SDG 4 frameworks have a number of common indicators, but there is a need to develop complementary data collection tools. The joint reporting of achievements towards objectives of both Agenda 2030 and Agenda 2063 requires the definition of intermediate benchmarks. So far, there has been no report at all levels (national, subregional and continental) since the adoption of the two agendas. It is therefore imperative to put in place a functional mechanism to report countries' achievements on both agendas.²⁴

In September 2020, the imperative for the regional benchmarking was identified among the priority areas for joint collaboration with the UIS through the African Union Commission (AUC) cluster on educational planning. So far, two consultations were organized in October 2020 with the AUC and the Association for the Development of Education in Africa.

²³ Montoya, S. and Antoninis, M. 2020.

²⁴ UIS 2021b.

The *communiqué* of the AUC Commissioner for Human Resources, Science and Technology has conveyed clear support for the process in Africa. It recognizes the relevance of the seven indicators for the continental education strategy while also raising the need to integrate TVET-related indicators given the importance of this sub-sector in the AUC development strategy, and of indicators related to COVID-19 and post-COVID-19 effects on teaching and learning.

The benchmarking of key indicators that include the seven global indicators as identified at the TCG 6, and indicators specific to the CESA 16–25 is most relevant in this context. TVET-related indicators are missing among the seven global indicators; therefore, there is a need to identify relevant ones that align with the CESA and TVET strategy and meet the selection criteria.

Table 4 displays the correspondence between the seven benchmarked indicators and the SOs from CESA²⁵.

No.	SDG Benchmarked Indicators	Correspondent CESA SO
1	Global Indicator 4.1.1 Proportion of students in (a) in grade 2 or 3; (b) at the end of primary education; and (c) at the end of lower secondary education achieving at least a minimum proficiency level in (i) reading (ii) mathematics, by sex	SO 4: 4.5 Proportion of children and young people (a) in grade 3; (b) at the end of primary education; and (c) at the end of lower secondary education achieving at least a minimum proficiency level in (i) reading (ii) mathematics and (iii) science, by sex
2	Global Indicator 4.1.2 Completion rate	SO 4: 4.1 Gross intake ratio for the final year of primary, lower secondary and upper secondary SO 4: 4.7 Percentage of girls who complete secondary education (under development)
3	Thematic Indicator 4.1.4 Out-of-school rate	S0 5: 5.4 Girls' dropout rate per reason of drop out
4	Global Indicator 4.2.2 Participation rate one year before primary	
5	Global Indicator 4.c.1 Proportion of teachers with the minimum required qualifications	S0 1: 1.1 Percentage of Teachers Qualified to Teach According to National Standards S0 1: 1.2 Percentage of teachers qualified in Science or Technology or Engineering or Mathematics by Sex S0 1: 1.4 Percentage of Teachers who have undergone In-Service Training (under development)
6	Education expenditure as share of budget and GDP: i) Public Expenditure on Education as a Percentage of Total Government Expenditure (SDG 1.a.2); ii) Public Expenditure on Education as a Percentage of GDP)	F.1 Public Expenditure on Education as a Percentage of Total Government Expenditure F.2 Public Current Expenditure on Education as a Percentage of Total Education Expenditure by level F.3 Public Expenditure on Education as a Percentage of GDP
7	Equity indicator to be defined	S0 5: 5.1 Gender Parity Index for Gross Enrolment Ratio S0 5: 5.2 Percentage of Female Teachers S0 5: 5.3 Percentage of Female Head Teachers S0 5: 5.4 Girls' dropout rate per reason of drop out S0 5: 5.5 Percentage of girls enrolled to STEM

Table 4: CESA – SDG 4 common indicators

²⁵ The table is reproduced from -UIS (2021b)

African Union benchmarked indicators

In addition to these seven SDG benchmarks, the AU has selected a set of indicators that are relevant for the regional benchmarking process. They reflect the development priority areas of the Agenda 2063 for education. The specific set of indicators for the Africa region is indicated in **Table 5**:

Table 5: CESA indicators selected for benchmarking

No.	Label	CESA Indicators
1		Proportion of students enrolled in STEM related fields by level of education
2	9.2	Expenditure on Research and Development as a percentage of GDP
3	3.1	Proportion of schools with access to (i) electricity (ii) the internet for pedagogical purposes and (iii) computers for pedagogical purposes
4		Public expenditure on TVET
5	8.3	TVET graduates labour force participation rate
6		Proportion of young people not in employment, education or training
7	2.1	Proportion of schools with hand washing/sanitizing facilities by level

Regional benchmarks - Reference points

A general consensus on the benchmark indicator process for the region and subregions has been achieved. Countries in all the subregions have overwhelmingly supported the process of establishing the regional benchmarks with feasible and achievable levels of indicators. Member states also fully agreed that the key indicators identified for the benchmarks are very much aligned with the (sub)regional policy priorities and will be very useful for regional and subregional SDG 4-CESA monitoring progress, thus agreed with all the proposed indicators for regional benchmarks.

Table 6: Regional averages for Sub-Saharan Africa

Indicator Number	Indicator	Regional average at baseline	Benchmarks' regional average 2025	Benchmarks' regional average 2030
1.a.2	Proportion of total government spending on essential services (education)	15.5	19.4	15.0
1.a	\ensuremath{GDP} Government expenditure on education as a percentage of \ensuremath{GDP}	3.9	4.0	4.0
4.1.1.a	Proportion of students in Grade 2 or 3 achieving at least a minimum proficiency level in mathematics	28.9	38.5	43.4
	Proportion of students in Grade 2 or 3 achieving at least a minimum proficiency level in reading	26.1	34.7	39.1
4.1.1.b	Proportion of students at the end of primary achieving at least a minimum proficiency level in mathematics	34.5	45.9	51.8
	Proportion of students at the end of primary achieving at least a minimum proficiency level in reading	34.0	45.2	51.0
4.1.1.c	Proportion of students at the end of lower secondary achieving at least a minimum proficiency level in mathematics	25.2	33.5	37.8
	Proportion of students at the end of lower secondary achieving at least a minimum proficiency level in reading	32.4	43.1	48.6
4.1.2.i	Completion rate in primary	71.4	82.8	88.6

Education Baseline in Africa: Expanding the coverage of CESA indicators

Indicator Number	Indicator	Regional average at baseline	Benchmarks' regional average 2025	Benchmarks' regional average 2030
4.1.2.ii	Completion rate in lower secondary	49.4	62.1	70.3
4.1.2.iii	Completion rate in upper secondary	27.6	36.6	41.5
4.1.4.i	Out-of-school rate in primary	19.1	11.8	7.9
4.1.4.ii	Out-of-school rate in lower secondary	32.2	18.4	14.2
4.1.4.iii	Out-of-school rate in upper secondary	46.8	39.6	31.9
4.2.2	Participation rate in organized learning (one year before the official primary entry age)	44.9	53.8	67.1
4.c.1.a	Proportion of teachers with the minimum required qualifications in pre-primary	48.3	64.3	72.5
4.c.1.b	Proportion of teachers with the minimum required qualifications in primary	81.7	90.5	96.6
4.c.1.c	Proportion of teachers with the minimum required qualifications in lower secondary	60.4	85.1	90.5
4.c.1.d	Proportion of teachers with the minimum required qualifications in upper secondary	70.7	74.3	81.2

UIS has developed a dashboard²⁶ presenting the benchmark values for three different reference points for countries to learn from and consult to establish their own national benchmarks.

The next sections present the data available for each strategic objective of the CESA framework. The alignment between the two frameworks is recalled in each chapter along with some analysis of the available data points and regional averages. The tables presented in the beginning of each chapter also indicate whether the indicator is defined as a benchmark for the region. They also present the status of the indicators: **"Reporting"** indicates that data is collected and available in the UIS database; **"Under development"** refers to the indicators that are under preparation as this report is written; and **"Second Phase"** indicates the indicators for which studies could begin in 2023.

²⁶ http://tcg.uis.unesco.org/benchmarks-dashboard/

SO 1 – Teachers

"Revitalize the teaching profession to ensure quality and relevance at all levels of education"

The first Strategic Objective (SO) of the CESA framework has four indicators, of which two are already reported within the SDG framework under SDG Target 4.c. One of the indicators is also a benchmark. Table 7 below summarizes the situation.

Table 7: Reporting status of SO 1 indicators

CESA 16-25 indicators (March 2018 revision)	CESA indicators for reporting as per the agreement between the UIS and the AU	Benchmarked	Reporting status
1.1 Percentage of Teachers Qualified to Teach According to National Standards	1.1 Proportion of teachers with the minimum required qualifications, by education level (SDG 4.c.1)		Reporting
1.2 Percentage of teachers qualified in Science or Technology or Engineering or Mathematics by Sex	1.2 Percentage of teachers qualified in Science or Technology or Engineering or Mathematics by Sex		Under development
1.3 Existence of Operational Teacher Development Policy	1.3 Existence of Operational Teacher Development Policy		Under development
1.4 Percentage of Teachers who have undergone In-Service Training	1.4 Percentage of teachers who received in-service training in the last 12 months by type of training (SDG 4.c.7)		Reporting

CESA 1.1 Percentage of Teachers Qualified to Teach According to National Standards

SDG 1.1 Proportion of teachers with the minimum required qualifications, by education level (SDG 4.c.1)

The Global Indicator SDG 4.c.1 aiming to measure the *proportion of teachers with the minimum required qualifications, by educational level* is used to report CESA Indicator 1.1.

The data release in September shows an increase in the coverage of this indicator in the region over the period 2016 to 2020 (**Table 8**). Available data is displayed in **Tables 9, 10 and 11**. About 85% of countries have available data for at least one year within this period for primary (ISCED level 1), and lower and upper secondary (ISCED levels 2 and 3). However, the coverage remains lower for pre-primary (ISCED level 02) (60%).

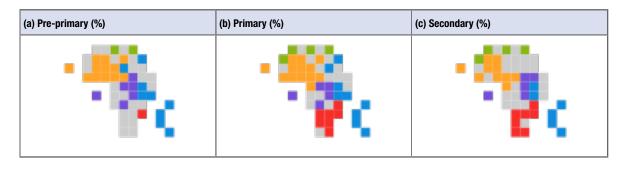


Table 8: Data availability of the SDG Global Indicator 4.c, by country, 2015–20

[📕] Northern Africa 📕 Southern Africa 📒 Western Africa 📕 Central Africa 📘 Eastern Africa

Figure 5 shows the latest value available in the countries of the region. In Central Africa, the disparities are very high in pre-primary and primary education. While Burundi, Cameroon and Equatorial Guinea have reported figures above 80%, the remaining countries reported between 20% (Sao Tome and Principe) and 52% (Gabon in primary). In secondary, the situation is more homogeneous. Burundi has also reported that 100% of the teachers have the minimum qualification, while the other countries reported between 45% and 55% in 2016 or 2018.

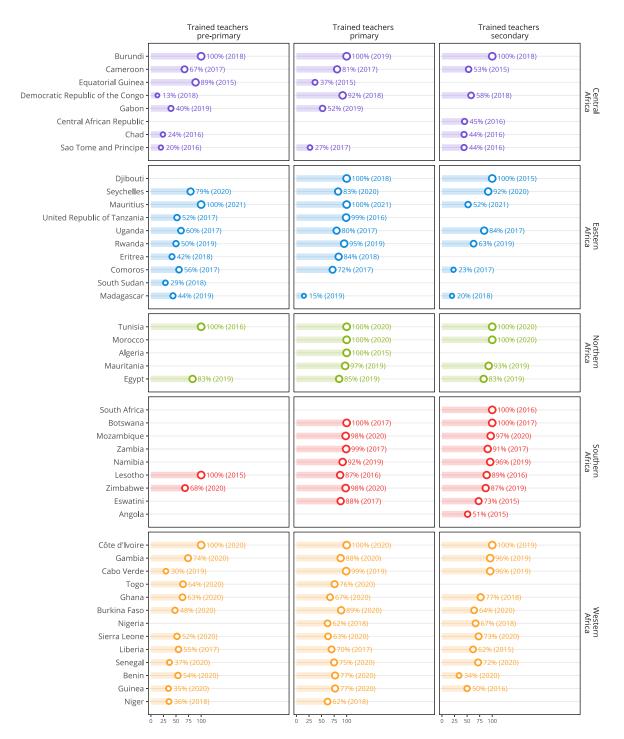


Figure 5: Proportion of teachers with the minimum required qualifications, 2015–20

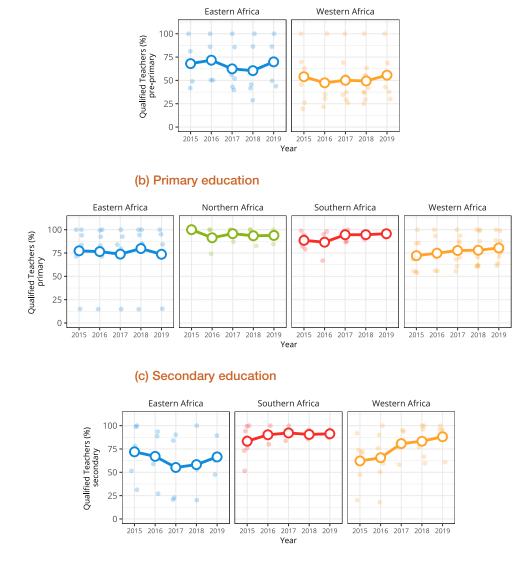
Eastern Africa has Djibouti, Seychelles and Mauritius reporting the highest figures. Mauritius has reported 100%

qualified teachers in pre-primary and primary, but only 52% in secondary (2020). Seychelles has reported a proportion of qualified teachers close to 80% in the first two levels, but above 90% in secondary (2020).

Northern Africa has the highest proportion of trained teachers. Egypt is the only country that reported figures below 85% in primary and secondary education (2019).

Southern Africa also reported high proportions of qualified teachers. As for Northern Africa, less information is available for the pre-primary level. Only Lesotho and Zimbabwe reported any figures. At the primary level, the average is above 90% and Zambia, Botswana and Mozambique have reported close to 100%. Along with South Africa, these three countries also reported the highest proportions of qualified teachers. Zambia reported 10 fewer percentage points of teachers qualified in secondary in 2017. Angola has the lowest proportions in secondary, just above 50% in 2015. More recent data is unavailable.





Except for a few countries, like Côte d'Ivoire, Gambia, Togo and Ghana, Western Africa has proportions below 50% in pre-primary. Côte d'Ivoire reported that 100% of the teachers in this level have qualification and the other three have an average of 65% qualified teachers. In primary, Côte d'Ivoire, Gambia, Cabo Verde and Burkina Faso have reported the highest proportions - from around 60% (Niger, 2018) to 75% (Togo, 2020). The same

(a) Pre-primary education

group of countries also have the highest proportions in secondary. Benin has the lowest proportions at this level (34% in 2020).

Regional averages for pre-primary are overall stable in the Western, Central and Eastern regions, rising in the last couple of years (Figure 6). A slight increase in proportion is also seen at the primary level in the Southern and Western regions, while Eastern and Northern Africa are stable. Averages for Western Africa have been increasing in secondary since 2015. In Eastern Africa, after a decline until 2017, the average is also slightly on the rise based on the few data points available.

CESA 1.4 Percentage of teachers who have undergone In-Service Training

SDG 1.4 Percentage of teachers who received in-service training in the last 12 months by type of training (SDG 4.c.7)

In-service training is reported using SDG 4.c.7 and refers to the proportion of teachers who received in-service training in the last 12 months by type of training. Data is mostly unavailable for this indicator.

Figure 7 shows that for this thematic indicator the latest available data for some countries dates to 2014. Figures reported in those years were above 70% in Central and Western Africa, with some exceptions like Burundi (48%). Morocco was the only country reporting data for the primary level for Northern Africa (15% in 2015). In lower secondary, Morocco reported 84% in 2018. The lowest proportion reported for this level was in Botswana (64% in 2015).



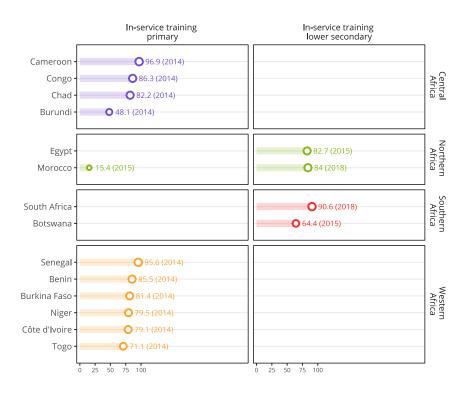


Table 9: Proportion of teachers with the minimum required qualifications by region, pre-primary,2015–20

Central Africa												
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Burundi		55.5	62.3		72.2	100	100	100	100			
Cameroon	42.8	48	57.1			54.2		67.3				
Chad	65.6	72.9		52.3			24.4					
Democratic Republic of the Congo	22.8	22.7	16.5	18.7	20.3	20.6			13.5			
Gabon										39.9		
Sao Tome and Principe	38.2	36.1	35.4	26.8	18.8	28.2	19.8					
Eastern Africa												
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Comoros								56				
Eritrea	56.5	52.8	56.1	50.4	45.9	41.8		39.8	41.6			
Madagascar	50.9				16.9					43.8		
Mauritius	94	98.7	99.9	100	100	100	100	100	100	100	100	100
Rwanda		37.9				49	50.5	43	45.6	49.5		
Seychelles	70.7	73.7	64	60.5	66.1	81.2	86	85.7	86.3	86.2	78.7	
South Sudan		38.9							28.7			
Uganda								60				
United Republic of Tanzania	18.1		33.1		36.2		50.1	52.1				
Northern Africa												
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Egypt							76.5			82.8		
Tunisia						100	100					
Southern Africa												
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Zimbabwe			28.3	27.2	32.7	39.9	50.9	52.9	58.5	59.6	67.7	
Western Africa												
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Benin			27.9				34.8	25.9	25		54.2	
Burkina Faso		21.6						34.5	41.9	42.6	48.2	
Cabo Verde	26.5	32.2	45.6		48.5		30.4	29.5	29.6	30.1		
Côte d'Ivoire		100	91.7	85.8	88.8	100	100	100	100	100	100	
Gambia				65.9	72.4	69.7		69			73.7	
Ghana	26.8	26.8	35.1	39.1	41.2	45.5			54.6	58.6	63.1	
Guinea		12.2	14.3	13.3	16.9	19.6	21.8				35.3	

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Liberia							50	54.6				
Niger	96								36.5			
Senegal	15.1		23.4	25.7	25.7	26.1			37.8	37.8	37.4	
Sierra Leone		42.4	49.3	44.6		54.1		37.3	55.6	51.6	51.9	
Тодо	52.1	53.7	50.1	55.7		62.9			63.4	68.8	64.4	

Table 10: Proportion of teachers with the minimum required qualifications by region, primary, 2015–20

Central Africa												
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Burundi		94.2	95		92.2	100	100	100	100	100		
Cameroon	57.4	67.1	78.8					81.2				
Democratic Republic of the Congo	91.7	89.9	93.1	94.1	94.6				92			
Gabon										52		
Sao Tome and Principe	49.4		32.8	31.2	33	34.4	31.1	27.4				
Eastern Africa												
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Comoros		55.2					74.9	71.9				
Djibouti		100		96		100			100			
Eritrea	93.8	91	89.6	79.9	70.7				84.5			
Madagascar			21	18.9	16.7	15.1	14.9	14.8	14.7	15.3		
Mauritius	100	100	100	100	100	100	100	100	100	100		100
Rwanda	91.5	98.4	95.6	95.2	95.6	93.9	92.5	92.6	94.4	95.1		
Seychelles	85.2	86.7	76.5	69.4	71.3	83.6	82.9	84	85	84.3	82.5	
Uganda			97.7	76.5	75.2	71.5	71.3	79.6				
United Republic of Tanzania	94.5			99			99.2					
Northern Africa												
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Egypt							74.1		82.7	84.6		
Morocco	100	100	100	100	100	100	100	100	100	100	100	
Tunisia			100	100	100	100	100	100	100		100	
Mauritania	100	100	100		91.2			87.2	91.2	96.9		
Southern Africa												
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Botswana	99.8	99.8	99.5	98.6	97.9	98.7		99.8				
Eswatini	79.3	77.6	67.6	79.1	81.6	82.1	66.9	87.7				
Lesotho	63.4	66.5	67.5	72	75.8	79.2	86.5					
Mozambique	75.9	80.1	83.6	87.3	90	93.2	95.1	97.2	97.2	98	98.4	
Namibia	96.4		94.3			87.4	86.3	86.6	89.6	91.8		
Zambia	89.7		92.7	86.7	85.1	85.6	86.6	98.8				
Zimbabwe			88.2	85.9	89.2	93.9	98.1	97.4	97.1	97.3	97.8	
Western Africa												
Western Africa Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021

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Burkina Faso			94.8	85.6	84.4	85.4	73.2	85.8	87.6	88.6	89.5
Cabo Verde	90	92.1	94.6		96		93.3	93.4	98.6	98.9	
Côte d'Ivoire		100	99.4	82.8	84.9	100	100	100	100	100	100
Gambia		89.7	63.5	81.9	90.7	85.8		87.7	100	87.8	87.7
Ghana	50.6	50.6	52.3	53.3	52.4	54.7	56	55.4	60.4	61.5	67.3
Guinea		80.4	74.5	74.1	75	75.7	75.4				76.7
Liberia		56.4			56.4			70.2			
Niger				45.8	50.1	55.5	55.6		61.6		
Nigeria	66.1								62.2		
Senegal	47.9	63.1	64.7	72.4	70	68.3				75.3	75.1
Sierra Leone		48	54.6	57.1		53.8		60.8	60.9	63.6	63.1
Тодо	76.7	70.8	82.1	76.1		73.3				76.7	75.7

Table 11: Proportion of teachers with the minimum required qualifications by region, secondary,2015–20

Central Africa												
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Burundi		72.4	74.9			100	100		100			
Central African Republic							45.4					
Chad				53			44					
Democratic Republic of the Congo	32.5		21.7	21.7	23.5				58			
Sao Tome and Principe	24.2	44.6	34.6		48.2	36.4	44.3					
Eastern Africa												
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Comoros							27.1	22.8				
Madagascar					20.7			20.8	20.2			
Mauritius			44.4	45.5	31.8	31.3		55.3	53.1	47.5		52.2
Rwanda		83	83.5	89.2		51.5	58.9	58	59.7	62.6		
Seychelles			79.7	84.5	86.5	98.9	88.7	90.2	100	89.4	91.7	
Uganda	88.9		95.5	86	84.6	78	93.6	84				
Northern Africa												
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Egypt							67.3		81.9	82.9		
Могоссо								100	100	100	100	
Tunisia								100	100		100	
Mauritania					86.9			97.2		92.5		
Southern Africa												
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Botswana			99.8	99.6	99.6	99.3		99.8				
Lesotho						100	88.9					
Mozambique	75.3	79.8	84.1	86.9	88.8	84.9					97.3	
Namibia			97.4			94.1	93.5	94	95.7	95.7		
South Africa							100					
Zambia	82.6		83.2	84.9	86.4	87.4	88.5	91				
Zimbabwe			71.1	73	74.2	76.1	80.1	83.7	85.5	86.9		
Western Africa												
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Benin						20	18				34	
Burkina Faso		48	48.3	48.9	46.9	60	59.5	58.2	59.8	60.8	64	
Cabo Verde	81.3		86.1		86.9		90	93.7	96	95.6		

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Côte d'Ivoire					100		100		100	100	
Gambia				89.8	93.9	91.7		94.9	100	95.9	
Ghana	70.4	70.4	71.7	72.8	72.3	73.7	75.7	76.2	77.1		
Guinea	59.4	61.7	49.9	61.8	48.2	47.5	50.4				
Nigeria	45.9								66.8		
Senegal		39.4	45.2	55.5	61.5	72.5					72.4
Sierra Leone		61.2	62.6	64.3		70.3					72.9

SO 2 – Infrastructure

"Build, rehabilitate, preserve education infrastructure and develop policies that ensure a permanent, healthy and conducive learning environment in all sub-sectors and for all, so as to expand access to quality education"

SO 2 has three indicators that find correspondence with SDG Target 4.a and are already being reported. One of the indicators is being developed. Basic handwashing facilities in schools are one of the benchmarked indicators. Table 12 provides the key information:

Table 12: Reporting status of SO 2 indicators

CESA 16-25 indicators (March 2018 revision)	CESA indicators for reporting as per the agreement between the UIS and the AU	Benchmarked	Reporting status
2.1 Proportion of schools with access to (i) basic drinking water; (ii) single sex basic sanitation facilities; and (iii) basic hand-washing facilities	2.1 Proportion of schools offering basic services, by type of service (SDG 4.a.1): (i) basic drinking water; (ii) single sex basic sanitation facilities; and (iii) basic hand-washing facilities	÷	Reporting
2.2 Proportion of schools with (i) adapted infrastructure; (ii) materials for students with disabilities	2.2 Proportion of schools offering basic services, by type of service (SDG 4.a.1): (i) adapted infrastructure and materials for students with disabilities		Reporting
2.3 Existence of a National Safe Schools Policy	2.3 Existence of a National Safe Schools Policy		Under development

CESA 2.1 Proportion of schools with access to (i) basic drinking water; (ii) single sex basic sanitation facilities; and (iii) basic hand-washing facilities

SDG 2.1 Proportion of schools offering basic services, by type of service (SDG 4.a.1): (i) basic drinking water; (ii) single sex basic sanitation facilities; and (iii) basic hand-washing facilities

In Africa, there is a great disparity between the regions in the provision of basic services like drinking water, toilets and handwashing facilities. Eastern and Western Africa have higher proportions of schools offering these basic services. It can also be seen that in general the lower levels of availability of these services are at the primary level. In Niger and Angola for example, less than 20% of schools dispose these services. In Central Africa, it is particularly difficult to monitor progress in this area.

Figure 8 shows the indicator on handwashing facilities. It is also among the CESA indicators selected by the AU for the regional benchmarking. Few countries in all subregions have already achieved 100% of the schools with handwashing facilities. It is the case, for example, of the islands states of Cabo Verde and São Tomé. Northern Africa has the most homogeneous and favorable situation. All four countries indicated figures above 80% in primary and secondary. In a few countries, especially in Eastern and Western Africa, less than 50% of the schools offer handwashing facilities. In Western Africa, Niger and Togo reported less than 20% at the primary level (2019/20). In Eastern Africa, the lowest availability of this facility is in Eritrea, which reported 10% in upper secondary, and only 3.3% of schools in primary.

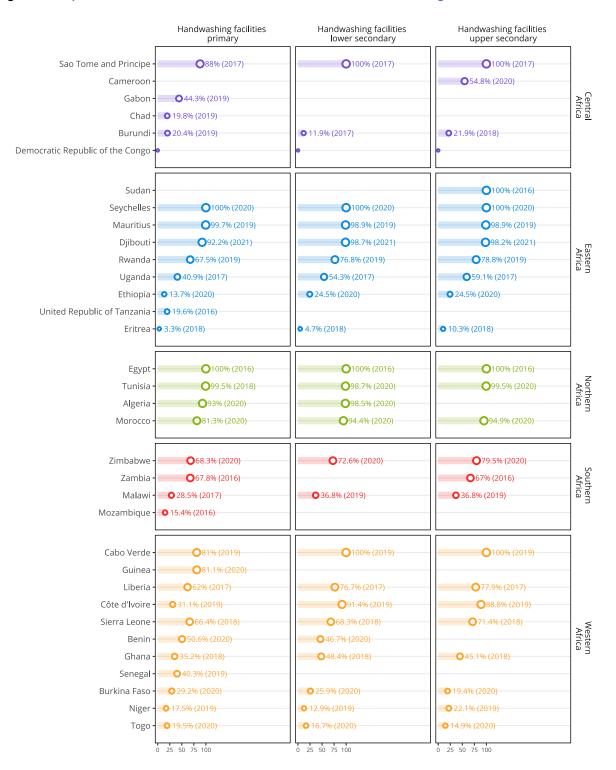


Figure 8: Proportion of schools with access to basic services - Handwashing facilities

CESA 2.2 Proportion of schools with (i) adapted infrastructure; (ii) materials for students with disabilities

SDG 2.2 Proportion of schools offering basic services, by type of service (SDG 4.a.1): (i) adapted infrastructure and materials for students with disabilities

Tables 13, 14 and 15 shows that monitoring of disability-friendly schools started from 2015 only. Data are still scarce for many countries.

The available data shows that school provision of adapted facilities to students with disabilities remains an important challenge. It represents a priority area to invest in for these countries to improve their education infrastructure and inclusiveness. The proportion of adapted schools rarely goes beyond 40%, like Mauritius at the secondary level, or Burkina Faso in primary.

 Table 13: SDG Indicator 4.a.1 Proportion of primary schools with access to adapted infrastructure and materials for students with disabilities -- Primary

Central Africa						
Country	2016	2017	2018	2019	2020	2021
Burundi			0	0		
Gabon				4		
Eastern Africa						
Country	2016	2017	2018	2019	2020	2021
Mauritius	37.1	31.1	31.4	28.8		30.8
Rwanda		18.1	23.5	23.2		
Seychelles	7.1	7.1	6.9	6.9	6.9	
Northern Africa						
Country	2016	2017	2018	2019	2020	2021
Могоссо		17.3	17.3	20.1	20.1	
Southern Africa						
Country	2016	2017	2018	2019	2020	2021
Eswatini	12.1					
Zambia	4.5					
Zimbabwe				15.6	19.3	
Western Africa						
Country	2016	2017	2018	2019	2020	2021
Burkina Faso	1.9	2.3		38.4	42.1	
Côte d'Ivoire					0	
Niger	0					
Senegal					33.3	
Sierra Leone		4.6	4.6	9.7	11.5	
Тодо					2.5	

Table 14: SDG Indicator 4.a.1 Proportion of primary schools with access to adapted infrastructure and materials for students with disabilities -- Lower secondary

Central Africa						
Country	2016	2017	2018	2019	2020	2021
Burundi				0		
Eastern Africa						
Country	2016	2017	2018	2019	2020	2021
Mauritius	36.6	34.7	45.3	44.2		46.4
Rwanda			28.5	30.6		
Seychelles	0	7.1	6.2	6.7	6.7	
Northern Africa						
Country	2016	2017	2018	2019	2020	2021
Могоссо		30.6	30.4	31.7	31.5	
Southern Africa						
Country	2016	2017	2018	2019	2020	2021
Eswatini	11					
Zimbabwe				13.8	14.9	
				10.0	14.5	
Western Africa				10.0	14.5	
Western Africa Country	2016	2017	2018	2019	2020	2021
	2016 18.6	2017	2018 17.5			2021
Country		2017		2019	2020	2021
Country Burkina Faso	18.6	2017		2019	2020	2021
Country Burkina Faso Niger	18.6	2017 6.6		2019	2020 13.7	2021

 Table 15: SDG Indicator 4.a.1 Proportion of primary schools with access to adapted infrastructure and materials for students with disabilities - Upper secondary

Central Africa						
Country	2016	2017	2018	2019	2020	2021
Burundi			0			
Cameroon					34.4	
Eastern Africa						
Country	2016	2017	2018	2019	2020	2021
Mauritius	36.6	34.7	45.3	44.2		46.4
Rwanda			36.7	38.6		
Seychelles	0	6.7	5.9	6.2	6.2	

Northern Africa						
Country	2016	2017	2018	2019	2020	2021
Могоссо		35.2	34.9	35.1	35	
Southern Africa						
Country	2016	2017	2018	2019	2020	2021
Eswatini	11					
Zambia	14.1					
Zimbabwe				15.6	18.7	
Western Africa						
Country	2016	2017	2018	2019	2020	2021
Burkina Faso	18.7		10.8	11	10.3	
Niger	0					
Senegal					42.1	
Sierra Leone		3.7	6.2	15.2	17.3	
Тодо					12.7	

Northern Africa

SO 3 – Information and Communication Technology

"Harness the capacity of ICT to improve access, quality and management of education and training systems"

Similar to the previous objective, Strategic Objective 3 is also related to SDG Target 4.a and its correspondent indicators. However, SO 3 focuses on the general infrastructure of education institutions with the following indicator to monitor countries' progress, especially that linked with ICT. Table 16 shows that the only indicator in this strategic objective is already being reported and is also a benchmark indicator.

Table 16: Reporting status of SO 3 indicators

CESA 16-25 indicators (March 2018 revision)	CESA indicators for reporting as per the agreement between the UIS and the AU	Benchmarked	Reporting status
3.1 Proportion of educational institutions with access to (i) electricity (ii) the internet for pedagogical purposes and (iii) computers for pedagogical purposes	3.1 Proportion of schools offering basic services, by type of service (SDG 4.a.1): (i) electricity (ii) the internet for pedagogical purposes and (iii) computers for pedagogical purposes	Ē	Reporting

CESA 3.1 Proportion of educational institutions with access to (i) electricity (ii) the internet for pedagogical purposes and (iii) computers for pedagogical purposes

SDG 3.1 Proportion of schools offering basic services, by type of service (SDG 4.a.1): (i) electricity (ii) the internet for pedagogical purposes and (iii) computers for pedagogical purposes

From the data displayed in **Figures 9 and 10**, Northern and Eastern Africa reported the highest proportions. In all regions, the proportion of primary schools with computers and internet is lower than in secondary.

Countries where the proportions of schools are the lowest are in Western Africa. In this subregion, Niger, Togo, Benin and Sierra Leone reported that less than 5% of the schools have internet and computers for the students.

Data also show that internet is still scarce in most countries of Western Africa in all three levels. The exceptions are Cabo Verde and Côte d'Ivoire, which reported values above the average in the region.

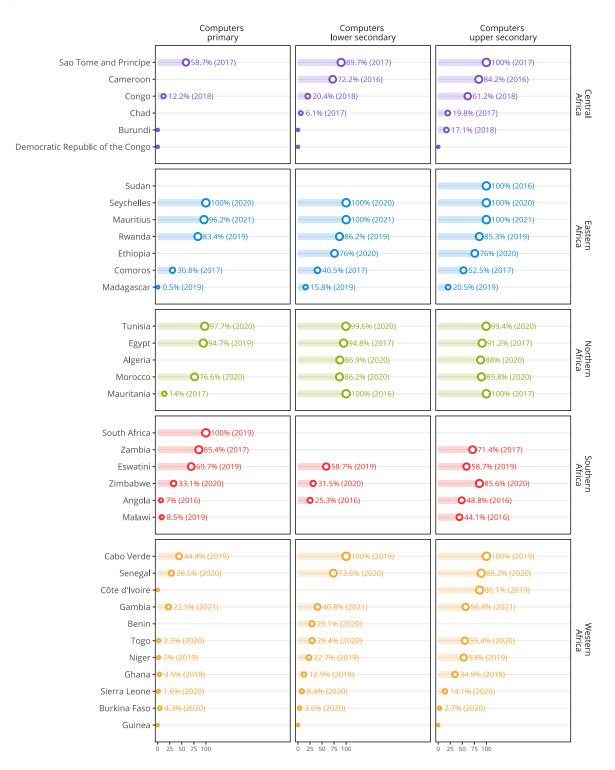


Figure 9: Proportion of schools with access to basic services - Computers

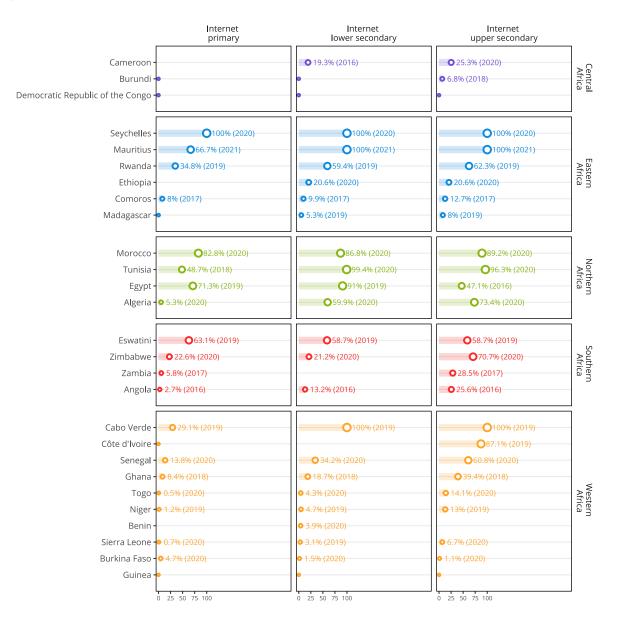


Figure 10: Proportion of schools with access to basic services - Internet

Data available also show that access to a source of electricity, a prerequisite for ICT, remains an important challenge in some regions of the continent, especially at the primary level. Niger, for example, reported in 2020 a proportion of only 5.2% of schools with electricity. Other countries in the subregion face the same challenge, but already higher proportions, as is the case of Guinea and Burkina Faso.

SO 4 – Skills and Completion Rates

"Ensure acquisition of requisite knowledge and skills as well as improved completion rates at all levels and groups through harmonization processes across all levels for national and regional integration"

Strategic Objective 4 is composed of multiple dimensions that encompass different targets of SDG 4. Among the six indicators, four are already being reported and two are under development. Completion rate is a benchmarked indicator. Table 17 provides a synthesis of the situation.

Table 17: Reporting status of SO 4 indicators

CESA 16-25 indicators (March 2018 revision)	CESA indicators for reporting as per the agreement between the UIS and the AU	Benchmarked	Reporting status
4.1 Gross intake ratio to last grade of primary, lower secondary and upper secondary	4.1 Completion rate (primary education, lower secondary education, upper secondary education) (SDG 4.1.2)		Reporting
4.2 Existence of a National Qualifications Framework	4.2 Existence of a National Qualifications Framework		Under development
4.3 Membership in the Network of African Learning Assessments	4.3 Membership in the Network of African Learning Assessments		Under development
4.4 Percentage Distribution of Tertiary Graduates by field of study	4.4 Distribution of tertiary graduates by field of study		Reporting
4.5 Proportion of children and young people (a) in grade 3; (b) at the end of primary education; and (c) at the end of lower secondary education achieving at least a minimum proficiency level in (i) reading (ii) mathematics and (iii) science, by sex	4.5 Proportion of children and young people (a) in grades 2/3; (b) at the end of primary; and (c) at the end of lower secondary achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex (SDG 4.1.1)		Reporting
4.6 Proportion of population in a given age group achieving at least a fixed level of proficiency in functional (a) literacy and (b) numeracy skills, by sex	4.6 Proportion of population in a given age group achieving at least a fixed level of proficiency in functional (a) literacy and (b) numeracy skills, by sex (SDG 4.6.1)		Reporting

The two global indicators associated with SDG 4.1 measure proficiency in reading and mathematics at three steps on the education ladder (4.1.1), and the completion rates in primary and secondary education (4.1.2) are used to monitor both frameworks. Indicator 4.6 is reported using the SDG Global Indicator 4.6.1 for literacy and numeracy on the "proportion of population in a given age group achieving at least a fixed level of proficiency in functional (a) literacy and (b) numeracy skills, by sex", but data are mostly unavailable for the region. Only a few data points for Ghana (2013) and South Africa (2017) are available. Indicators 4.2 and 4.3 are under development and are not reported below.

CESA 4.1 Gross intake ratio to last grade of primary, lower secondary and upper secondary

SDG 4.1 Completion rate (primary education, lower secondary education, upper secondary education) (SDG 4.1.2)

SDG Indicator 4.1.3 has the same definition as CESA Indicator 4.1: Gross intake ratio for final year of primary and lower secondary. This indicator has wide coverage in terms of data availability, with about 40 countries on the continent having information available for this indicator at ISCED level 1 or 2. However, the indicator that was chosen to report this indicator is the set of completion rates (**Figure 18**).

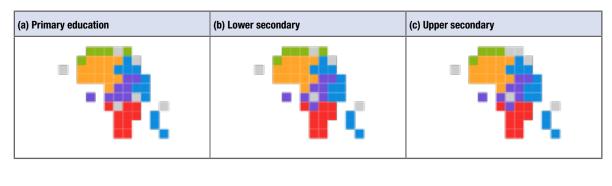


Table 18: Data availability for SDG Global Indicator 4.1.2, by country

Northern Africa 📕 Southern Africa 📕 Western Africa 📕 Central Africa 📕 Eastern Africa

Completion rates decline on average as we advance on the education level (Figure 11). While the average completion rate is above 50% for all regions in primary, only Northern Africa reaches this level in lower secondary. In upper secondary, none of the subregions reach a mean of 50% completion. The averages are mostly stable in all regions. Northern and Southern Africa have the highest rates on the continent followed by the Eastern and Western regions.

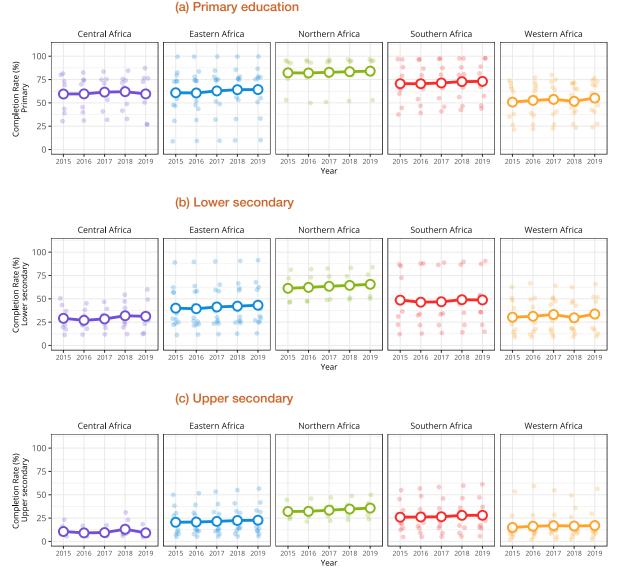


Figure 11: Average completion rates by level of education, both sexes, 2015–19

CESA 4.4 Percentage Distribution of Tertiary Graduates by field of study

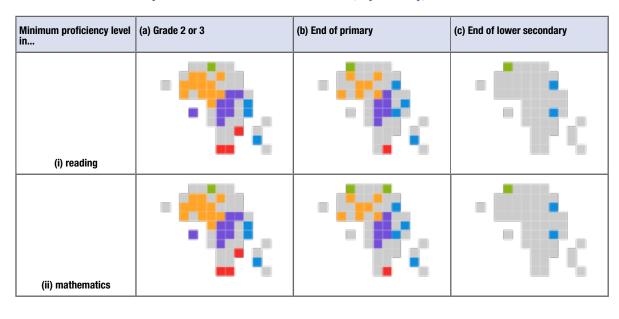
SDG 4.4 Distribution of tertiary graduates by field of study

Another indicator identified in the UIS database that allows monitoring of SO 4 is the distribution of graduates at the tertiary level. **Tables 20 to 22** show the distribution for the main "hard sciences." They reveal modest levels of graduates in these fields, which may be related to the levels of performance at the earliest educational ages.

CESA 4.5 Proportion of children and young people (a) in grade 3; (b) at the end of primary education; and (c) at the end of lower secondary education achieving at least a minimum proficiency level in (i) reading (ii) mathematics and (iii) science, by sex

SDG 4.5 Proportion of children and young people (a) in grades 2/3; (b) at the end of primary; and (c) at the end of lower secondary achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex (SDG 4.1.1)

The other important indicators to monitor SO 4 are the ones that measure proficiency in literacy and numeracy. Data for these indicators are available mostly for the primary level. New data points from 2019 were collected since the latest edition of the report (Figures 19).





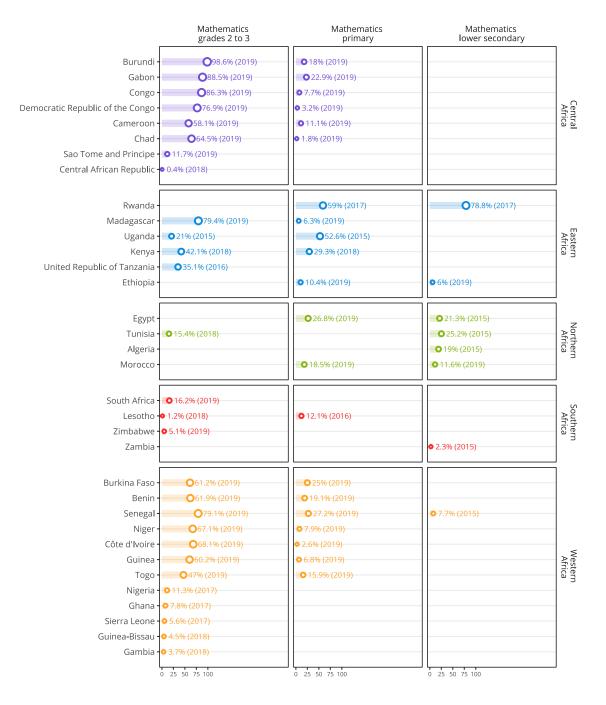
🗾 Northern Africa 📕 Southern Africa 📕 Western Africa 🧧 Central Africa 📕 Eastern Africa

Figures 12 and 13 show the latest measured value for the African states in reading and mathematics are slightly better in grades 2 to 3 than by the end of the primary, which might be explained by the fact that the skills assessed at this level are easily mastered by children who are 7 or 8 (Grade 2) or 8 or 9 (Grade 3). Data from 2019 show that a fair amount of countries in the subregion have proportions of skilled children below 5%, especially in mathematics.

Figure 12: Proportion of children and young people achieving at least a minimum proficiency level in reading, by country, latest year available

	Reading grades 2 to 3	Reading pPrimary	Reading lower secondary	_
Gabon・	O 66.1% (2019)	O 76.3% (2019)		
Congo	O 63.3% (2019)	O 33.6% (2019)		
Burundi ·	0 78.9% (2019)	• 4.5% (2019)		
Cameroon -	O 39.4% (2019)	O 30.2% (2019)		A€
Democratic Republic of the Congo	0 41.6% (2019)	9 .2% (2019)		Central Africa
Chad	O 34.1% (2019)	• 7.6% (2019)		
Sao Tome and Principe -	O 11.7% (2019)			
Central African Republic				
Rwanda -		0 56.4% (2017)	071.3% (2017)	
United Republic of Tanzania ·	O 56% (2016)			
Kenya -	O 53.1% (2018)	• • • • • • • • • • • • • • • • • • • •		Eastern Africa
Uganda ·	O 33.2% (2015)	O 51.9% (2015)		Ca
Madagascar •	• • • • • • • • • • • • • • • • • • • •	O 6.3% (2019)		
Ethiopia -		O 7.7% (2019)	o 6.5% (2019)	
Tunisia - Morocco - Algeria -	0 47% (2018)	• 36% (2016)	 28.4% (2015) 26.7% (2018) 21% (2015) 	Northern Africa
South Africa ·	O 22% (2016)			
Zimbabwe -	019.6% (2019)			Southern Africa
Lesotho -	0 13.2% (2018)	• 3.4% (2016)		rica
Zambia -			• 5% (2015)	
Benin ·	O 37.7% (2019)	0 45.5% (2019)		
Burkina Faso ·	O 34.2% (2019)	O 33% (2019)		
Senegal -	0 47.7% (2019)	0 41.1% (2019)	• 8.7% (2015)	
Niger -	0 44.3% (2019)	• 14.4% (2019)		
Côte d'Ivoire	O 33.1% (2019)	022% (2019)		
Guinea	023.3% (2019)	022.2% (2019)		Afr
Togo -	024.5% (2019)	019.4% (2019)		Western Africa
Nigeria ·	0 17% (2017)			_
Sierra Leone ·	O 6.1% (2017)			
Guinea-Bissau ·	o 5.8% (2018)			
Ghana	• 5.8% (2017)			
Gambia	• 5.2% (2018)			
	0 25 50 75 100	0 25 50 75 100		
		> > > > > > > > > > > > > > > > >		

Figure 13: Proportion of children and young people achieving at least a minimum proficiency level in mathematics, by country, latest year available



Learning Proficiency for Sustainable Development Goal 4.1

Along with the present publication, the UIS also published a companion entitled "Assessing Learning Proficiency Levels and Trends for Sustainable Development Goal 4.1 : A focus on Africa."²⁷

The UIS, the AU, the national government and non-government organizations across Africa are among the expected users of the report.

²⁷ The publication was written by Prof. Martin Gustafsson, from Research on Socio-Economic Policy (ReSEP), University of Stellenbosch.

The report examines the availability and reliability of statistics on SDG 4.1, with a focus on the Africa region, and discusses what these statistics suggest about learner proficiency both in recent years and since the start of the COVID-19 pandemic. It is aimed primarily at those with an interest in measuring proficiency and in interpreting proficiency statistics.

The report also examines the availability of SDG learning proficiency indicator values. The conclusions point to a generally low level of learning proficiency in Africa, and especially to decreasing levels of proficiency with higher grades in the schooling system. The analysis also suggests that, as in the rest of the world, girls on average perform slightly better than boys, in particular in reading. The report also raises important questions around measurement accuracy based on the existing patterns in the SDG 4.1.1 indicator values in certain countries. Finally, the report assesses the impact of the 2020 pandemic on proficiency. Africa's learners lost an estimated 69% of a school year on average, and while evidence specific to Africa is emerging on what this means for learning proficiency, far more evidence is needed.

The report also issues recommendations grouped under four themes:

- 1. Measurement within existing indicator definitions must be improved. The AU has not introduced its own set of indicators to monitor learning proficiency but has instead focused on the relevant SDG indicators.
- 2. Africa should focus on the development of the two African assessment programmes, PASEC and SACMEQ.
- 3. A sense of national ownership of SDG 4.1.1 statistics needs to be cultivated.
- 4. Holistic monitoring of learning drawing from all available data sources is necessary.

The report with detailed analysis and recommendations can be found at the following link.

Table 20: Percentage of graduates from tertiary education in Natural Sciences, Mathematics and Statistics programmes, both sexes

Country	2010	2011	2012	2014	2015	2016	2017	2018	2019	2020
Burundi	3.7					10.4	7.4	13.4		
Congo							7.5			
Democratic Republic of the Congo						2.9				
Eastern Africa										
Country	2010	2011	2012	2014	2015	2016	2017	2018	2019	2020
Eritrea						5.2				
Madagascar	11.9			10	10.3	9.2	9.9	8.2		8.6
Mauritius							4.5			4.4
Rwanda					2.3	5.8	4.8	5.3	3.5	
Seychelles	0	6.7	0		4	3.6	2	4.3	6.5	1.9
United Republic of Tanzania									1.3	
Northern Africa										
Country	2010	2011	2012	2014	2015	2016	2017	2018	2019	2020
Algeria	9.7	7.8			11.1	11.8		9.6	11.7	12.8
Egypt						3.6				
Могоссо	6.7				11.6	8.7	9.7		9.8	10.3
Tunisia			8.4		9.8	10.5		0.0		
					9.0	10.5		9.9		
Mauritania					9.0	8.6		9.9		27.3
					9.0			9.9		27.3
Mauritania	2010	2011	2012	2014	9.0 2015		2017	9.9 2018	2019	27.3 2020
Mauritania <mark>Southern Africa</mark>	2010	2011		2014		8.6	2017		2019	
Mauritania Southern Africa Country	2010	2011		2014		8.6	2017		2019	2020
Mauritania Southern Africa Country Botswana	2010	2011	2012	2014	2015	8.6	2017	2018	2019	2020
Mauritania Southern Africa Country Botswana Lesotho	2010	2011	2012 0	2014	2015 1.3	8.6 2016		2018 1.3	2019	2020
Mauritania Southern Africa Country Botswana Lesotho Mozambique	2010	2011	2012 0		2015 1.3 1.9	8.6 2016 2	1.1	2018 1.3 1	2019 7.3	2020
Mauritania Southern Africa Country Botswana Lesotho Mozambique Namibia	2010	2011	2012 0	6.6	2015 1.3 1.9 6.7	8.6 2016 2 4.6	1.1 3.2	2018 1.3 1 2.5		2020
Mauritania Southern Africa Country Botswana Lesotho Mozambique Namibia South Africa	2010	2011	2012 0	6.6	2015 1.3 1.9 6.7	8.6 2016 2 4.6	1.1 3.2	2018 1.3 1 2.5		2020
Mauritania Southern Africa Country Botswana Lesotho Mozambique Namibia South Africa Western Africa			2012 0 0	6.6 7.5	2015 1.3 1.9 6.7 7.8	8.6 2016 2 4.6 7.1	1.1 3.2 7.3	2018 1.3 1 2.5 7.3	7.3	2020
Mauritania Southern Africa Country Botswana Lesotho Mozambique Namibia South Africa Western Africa Country		2011	2012 0 0	6.6 7.5 2014	2015 1.3 1.9 6.7 7.8 2015	8.6 2016 2 4.6 7.1	1.1 3.2 7.3	2018 1.3 1 2.5 7.3 2018	7.3	2020
Mauritania Southern Africa Country Botswana Lesotho Mozambique Namibia South Africa Vestern Africa Country Benin	2010	2011 1.8	2012 0 0 2012	6.6 7.5 2014 1.7	2015 1.3 1.9 6.7 7.8 2015 9.2	 8.6 2016 4.6 7.1 2016 	1.1 3.2 7.3 2017	2018 1.3 1 2.5 7.3 2018 11.3	7.3 2019	2020 2.8 2020
MauritaniaSouthern AfricaCountryBotswanaLesothoMozambiqueNamibiaSouth AfricaWestern AfricaCountryBeninBurkina Faso	2010	2011 1.8	2012 0 0 2012	6.6 7.5 2014 1.7	2015 1.3 1.9 6.7 7.8 2015 9.2	8.6 2016 2 4.6 7.1 2016	1.1 3.2 7.3 2017 5.5	2018 1.3 1 2.5 7.3 2018 11.3	7.3 2019	2020 2.8 2020

Table 21: Percentage of graduates from tertiary education in Information and Communication Technologies programmes, both sexes

Central Africa										
Country	2010	2011	2012	2014	2015	2016	2017	2018	2019	2020
Burundi	5.1					7.6	5.2	6.3		
Congo							2.1			
Democratic Republic of the Congo						6.4				
Eastern Africa										
Country	2010	2011	2012	2014	2015	2016	2017	2018	2019	2020
Eritrea						0.3				
Madagascar	1.4			7.5	7.8	6.5	6.3	9.6		8
Mauritius							10.4			8.7
Rwanda					6.6		4.7	5.2	5.4	
Seychelles	0	1.7	0		7.9	10.7	8.7	3.2	10.6	11.1
United Republic of Tanzania									3.8	
Northern Africa										
Country	2010	2011	2012	2014	2015	2016	2017	2018	2019	2020
Algeria	4.5	3.9			2.8	2.5		2.6	3.4	3
Egypt						1.5				
Morocco	15.8				2	5	3.5		3.9	4.9
Morocco Tunisia	15.8		17.5		2 17.5	5 16	3.5	13.9	3.9	4.9
	15.8		17.5				3.5	13.9	3.9	4.9 5.1
Tunisia	15.8		17.5			16	3.5	13.9	3.9	
Tunisia Mauritania	15.8 2010	2011	17.5 2012	2014		16	3.5 2017	13.9 2018	3.9 2019	
Tunisia Mauritania <mark>Southern Africa</mark>		2011		2014	17.5	16 4.5				5.1
Tunisia Mauritania Southern Africa Country		2011		2014	17.5	16 4.5				5.1 2020
Tunisia Mauritania Southern Africa Country Botswana		2011	2012	2014	17.5 2015	16 4.5		2018		5.1 2020
Tunisia Mauritania Southern Africa Country Botswana Lesotho		2011	2012 0.7	2014	17.5 2015 2.3	16 4.5 2016	2017	2018 4.9		5.1 2020
Tunisia Mauritania Southern Africa Country Botswana Lesotho Mozambique		2011	2012 0.7		17.5 2015 2.3 1.3	16 4.5 2016 2	2017 2.3	2018 4.9 1.3		5.1 2020
Tunisia Mauritania Southern Africa Country Botswana Lesotho Mozambique Namibia		2011	2012 0.7	6	17.5 2015 2.3 1.3 4.5	16 4.5 2016 2 4.4	2017 2.3 4.9	2018 4.9 1.3 4.7	2019	5.1 2020
Tunisia Mauritania Southern Africa Country Botswana Lesotho Mozambique Namibia South Africa		2011	2012 0.7	6	17.5 2015 2.3 1.3 4.5	16 4.5 2016 2 4.4	2017 2.3 4.9	2018 4.9 1.3 4.7	2019	5.1 2020
Tunisia Mauritania Southern Africa Country Botswana Lesotho Mozambique Namibia South Africa Western Africa	2010		2012 0.7 0	6 3.4	17.5 2015 2.3 1.3 4.5 3.2	16 4.5 2016 2 4.4 3.1	2017 2.3 4.9 3.2	2018 4.9 1.3 4.7 3	2019	5.1 2020 5
Tunisia Mauritania Southern Africa Country Botswana Lesotho Mozambique Namibia South Africa Western Africa Country	2010	2011	2012 0.7 0	6 3.4 2014	17.5 2015 2.3 1.3 4.5 3.2 2015	16 4.5 2016 2 4.4 3.1	2017 2.3 4.9 3.2	2018 4.9 1.3 4.7 3	2019	5.1 2020 5
Tunisia Mauritania Southern Africa Country Botswana Lesotho Mozambique Namibia South Africa Western Africa Country Benin	2010	2011 2.1	2012 0.7 0 2012	6 3.4 2014 7	17.5 2015 2.3 1.3 4.5 3.2 3.2 2015 5.4	16 4.5 2016 2 4.4 3.1 2016	2017 2.3 4.9 3.2 2017	2018 4.9 1.3 4.7 3 3 2018 4.8	2019 3 2019	5.1 2020 5 2020
TunisiaMauritaniaSouthern AfricaCountryBotswanaLesothoMozambiqueNamibiaSouth AfricaWestern AfricaCountryBeninBurkina Faso	2010	2011 2.1	2012 0.7 0 2012	6 3.4 2014 7	17.5 2015 2.3 1.3 4.5 3.2 3.2 2015 5.4	16 4.5 2016 2 4.4 3.1 2016 2016	2017 2.3 4.9 3.2 2017 2017	2018 4.9 1.3 4.7 3 3 2018 4.8 0	2019 3 2019	5.1 2020 5 2020

Table 22: Percentage of graduates from tertiary education in Engineering, Manufacturing and Construction programmes, both sexes

Central Africa										
Country	2010	2011	2012	2014	2015	2016	2017	2018	2019	2020
Burundi	3.1					6.4	8	0		
Congo							5.5			
Democratic Republic of the Congo						6.2				
Eastern Africa										
Country	2010	2011	2012	2014	2015	2016	2017	2018	2019	2020
Eritrea						23.5				
Madagascar	5.6			5	7.4	7.5	6.7	6.1		12.6
Mauritius							8.4			8.5
Rwanda						3.8	4.2	5.8	4.1	
Seychelles	0	16.7	0		3.7	1.9	4.9	9.8	2.8	15.8
United Republic of Tanzania									4.4	
Northern Africa										
Country	2010	2011	2012	2014	2015	2016	2017	2018	2019	2020
Algeria	14.9	14.4			17.2	16.7		22	17.3	13.7
Egypt						6.2				
Могоссо	12.8				3.6	4.7	5.9		5.3	F 1
	12.0				3.0	4.7	5.9		5.5	5.1
Tunisia	12.0		17.2		3.0 17	4.7	5.9	19.5	5.5	5.1
	12.0		17.2				5.9	19.5	5.5	2.1
Tunisia	12.0		17.2			17.9	0.9	19.5	0.0	
Tunisia Mauritania	2010	2011	17.2 2012	2014		17.9	3.9 2017	19.5 2018	2019	
Tunisia Mauritania <mark>Southern Africa</mark>		2011		2014	17	17.9 7.1				2.1
Tunisia Mauritania Southern Africa Country		2011		2014	17	17.9 7.1				2.1 2020
Tunisia Mauritania Southern Africa Country Botswana		2011	2012	2014	17 2015	17.9 7.1		2018		2.1 2020
Tunisia Mauritania Southern Africa Country Botswana Lesotho		2011	2012 11.8	2014	17 2015 8	17.9 7.1 2016	2017	2018 9.2		2.1 2020
Tunisia Mauritania Southern Africa Country Botswana Lesotho Mozambique		2011	2012 11.8		17 2015 8 6.8	17.9 7.1 2016 7.9	2017 5.6	2018 9.2 7.3		2.1 2020
Tunisia Mauritania Southern Africa Country Botswana Lesotho Mozambique Namibia		2011	2012 11.8	5.3	17 2015 8 6.8 5	17.9 7.1 2016 7.9 4	2017 5.6 4.1	2018 9.2 7.3 5.6	2019	2.1 2020
Tunisia Mauritania Southern Africa Country Botswana Lesotho Mozambique Namibia South Africa		2011	2012 11.8	5.3	17 2015 8 6.8 5	17.9 7.1 2016 7.9 4	2017 5.6 4.1	2018 9.2 7.3 5.6	2019	2.1 2020
Tunisia Mauritania Southern Africa Country Botswana Lesotho Mozambique Namibia South Africa Western Africa	2010		2012 11.8 4.2	5.3 8.7	17 2015 8 6.8 5 8.7	17.9 7.1 2016 7.9 4 8.3	2017 5.6 4.1 8.1	2018 9.2 7.3 5.6 8	2019	2.1 2020 10.8
Tunisia Mauritania Southern Africa Country Botswana Lesotho Mozambique Namibia South Africa Western Africa Country	2010	2011	2012 11.8 4.2	5.3 8.7 2014	17 2015 8 6.8 5 8.7 8.7	17.9 7.1 2016 7.9 4 8.3	2017 5.6 4.1 8.1	2018 9.2 7.3 5.6 8	2019	2.1 2020 10.8
Tunisia Mauritania Southern Africa Country Botswana Lesotho Mozambique Namibia South Africa Western Africa Country Benin	2010	2011 9.4	2012 11.8 4.2 2012	5.3 8.7 2014 5.6	17 2015 8 6.8 5 8.7 8.7 2015 6.2	17.9 7.1 2016 7.9 4 8.3 2016	2017 5.6 4.1 8.1 2017	2018 9.2 7.3 5.6 8 8 2018 4.8	2019 8 2019	2.1 2020 10.8 2020
TunisiaMauritaniaSouthern AfricaCountryBotswanaLesothoMozambiqueNamibiaSouth AfricaWestern AfricaCountryBeninBurkina Faso	2010	2011 9.4	2012 11.8 4.2 2012	5.3 8.7 2014 5.6	17 2015 8 6.8 5 8.7 8.7 2015 6.2	17.9 7.1 2016 7.9 4 8.3 2016	2017 5.6 4.1 8.1 2017 2017	2018 9.2 7.3 5.6 8 8 2018 4.8 12.8	2019 8 2019	2.1 2020 10.8 2020

SO 5 – Parity and Equity

"Accelerate processes leading to gender parity and equity"

Strategic Objective 5 has five indicators and intersects with SDG 4.5, but its focus is on gender parity. Two indicators are shared between frameworks and are also among the benchmarked indicators: 5.1 Completion Rate - Adjusted Gender Parity Index (SDG 4.5.1/4.1.2) and 5.4 Out-of-school rate, by sex (SDG 4.1.4). Besides these two, two other indicators are already being reported. The percentage of female teachers and the percentage of girls enrolled in STEM can also be monitored using administrative sources. Indicator 5.3 Percentage of Female Head Teachers is being explored for future reporting. Table 23 summarizes the situation.

Table 23: Reporting status of SO 5 indicators

CESA 16-25 indicators (March 2018 revision)	CESA indicators for reporting as per the agreement between the UIS and the AU	Benchmarked	Reporting status
5.1 Gender Parity Index for Gross Enrolment Ratio	5.1 Completion Rate - Adjusted Gender Parity Index (SDG 4.5.1/4.1.2)		Reporting
5.2 Percentage of Female Teachers	5.2 Percentage of female teachers by teaching level of education		Reporting
5.3 Percentage of Female Head Teachers	5.3 Percentage of Female Head Teachers		Under development
5.4 Girls' dropout rate per reason of drop out	5.4 Out-of-school rate, by sex (SDG 4.1.4)		Reporting
5.5 Percentage of girls enrolled in STEM	5.5 Percentage of graduates from Science, Technology, Engineering and Mathematics programmes in tertiary education, both sexes	_	Reporting

CESA 5.1 Gender Parity Index for Gross Enrolment Ratio

SDG 5.1 Completion Rate - Adjusted Gender Parity Index (SDG 4.5.1/4.1.2)

Gender parity index, calculated for completion rates, is displayed in **Figure 14**.Countries that appear to the right of the grey band have an index above 1 and therefore favour girls on completion rates. It can be seen that a few countries are in this situation in primary, but this changes in upper secondary. At that level, completion rates are higher for boys in most countries. This is the case for Rwanda, which has an index above 1.1 in primary and lower secondary, and below 0.9 in upper secondary. Lesotho and South Africa have maintained completion rates that favour girls at all three levels.

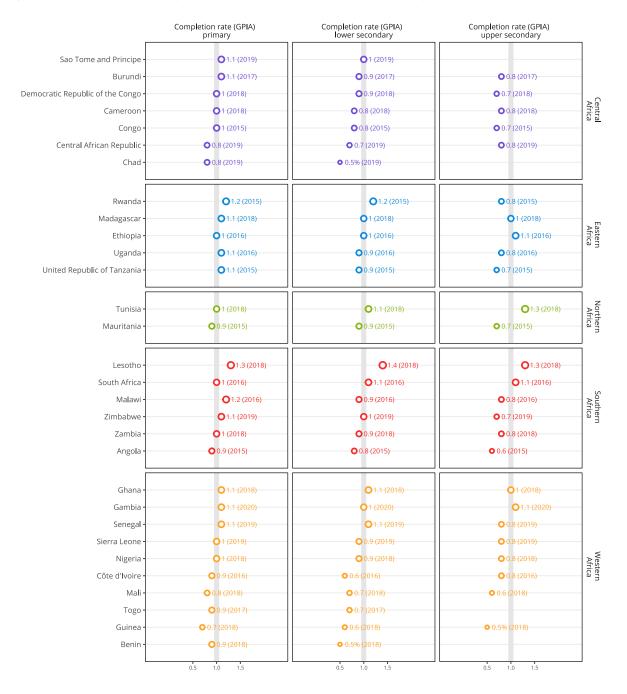


Figure 14: Completion rates, gender parity index, primary and secondary

CESA 5.2 Percentage of Female Teachers

SDG 5.2 Percentage of female teachers by teaching level of education

The average percentage of teachers who are female is above 50% in primary for all subregions but Western Africa. The proportion has remained mostly stable at this level. The average proportion in secondary and tertiary is below 50% in most regions, with the exception of Southern Africa.

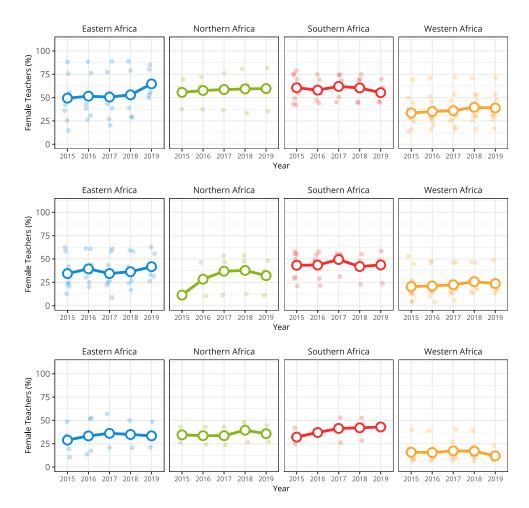


Figure 15: Percentage of teachers who are female

5.4 Girls' dropout rate per reason of drop out

5.4 Out-of-school rate, by sex (SDG 4.1.4)

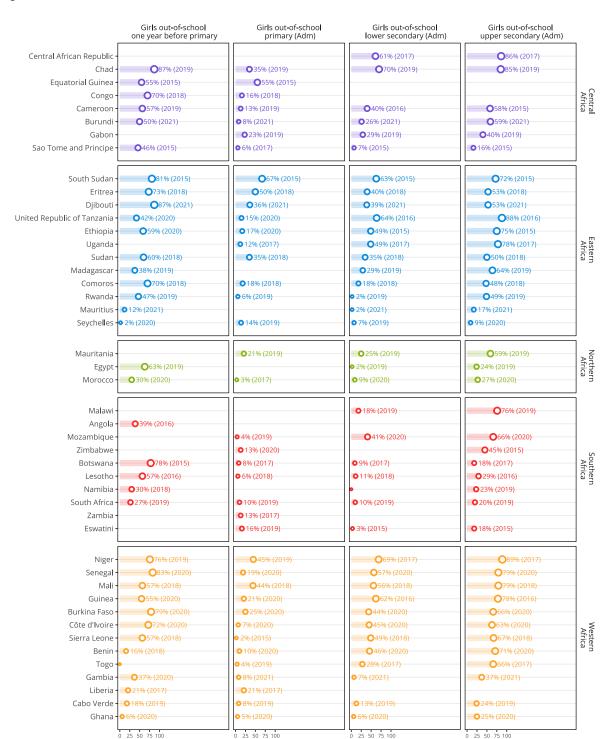
Finally, the out-of-school rate is the indicator already reported that can be used to monitor dropout rates for girls. Figure 16 shows the latest number available for all the countries in the region, since 2015.

In the primary level in Central Africa, the highest rate of girls left out of school was reported by Equatorial Guinea in 2015 (54%). Chad also reported a high rate of 35% in 2019. The lowest rate is in São Tomé and Principe, which reported 6% in 2017. In Eastern Africa, Eritrea reported 49% in 2018. Djibouti and Sudan reported values close to 35% in 2021. The lowest rates were reported in Rwanda, 6% in 2019. In Northern Africa, Morocco and Tunisia reported values close to 3% and Mauritania 21% in 2019. In Southern Africa, it is Angola which reported the highest figures in 2015 (24%). Recent data between 2018 and 2020 show rates between 10 and 15% in Zambia, Zimbabwe and Eswatini. The lowest recorded rate was in Namibia in 2015 (1.5%). In Western Africa, half of the countries reported rates above 20%. The highest rates are in Niger (45%, 2019) and Mali (44%, 2018). More than one quarter of the girls are also out of school in Nigeria (2018) and Burkina Faso (2020). Togo and Ghana have reported rates close to 5% between 2019 and 2020.

In lower secondary, only three countries in Western Africa have rates below 25%. Ghana reported 6% and Gambia 7% respectively in 2020 and 2021 while Cabo Verde reported 13% in 2019. Niger reported that 70% of girls were out of school at this level in 2017. In Eastern Africa, Rwanda, Mauritius and Seychelles have less than 5% of girls out of school. South Sudan reported in 2015 that 63% of the girls are out in this level. In Southern Africa, Namibia, Botswana and Eswatini have the lowest rates of girls out of school. In 2019, Mozambique has still 40%

of girls out of school in this level. In Central Africa, São Tomé and Principe is the only country with rates below 10%. Chad reported in 2019 that 70% of girs were out of school. In Northern Africa, Mauritania has similar rates, while Morocco and Tunisia report that around one quarter of girls are out of school.

The out-of-school rates are higher in upper secondary as compared to lower secondary. Twenty four out of 41 countries have reported rates above 50%. One quarter of the countries have more than 75% of the girls out of school at this level.





Around three hundred data points from household surveys were taken from the World Inequality Database on Education. Seventy two data points are available in the period from 2015 to 2020 also report out-of-school data. Values collected using this instrument differ from the administrative data. For instance, in the primary, the household survey data tends to be lower than the survey, while in the upper secondary the opposite is true. Despite these differences, the picture is mostly the same in all subregions.

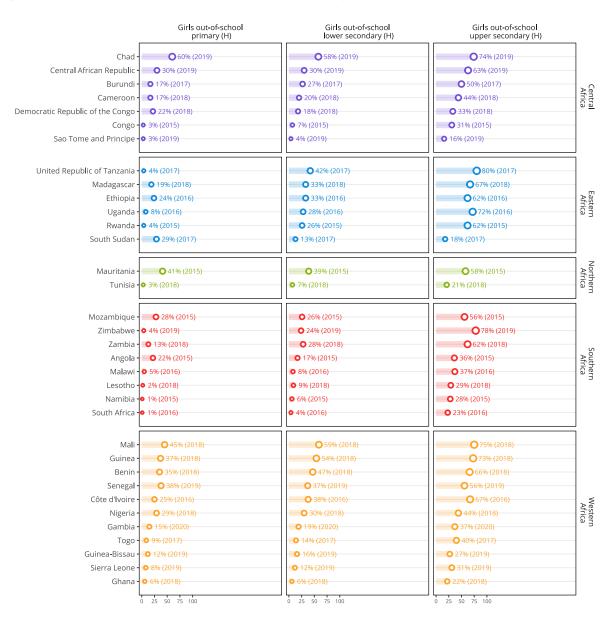


Figure 17: Out-of-school rate for children, household survey data, female

5.5 Percentage of girls enrolled in STEM

5.5 Percentage of graduates from Science, Technology, Engineering and Mathematics programmes in tertiary education, both sexes

The number of girls in STEM is not available directly, but the percentage for both sexes can be used in conjunction with other variables as an indication for the proportion of girls. Table 24 shows the percentage of graduates in STEM fields.

Table 24: Percentage of graduates from Science, Technology, Engineering and Mathematics programmes in tertiary education, both sexes

Central Africa												
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Burundi	11.9						24.3	20.6	19.7			
Congo								15.1				
Democratic Republic of the Congo							15.5					
Eastern Africa												
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Eritrea							29					
Madagascar	18.9				22.5	25.5	23.2	23	23.8		29.1	
Mauritius								23.3			21.6	
Rwanda							20.4	13.8	16.3	13		
Seychelles	0	25	0			15.6	16.2	15.7	17.2	19.9	28.8	
United Republic of Tanzania										9.5		
Northern Africa												
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Algeria	29.1	26.1				31.2	31.1		34.2	32.4	29.6	
Egypt							11.2					
Могоссо	35.3					17.1	18.4	19		19	20.4	
Tunisia			43.1			44.4	44.4		43.3			
Tunisia Mauritania			43.1			44.4	44.4 20.2		43.3		34.6	
			43.1			44.4			43.3		34.6	
Mauritania	2010	2011	43.1 2012	2013	2014	44.4 2015		2017	43.3 2018	2019	34.6 2020	2021
Mauritania Southern Africa	2010	2011		2013	2014 17.5		20.2	2017 27.6		2019 23.3		2021
Mauritania Southern Africa Country	2010	2011		2013			20.2				2020	2021
Mauritania Southern Africa Country Botswana	2010	2011	2012	2013		2015	20.2		2018		2020	2021
Mauritania Southern Africa Country Botswana Lesotho	2010	2011	2012 12.6	2013		2015 11.7	20.2 2016	27.6	2018 15.4		2020	2021
Mauritania Southern Africa Country Botswana Lesotho Mozambique	2010	2011	2012 12.6	2013	17.5	2015 11.7 10.1	20.2 2016 11.9	27.6 9	2018 15.4 9.6		2020	2021
Mauritania Southern Africa Country Botswana Lesotho Mozambique Namibia	2010	2011	2012 12.6	2013	17.5 17.9	2015 11.7 10.1 16.2	20.2 2016 11.9 13	27.6 9 12.1	2018 15.4 9.6 12.9	23.3	2020	2021
Mauritania Southern Africa Country Botswana Lesotho Mozambique Namibia South Africa	2010	2011	2012 12.6	2013	17.5 17.9	2015 11.7 10.1 16.2	20.2 2016 11.9 13	27.6 9 12.1	2018 15.4 9.6 12.9	23.3	2020	2021
Mauritania Southern Africa Country Botswana Lesotho Mozambique Namibia South Africa Western Africa			2012 12.6 4.2		17.5 17.9 19.6	2015 11.7 10.1 16.2 19.6	20.2 2016 11.9 13 18.5	27.6 9 12.1 18.6	2018 15.4 9.6 12.9 18.3	23.3	2020	
Mauritania Southern Africa Country Botswana Lesotho Mozambique Namibia South Africa Western Africa Country		2011	2012 12.6 4.2		17.5 17.9 19.6 2014	2015 11.7 10.1 16.2 19.6	20.2 2016 11.9 13 18.5	27.6 9 12.1 18.6	2018 15.4 9.6 12.9 18.3	23.3	2020	
Mauritania Southern Africa Country Botswana Lesotho Mozambique Namibia South Africa Western Africa Country Benin	2010	2011 13.2	2012 12.6 4.2 2012		17.5 17.9 19.6 2014 14.2	2015 11.7 10.1 16.2 19.6 2015 20.7	20.2 2016 11.9 13 18.5 2016	27.6 9 12.1 18.6 2017	2018 15.4 9.6 12.9 18.3 2018 20.9	23.3 18.3 2019	2020 18.5 2020	
MauritaniaSouthern AfricaCountryBotswanaLesothoMozambiqueNamibiaSouth AfricaWestern AfricaCountryBeninBurkina Faso	2010	2011 13.2	2012 12.6 4.2 2012		17.5 17.9 19.6 2014 14.2	2015 11.7 10.1 16.2 19.6 2015 20.7	20.2 2016 11.9 13 18.5 2016	27.6 9 12.1 18.6 2017 15.4	2018 15.4 9.6 12.9 18.3 2018 20.9 19.7	23.3 18.3 2019	2020 18.5 2020	

SO 6 – Literacy

"Launch comprehensive and effective literacy programmes across the continent to eradicate the scourge of illiteracy"

The three indicators selected by CESA to monitor SO 6 find direct correspondence among thematic indicators of SDG Target 4.6. All indicators are being reported as is verified in Table 25. None of these indicators is benchmarked.

Table 25: Reporting status of SO 6 indicators

CESA 16-25 indicators (March 2018 revision)	CESA indicators for reporting as per the agreement between the UIS and the AU	Benchmarked	Reporting status
6.1 Youth literacy rate	6.1 Youth/adult literacy rate - Youth (SDG 4.6.2)		Reporting
6.2 Adult Literacy Rate	6.2 Youth/adult literacy rate - Adult (SDG 4.6.2)		Reporting
6.3 Participants in literacy programmes as a percentage of non-literate population	6.3 Participation rate of illiterate youth/adults in literacy programmes (SDG 4.6.3)		Reporting

The first thematic indicator "Youth/adult literacy rate" is available for some cohorts, while the second "Participation rate of illiterate youth/adults in literacy programmes" has limited availability.

CESA 6.1 and 6.2 Youth/adult literacy rate

SDG 6.1 and 6.2 Youth/adult literacy rate (SDG 4.6.2)

As shown in **Figure 18**, the elderly population has lower literacy rates compared to younger cohorts in all subregions.

This is a consequence of the expansion of the formal educational system over different generations. However, a substantial proportion of the population, both youth and adult, did not have access to literacy programmes in the region.

This difficulty of including youth and adults is more pronounced in some countries such as the Central African Republic, Chad, South Sudan, Niger and Mali, where the youth literacy rate, for instance, is lower than 50%.

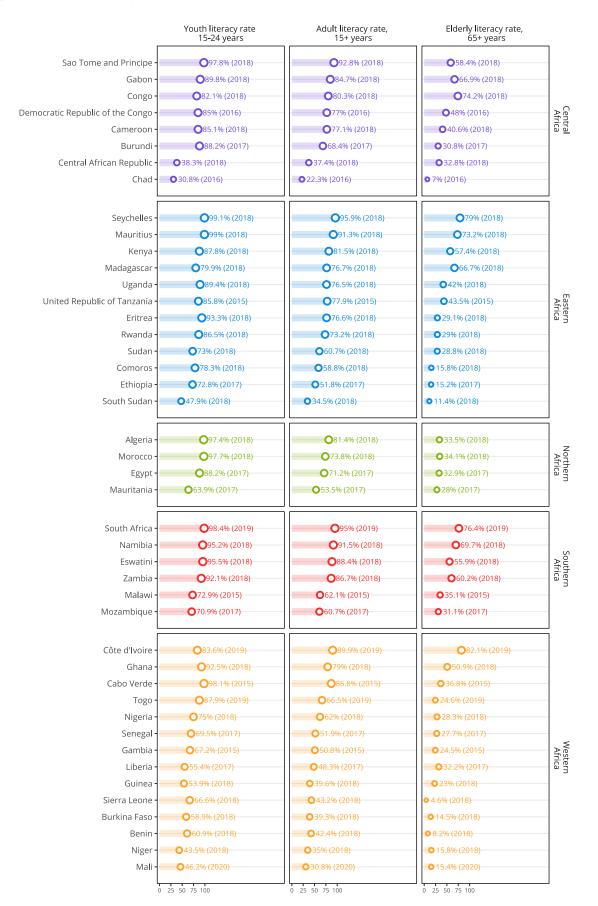


Figure 18: Literacy rate: youth, adult and elderly population, latest value available

Table 26: Youth literacy rate, population 15--24 years, both sexes

Central Africa												
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Burundi					79.6			88.2				
Cameroon	80.6								85.1			
Central African Republic	36.4								38.3			
Chad						38.8	30.8					
Congo		80.9							82.1			
Democratic Republic of the Congo			83.6				85					
Gabon			88.5						89.8			
Sao Tome and Principe			96.7						97.8			
Eastern Africa												
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Sudan									73			
Comoros			71.6						78.3			
Eritrea									93.3			
Ethiopia								72.8				
Kenya					86.5				87.8			
Madagascar			76.8						79.9			
Mauritius		98.1							99			
Rwanda	77.3		82.3		85.1				86.5			
Seychelles	99								99.1			
South Sudan									47.9			
Uganda	87.4		83.7						89.4			
Northern Africa												
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Algeria									97.4			
Egypt	87.5		89.3	92				88.2				
Могоссо		81.5	91.2						97.7			
Mauritania				71				63.9				
Southern Africa												
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Eswatini	93.5								95.5			
Mozambique						70.5		70.9				
Namibia		94.4							95.2			
South Africa	98.6	98.8	98.9		98.9	99		95.3		98.4		
Zambia	88.7								92.1			

Western Africa

Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Benin			52.5						60.9			
Burkina Faso					50.1				58.9			
Côte d'Ivoire			48.3		53					83.6		
Ghana	85.7								92.5			
Guinea	31.4				46.3				53.9			
Liberia								55.4				
Mali	44.3	42.1				49.4			50.1		46.2	
Niger			39.8						43.5			
Nigeria									75			
Senegal		65.8		56.9				69.5				
Sierra Leone				57					66.6			
Тодо		79.9				84.3				87.9		

SO 8 – TVET

"Expand TVET opportunities at both secondary and tertiary levels and strengthen linkages between the world of work and education and training systems"

Strategic Objective 8 is related to SDG Target 4.3 and 4.4 and SDG 8. There are six AU indicators to measure this specific objective. Two of them are shared between the two frameworks. Besides these two, another two are already being reported, one is under development and the other will be developed in the second phase (2023). Two are selected as benchmarked indicators, as it can be seen in Table 27.

Table 27: Reporting status of SO 8 indicators

CESA 16-25 indicators (March 2018 revision)	CESA indicators for reporting as per the agreement between the UIS and the AU	Benchmarked	Reporting status
8.1 Percentage of Total Enrolment in Secondary and tertiary Technical and Vocational Education and Training	8.1 Distribution of enrolment by programme orientation		Reporting
8.2 Percentage of TVET Graduates	8.2 Share of all students in vocational programmes, by level of education (%)		Reporting
8.3 TVET Graduates Labour Force Participation Rate	8.3 Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months, by sex (SDG 4.3.1)	Ē	Reporting
8.4 Percentage of Students who Meet National Requirements for Academic programs in secondary or tertiary and enrol for TVET	8.4 Percentage of Students who Meet National Requirements for Academic programs in secondary or tertiary and enroll for TVET		Second phase
8.5 State of National TVET policies and governance structures	8.5 State of National TVET policies and governance structures		Under development
8.6 Percentage of TVET Graduates who have participated in Apprenticeships	8.6 Participation rate in technical-vocational programmes (15- to 24-year-olds) by sex (SDG 4.3.3)		Reporting
	8.7 Youth not in Education, Employment or Training (NEET) (SDG 8.6.1)		

Data for indicators 8.1, 8.2, 8.3 and 8.6 are available for some countries and are reported below.

CESA 8.1 Percentage of Total Enrolment in Secondary and tertiary Technical and Vocational Education and Training

SDG 8.1 Distribution of enrolment by programme orientation

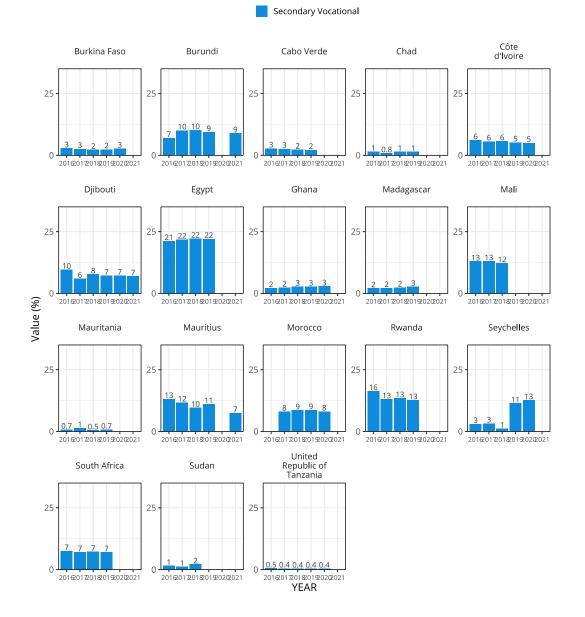
CESA 8.2 Percentage of TVET Graduates

SDG 8.2 Share of all students in vocational programmes, by level of education (%)

Despite some variation across countries, the proportion of students enrolled in secondary-level vocational programmes is lower than 25% for all countries with data available (Figure 19 and Table 28).

For 13 out of the 28 countries this percentage is lower than 10%, indicating a low coverage of vocational education in the region. In addition, this proportion has been stable over the past decade with no clear indication of expansion in any country.

In 2019, Egypt has the highest enrolment (22%); along with Rwanda, Seychelles and Mauritius are the only countries reporting above 10%. In the same year, Burundi had the highest proportions in Central Africa (9%) and Morocco the highest in the northern subregion (8.6%).





8.3 TVET Graduates Labour Force Participation Rate

8.3 Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months, by sex (SDG 4.3.1)

8.6 Percentage of TVET Graduates who have participated in Apprenticeships

8.6 Participation rate in technical-vocational programmes (15- to 24-year-olds) by sex (SDG 4.3.3)

In addition, as shown in **Figure 20**, the proportion of 15- to 24 year-olds enrolled in vocational programmes is lower than 10% across all countries in the region, except for Seychelles and Egypt. The general participation of youth and adults in formal and non-formal education and training is also low in all countries with data available.

Table 29 shows the available data for SDG Indicator 4.3.3.

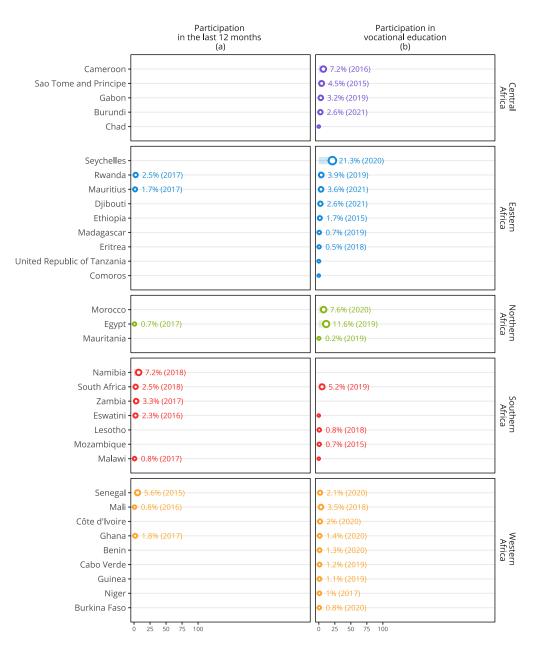


Figure 20: Global and thematic indicators for vocational and tertiary education, latest year available

a)Participation rate of youth and adults in formal and non-formal education and training in the last 12 months, both sexes (%)

b)Proportion of 15-to-24-year-olds enrolled in vocational education, both sexes (%)

Table 28: Share of all students in secondary education enrolled in vocational programmes

o												
Central Africa												
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Burundi	4.6	5	4.1	5.3	6.3	7.3	7	10.1	10.2	9.4		8.9
Cameroon		20.4	21	21.2	22.2	21.8	21.6					
Central African Republic		4.3	3.1				4.1	3.7				
Chad	1.3	1.4	1.5	1.4	1.5	1.6	1.5	0.8	1.4	1.4		
Gabon										6.7		
Sao Tome and Principe	2.1	2.2	3.3	3.8	5.3	7.4	2.5	5.6				
Eastern Africa												
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Sudan	1.8	1.4	1.5	1.4	1.3	2	1.5	1.1	2.1			
Comoros				0.5	0.6			0.6	0			
Djibouti		3.7	4.2	4.1	4.7	7.4	9.6	5.9	7.7	7.1	7.2	6.9
Eritrea	0.5	0.8	0.9	0.9	1	0.6		1.1	1.1			
Madagascar		1.9	2		1.8	1.9	2	2.2	2.3	2.6		
Mauritius	12.7	12.6	9	11.8	14.1	11.4	13.1	11.7	9.6	11.1		7.5
Rwanda	11	12.2	10.9	13.8	15	17.6	16.4	13	13.5	12.6		
Seychelles	0	0	3.4	3.1	4	3.7	3	3.2	1.2	11.4	12.6	
Uganda							4.2	4.4				
United Republic of Tanzania	10.3						0.5	0.4	0.4	0.4	0.4	
Northern Africa												
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Egypt		20.5	21.9	22.1	21		21.2	21.8	22.1	22		
Могоссо	6.1	6	6.1					8	8.6	8.6	8.1	
Tunisia	12	14		9.3	6.1	6.2	9.1					
Mauritania			1.3	1.2	1.1	0.6	0.7	1.4	0.5	0.7		
Southern Africa												
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Angola	42.7	45.2					14.1					
Eswatini	0	0	0.3	0.4	0.4	0	3.9					
Lesotho	2		5	2.6	1.8	3.5		2.1				
Malawi	0	0	0	0	0	0	0	0	0	0		
Mozambique	5.2	4.8	4.4	4.8	5.1	4.9		9.2				
South Africa	4.7	4.7	5.1		7	7.1	7.5	7	7.2	7		
Western Africa												
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021

Benin		3.4		2.6	2.6	2.3	2.8				3.7
Burkina Faso	4.9	4.3	4	3.9	3.4	3.1	2.8	2.6	2.2	2.4	2.7
Cabo Verde	2.9	2.7	2.7	2.9	2.9	2.8	2.8	2.6	2.3	2.2	
Côte d'Ivoire		4		6.1	6.8	6.8	6.1	5.6	5.7	5.2	5.1
Ghana		3.3	3.6	2.6	1.8	1.8	2.1	2.3	2.7	2.7	2.9
Guinea		4.4	3.3	3.2	3.7	2.7	2.5				
Mali	13.8	11.5		12.5	13.4	13	13	13	12.2		
Niger	1.9	1.9	5.9	6.3	8.2	8.2	7.6	7.2			
Senegal	5.2	6.1	5.7	6.3	5.7	4.8				5.5	5.9
Тодо		5.1	6.5	5.5		5.8	6.5	5.8			

Table 29: SDG Indicator 4.3.3 Participation rate in technical and vocational programmes (15- to24-year-olds), by sex

Central Africa												
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Burundi	0.6	0.9	0.8	1.1	1.6	2	2.1	2.8	2.8	2.6		2.6
Cameroon		6	6	6.3	7.1	7.1	7.2					
Chad							0	0				
Gabon										3.2		
Eastern Africa												
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Comoros				0				0	0			
Djibouti											2.7	2.6
Eritrea	0.2	0.3	0.4	0.4	0.4	0.2		0.4	0.5			
Madagascar		0	0		0.6	0	0.6	0.7	0.7	0.7		
Mauritius		0.3	0.3	1	1.1	1.3	2.2	1.4	1.5	0.9	0.8	3.6
Rwanda								3.4	4	3.9		
Seychelles						13.2	11.9	13.1	13.6	19.8	21.3	
United Republic of Tanzania								0.1				
Northern Africa												
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Egypt		9			10.2		10.6	11	11.4	11.6		
Могоссо									7.7	7.8	7.6	
Mauritania			0.2	0.3	0.2	0.1	0.2	0.3	0.1	0.2		
Southern Africa												
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Lesotho	0.3	0.9	1.4		0.7	1.3	0.8		0.8			

Education Baseline in Africa: Expanding the coverage of CESA indicators

Malawi	0	0	0	0	0	0	0	0	0	0		
South Africa						2.5		5.3	5.1	5.2		
Western Africa												
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Benin				1.1		1	1.2				1.3	
Burkina Faso	0.8	0.8	0.8	0.7	0.7	0.8	0.8	0.7		0.8	0.8	
Cabo Verde			1.2	1.4	1.4	1.4	1.4	1.4	1.4	1.2		
Côte d'Ivoire							1.9	1.8	2	2	2	
Ghana				1.1	0.8	0.8	0.5		1.3	1.3	1.4	
Guinea					0.8					1.1		
Mali	3.6	3.2		3.6	4.1	3.8	3.9	3.8	3.5			
Niger	0	0			0.8	0.8	0.9	1				
Senegal				1.4		1.5					2.1	

SO 9 – Tertiary Education

"Revitalize and expand tertiary education, research and innovation to address continental challenges and promote global competitiveness"

Strategic Objective 9 looks at the tertiary education and research and development capacity. The framework identifies eight indicators for which there are equivalents and available indicators collected for monitoring SDG Target 4.3. The benchmarked indicator is being reported under SDG 9. Three indicators are not available and are either under development or left to the second phase in 2023. Table 30 presents a summary of the situation for SO 9.

Table 30: Reporting status of SO 9 indicators

CESA 16-25 indicators (March 2018 revision)	CESA indicators for reporting as per the agreement between the UIS and the AU	Benchmarked	Reporting status
9.1 Number of earned doctoral degrees by field	9.1 Percentage of graduates by field of education (tertiary education)		Reporting
9.2 Expenditure on Research and Development as a Percentage of GDP	9.2 Research and Development Expenditure as a proportion of GDP (SDG 9.5.1)		Reporting
9.3 Enrolment of Students in Higher and Tertiary Education per 100,000	9.3 Gross enrolment ratio for tertiary education by sex (SDG 4.3.2)	-	Reporting
9.4 Inbound Mobility Ratio	9.4 Inbound Mobility Rate		Reporting
9.5 Outbound Mobility Ratio	9.5 Outbound Mobility Rate		Reporting
9.6 The quality of graduates and their employability in the world economy	9.6 Existence of tertiary education accreditation / Unemployment rate of tertiary education		Under development
9.7 Conducive environment for research and innovation through the provision of adequate infrastructure and resources	9.7 Conducive environment for research and innovation through the provision of adequate infrastructure and resources		Second phase
9.8 Proportion of Learners enrolled in: a. Distance Education, b. Open Learning, c. E-Learning Programmes	9.8 Proportion of Learners enrolled in: a. Distance Education, b. Open Learning, c. E-Learning Programmes		Under development

The sections below present the data available for indicators 9.2, 9.4 and 9.5. The data used to report Indicator 9.1 is the same used to report 8.1 and was included in the previous section.

CESA 9.2 Expenditure on Research and Development as a Percentage of GDP

SDG 9.2 Research and Development Expenditure as a proportion of GDP (SDG 9.5.1)

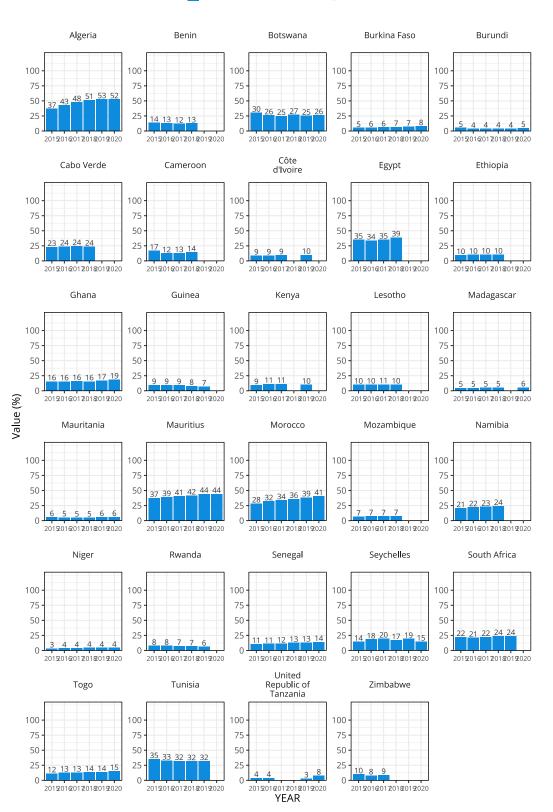
Table 31 reports on the benchmarked indicator on Research and Development Expenditure. As can be seen, only a few data points are available. Since 2010, only 31 out of 56 countries have been represented. In most countries, the gross domestic expenditure on Research and Development as a percentage of GDP (GERD) is fairly stable. The two countries with the highest expenditures are Egypt and South Africa.

Table 31: Gross of	domestic e	expenditure on	Research an	d Development
--------------------	------------	----------------	-------------	---------------

Central Africa									
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018
Burundi	0.1		0.1						0.2
Chad							0.3		
Eastern Africa									
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018
Ethiopia	0.2			0.6				0.3	
Madagascar	0.1	0.1			0		0	0	
Mauritius			0.2					0.4	0.3
Rwanda							0.6		
Seychelles							0.2		
Northern Africa									
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018
Algeria								0.5	
Egypt	0.4	0.5	0.5	0.6	0.6	0.7	0.7	0.7	0.7
Tunisia	0.7	0.7	0.7	0.7	0.7	0.6	0.6		0.6
Mauritania									0
Southern Africa									
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018
Angola							0		
South Africa	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8	
Western Africa									
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018
Burkina Faso					0.2			0.6	
Côte d'Ivoire							0.1		
Gambia		0.1							0.1
Mali	0.6					0.3		0.3	

The other indicator for which the UIS is reporting, concerns the enrolment ratio in tertiary education. **Figure 21** indicates that only one country with data available in the region has a gross enrolment ratio (GER) in tertiary education higher than 50%. In fact, among the 29 countries, only 4 of them have a GER higher than 30%. Despite the lower coverage in most of the countries, there are clear trends of increasing coverage in some countries, particularly in Northern Africa.





Gross enrolment ratio for tertiary education (%)

CESA 9.4 Inbound Mobility Ratio

SDG 9.4 Inbound Mobility Rate

Table 32 shows that inbound mobility is generally low across the region. This is particularly evident when compared to the outbound values (below). Senegal, in West Africa, has one of the highest values (7% in 2020). It has declined over the years, after having reached 15.8% in 2015. Namibia and South Africa have the highest values in Southern Africa. In Central and Eastern Africa, the highest mobility values are respectively in Burundi and Mauritius.

Table 32: Inbound mobility rate, both sexes

Central Africa												
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Burundi	6.2			8		3.2	3.6	4.5	4.8			
Cameroon	0.8	1.4	1.1				1	1.4	2.8			
Democratic Republic of the Congo		0.5		1.2			0.4					
Eastern Africa												
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Kenya							0.9	0.9		1.3		
Madagascar	1.8	1.7	1.7	1.7	1.8	1.8	1.8	1.7	1.3		1.9	
Mauritius	1.8	1.8	2.3	2.9	3.8	4	4.5	5.4			6.7	
Rwanda			0.8	1	0.9	1	0.7	1.7	4	3.6		
Northern Africa												
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Algeria	0.6	0.5	0.6	0.6	0.6	0.6	0.5	0.6	0.5	0.5	0.6	
Egypt	1.9			1.8	1.9		1.8					
Могоссо	1.9			1.4	1.8	1.8	1.7	2	1.9	2	2.1	
Tunisia	0.6	0.6	0.5	1.8		2	2.1	2.3	2.2			
Mauritania						1.4	2	1.4		1.5	1.4	
Southern Africa												
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Botswana					2.6	1.6	2.6	2.4		2.3	2.2	
Lesotho			0.5	0.4	0.4	0.3		0.3	0.4			
Mozambique		0.3		0.3	0.4		0.4	0.3	0.4			
Namibia					8.8	8.6	7.1	6.1	4.8			
South Africa			4.2	4.1	4.2	4.1	4.3	4.1	3.6	3.5		
Western Africa												
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
								_				
Benin	7.9				6.9	7.9	8.9	7	4.5			

Cabo Verde		1.4	1.1	1	1.4	1.3	1	0.8	1.4		
Côte d'Ivoire	1.3	1.9			1.7	1.8	2.1	2.2		2.6	
Ghana		2	3.1	3	3.9	4.3	3.8	2.9	2.2	1.4	1
Niger	6.6	6.6	5.4			3.9	4.5	4.3	5.2	5.4	
Senegal		6.9	11.6	13.8	14.7	15.8	8.1	8.3	7.8	7.6	7

CESA 9.5 Outbound Mobility Ratio

SDG 9.5 Outbound Mobility Rate

Table 33 shows outbound mobility. It can be seen that they are substantially higher than inbound, reaching almost 50% in some countries like Seychelles (2019). Outbound values close to or above 20% can be noticed in Cabo Verde in Western Africa, Mauritania in Northern Africa, and also Mauritius in Eastern Africa. In Central Africa, Congo also reported 21.8% in 2017.

Table 33: Outbound mobility ratio, both sexes

Central Africa												
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Burundi	6.1		7.4	6.2	5.4	4.8	7.3	7.6	8.5			
Cameroon	9.7	9.6	8.3	6.5	6.8	6.6	9.2	9	8			
Congo		31.1	25.9	24.3				21.8				
Democratic Republic of the Congo		1.3	1.3	1.8			2.2					
Eastern Africa												
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Eritrea	8.6				13.7	15.4	19.6					
Kenya						3.2	2.6	2.7		3.1		
Madagascar	5.8	5.6	5.4	4.4	3.8	3.8	3.7	3.5	3.2			
Mauritius	24.7	21.8	18.5	17.4	18.3	19.7	20.2	22.2				
Rwanda	7.9	7.6	8.5	8.6	8	6.3	5.6	5.8	6.4	7.4		
United Republic of Tanzania	7.9		3.5	3.8		3.7	4			4.4		
Northern Africa												
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Algeria	2	2	2.1	1.7	1.7	1.6	1.5	1.7	1.9	2		
Egypt	0.5	0.7	0.7	0.8	0.9	0.9	1.1	1.2	1.2			
Могоссо	9.6	8.7	7.4	5.7	5.4	5.1	4.9	5.1	5	5.1		
Tunisia	5.3	5.4	5.3	5.1	5.5	5.8	7	7.9	8.8	9.1		
Mauritania	26.2	24	20.9	19.6		22	22.8	23.5	24.4	19.6		
Southern Africa												
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Angola		6.9		4.8		6.2	6.2					

Education Baseline in Africa: Expanding the coverage of CESA indicators

Botswana	19.3	17.9	9.6	6.9	6.3	5.4	6	5.2		5.1		
Lesotho			11.3	12	12.4	12.7		13.4	14			
Mozambique	2	1.8	1.4	1.4	1.3	1.4	1.3	1.5	1.4			
Namibia					10.1	10.7	9.8	9.1	9.3			
South Africa			0.7	0.7	0.8	0.9	1	1	1	0.9		
Western Africa												
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Benin	4.4	4.6	4	3.6	3.9	4.8	5.3	5.8	5.7			
Burkina Faso	7.6	6.6	5.9	5.9	6.1	6.4	6	5.7	5.5	5.2		
Cabo Verde	36.3	32.8	35.6	33	23.7	24.6	27.1	27.5	31.7			
Côte d'Ivoire	6.5	14.6		5.5	6	6	6.4	6.3		6.6		
Ghana		3.5	3.5	3	3	3.2	3.3	3.3	3.7	3.5		
Niger	22	21.6	16.3			10.5	8.9	7.5	6.5	7.5		
Senegal	13.7	10.1	9.7	8.4	8.5	8.5	8.3	7.9	7.5	7.7		
Тодо	8.8	8.1	7.2	7	7.8	8.7	7.1	6.9	7.2	6.8		

SO 10 – Peace and Non-violence

"Promote peace education and conflict prevention and resolution at all levels of education and for all age groups"

Strategic Objective 10 has identified three indicators. One of them is related to SDG Target 4.7 and is already being reported. The two others are under development. Table 34 shows the three indicators and their current status.

Table 34: Reporting status of SO 10 indicators

CESA 16-25 indicators (March 2018 revision)	CESA indicators for reporting as per the agreement between the UIS and the AU	Benchmarked	Reporting status
10.1 Existence of National Strategies to ensure the continuation of education during humanitarian situations, emergency situations such as armed conflict and support the re- establishment of educational facilities	10.1 Existence of National Strategies to ensure the continuation of education during humanitarian situations, emergency situations such as armed conflict and support the re- establishment of educational facilities		Under development
10.2 Existence of National education policies to address psychosocial support, disaster risk reduction and other systems/mechanisms to protect education from attacks and support for rehabilitation of school infrastructure	10.2 Existence of National education policies to address psychosocial support, disaster risk reduction and other systems/mechanisms to protect education from attacks and support for rehabilitation of school infrastructure		Under development
10.3. Extent to which (i) global citizenship education and (ii) education for sustainable development, including gender equality and human rights, (iii) Peace, Life Skills, Media and Information Literacy education, are mainstreamed in: (a) national education policies, (b) curricula, (c) teacher education and (d) student assessment	10.3 Extent to which (i) global citizenship education and (ii) education for sustainable development are mainstreamed in (a) national education policies, (b) curricula, (c) teacher education and (d) student assessment (SDG 4.7.1)		Reporting

CESA 10.3. Extent to which (i) global citizenship education and (ii) education for sustainable development, including gender equality and human rights, (iii) Peace, Life Skills, Media and Information Literacy education, are mainstreamed in: (a) national education policies, (b) curricula, (c) teacher education and (d) student assessment

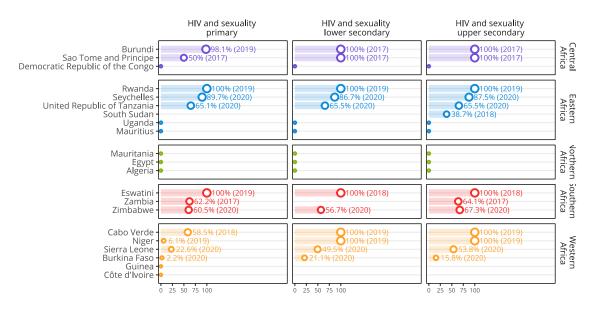
SDG 10.3 Extent to which (i) global citizenship education and (ii) education for sustainable development are mainstreamed in (a) national education policies, (b) curricula, (c) teacher education and (d) student assessment (SDG 4.7.1)

SDG Target 4.7 includes Indicator 4.7.2 for the "percentage of schools that provide life skills-based HIV and sexuality education" which corresponds to CESA Indicator 10.3 in its point (ii) "education for sustainable development, including gender equality and human rights".

Life skills-based HIV and sexuality education

As shown in **Figure 22** there is substantial country variation for Indicator 4.7.2 on the continent. Among primary schools, for instance, the percentage providing HIV and sexuality education varies from 2% in Burkina Faso to 100% of schools in Rwanda. Although some countries have lower coverage across all levels, the percentage of schools increases substantially at the lower and upper secondary levels across the continent.





Global citizenship education

For the few countries available, **Figure 23** shows that global citizenship education and education for sustainable development are generally covered across national policies, curricula, teacher education and student assessments in the region. More effort is also required in this indicator in terms of data collection.

Figure 23: The extent to which (i) global citizenship education and (ii) education for sustainable development are mainstreamed

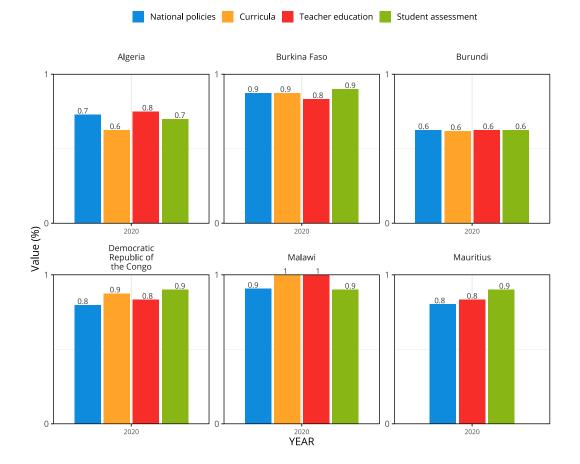


 Table 35: SDG 4.7.2 Percentage of schools providing life skills-based HIV and sexuality education -

 Primary

CountyQ100Q101Q101Q101Q101Q101Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10Q10 </th <th>Central Africa</th> <th></th>	Central Africa												
Sa Toam and PrincipeSo ToaSo Toam and PrincipeSo Toam and Pr	Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Eastent Africa20102011201220132014201620162018201920202021Mauritus10010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010010	Burundi							100	100	99.3	98.1		
Country201020102012201320142016201620162019201920202021Mauritius''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''''	Sao Tome and Principe								50				
MauritiusIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII<	Eastern Africa												
Rwanda100100100100100100100100100100Seychelles<	Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
SeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychellesSeychelles<	Mauritius				0	0	0	0	0	0	0		0
Jamin Colspan="6">Jamin Colspan="6"UgandaSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolveSolve<<	Rwanda		100	100	100	100	100	100		100	100		
Ander Republic of TanzaniaService of Service of Serv	Seychelles							32.1	92.9	89.7	89.7	89.7	
Northern AfricaCounty20102011201220132014201520162017201820192012Algeria	Uganda								0				
Country201020102012201320142015201620172018201920202021Algeria	United Republic of Tanzania									48.6	56.5	65.1	
AlgeriaSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSourceSour	Northern Africa												
QEgypt0Mauritania111111000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000	Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
MaritaniaJoin Suthern Africa201020112012201320142015201620172018201920202021Eswatin101101101101101100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100	Algeria							0	0	0	0	0	
Southern Africa201020102012201320142015201620172018201920202021Ewadini	Egypt							0					
Country201020112012201320142015201620172018201920202021Eswatini	Mauritania									0	0		
Eswatini 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100	Southern Africa												
Zambia54.862.2Zimbabwe44.246.060.5Western Africa201020112012201320142015201620172018201920202021Burkina Faso	Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Zimbabwe44.264.060.5Western Africa201020102012201320142015201620172018201920202021Burkina Faso	Eswatini						100	100	100	100	100		
Vestern Africa 2010 2010 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 Burkina Faso 2.4 2.3 2.5 2.2 2.3 2.5 2.2 <t< td=""><td>Zambia</td><td></td><td></td><td></td><td></td><td></td><td></td><td>54.8</td><td>62.2</td><td></td><td></td><td></td><td></td></t<>	Zambia							54.8	62.2				
Country 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 Burkina Faso	Zimbabwe									44.2	46	60.5	
Burkina Faso 2.4 2.2 2.3 2.5 2.2 Cabo Verde 75.2 58.5 - - Côte d'Ivoire - - 0 Guinea 4.6 5.6 5.6 6.1	Western Africa												
Cabo Verde 75.2 58.5 Côte d'Ivoire 0 Guinea - 0 Niger 4.6 5.6 5.6 6.1	Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Côte d'Ivoire 0 Guinea 0 Niger 4.6 5.6 5.6 6.1	Burkina Faso							2.4	2.2	2.3	2.5	2.2	
Guinea 0 Niger 4.6 5.6 5.6 6.1	Cabo Verde								75.2	58.5			
Niger 4.6 5.6 5.6 6.1	Côte d'Ivoire											0	
	Guinea											0	
Sierra Leone 21.2 23.2 23.3 22.6	Niger							4.6	5.6	5.6	6.1		
	Sierra Leone								21.2	23.2	23.3	22.6	

 Table 36: SDG 4.7.2 Percentage of schools providing life skills-based HIV and sexuality education -

 Lower Secondary

Central Africa												
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021

Burundi							100	100				
Sao Tome and Principe								100				
Eastern Africa												
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Mauritius				0	0	0	0	0	0	0		0
Rwanda		100	100	100	100	100	100		100	100		
Seychelles							78.6	85.7	81.2	86.7	86.7	
Uganda								0				
United Republic of Tanzania									53.2	56.9	65.5	
Northern Africa												
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Algeria							0	0	0	0	0	
Egypt							0					
Mauritania									0	0		
Southern Africa												
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Eswatini						100	96.9	100	100			
Zimbabwe									45.8	44	56.7	
Western Africa												
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Burkina Faso							0		21.1	20.8	21.1	
Cabo Verde								100		100		
Niger							100			100		

 Table 37: SDG 4.7.2 Percentage of schools providing life skills-based HIV and sexuality education -

 Upper secondary

Central Africa												
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Burundi							100	100				
Sao Tome and Principe								100				
Eastern Africa												
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Mauritius				0	0	0	0	0	0	0		0
Rwanda		100	100	100	100	100	100		100	100		
Seychelles							78.6	80	82.4	87.5	87.5	
South Sudan									38.7			

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Uganda								0				
United Republic of Tanzania									53.2	56.9	65.5	
Northern Africa												
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Algeria							0	0	0	0	0	
Egypt							0					
Mauritania									0	0		
Southern Africa												
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Eswatini						100	96.9	100	100			
Zambia							60.5	64.1				
Zimbabwe									46.9	52.6	67.3	
Western Africa												
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Burkina Faso							0		13	15.1	15.8	
Cabo Verde								100		100		
Niger							100			100		
Sierra Leone								33.7	51.1	53.3	53.8	

Finance Indicators

"Governments must allocate 4-6% of their gross domestic product and/or 15-20% of total public expenditure to education, ensuring efficient spending and prioritizing the most marginalized groups"

Two indicators are used to monitor financing in education. The first indicator measures the proportion of total government spending on essential services and finds a direct correspondent in SDG Indicator 1.a.2, the proportion of total government spending on essential services (education, health and social protection). The second indicator measures the education expenditure as a share of GDP.

Although the financial indicators are not part of the SDG 4 global monitoring framework per se, the UIS collects data from Member States on these dimensions and they are part of the financial indicators of the Education 2030 Framework for Action. The target on education finance was endorsed globally by the 160 signatory countries of the Incheon Declaration and Framework for Action for the implementation of the SDG 4.²⁸ Also, both finance indicators are included in the set of seven benchmark indicators that are used to monitor progress of SDG 4 at both regional and country levels.

The AU has also decided to monitor the initial household and government funding per student by level, as a percentage of GDP per capita or as constant Purchasing power parities (PPP) USD. A set of 18 indicators is available in the SDG database and available for monitoring.

CESA F.1 Public Expenditure on Education as a Percentage of Total Government Expenditure

SDG F.1 Expenditure as a percentage of Total Government Expenditure (Global Indicator 1.a.2)

SDG Indicator 1.a.2 is expressed as expenditure on education as a percentage of total government expenditure (%). About 200 data points are available for 48 countries in the region from 2015 and 2019. **Figure 24** shows the average for each subregion. On average, the Southern and Western Africa subregions are close to the 15% threshold. Looking individually, only Côte d'Ivoire, Sierra Leone and Senegal reached the minimum investment in this indicator in 2019. In this region, the average has been stable since 2015, while in the others a slight decline can be seen. In Northern Africa, only Algeria reported an investment close to 15%.

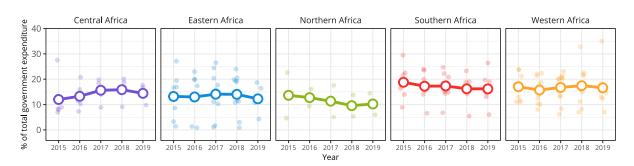


Figure 24: Expenditure on education as a percentage of total government expenditure (Global Indicator 1.a.2), 2015-2019

²⁸ UNESCO 2016.

CESA F.2 Public Current Expenditure on Education as a Percentage of Total Education Expenditure by level

F2. Education expenditure per student by level of education and source of funding (SDG 4.5.4)

Data on initial household funding is scarce after 2015. Only Cabo Verde reported on this indicator after that year. Data on initial government funding are more available. Tables 38, 39 and 40 show the constant PPP initial funding for primary, secondary and tertiary.

Data show that investment per students is similar in primary and secondary, and by and large higher in the tertiary. In some countries, like Cabo Verde, the initial funding for students in the tertiary is double that for primary.

CESA F.3 Public Expenditure on Education as a Percentage of GDP

SDG Government expenditure on education as a percentage of GDP

The second indicator on finance corresponds to the expenditure on education as a share of GDP. **Figure 25** displays a similar picture when the GDP is the denominator. Only in Southern Africa, the average expenditure is above the 5% target. Only seven countries are above the minimum threshold in 2019.



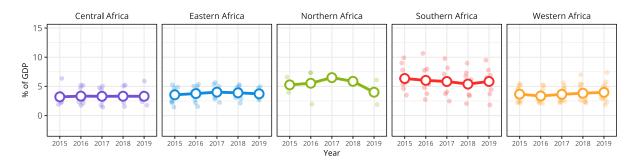


Table 38: Initial government funding per primary student, constant PPP

Central Africa												
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Chad	125.6	101	113.9						106.4			
Eastern Africa												
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Mauritius	1753.8	1741.8	1840.8	2180.3	2627.6	2550.6	2801.9	3248.6	3334	3511.2		
Rwanda	104.4	90.3	109.4	105.6		96	100.3		83			
Seychelles		2059.2	2440.4	3178.3	4033		3827.5					
Northern Africa												
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Egypt								1062.9		744.2		
Mauritania	423.9	348.3	342.1	336.8		395	388.8			329.5		
Southern Africa												

Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Lesotho									618.4			
Malawi	63.7	75.3		105.6	129	136.8	116.8					
South Africa	2109.6	2192.3	2408	2390.8	2291.5	2217.2	2243	2242.1	2279.1	2351.9	2715.1	
Zambia						505	458.6	459.9				
Western Africa												
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Cabo Verde		1023.7		939.4	1059.7	1066.9	1133	1135.2		1608.8		
Côte d'Ivoire		436.4	509.5	533	538.8	441.2	549.7	480.5	506.2			
Guinea	133.3	107.9	109.1	144.1	128.3		157.2				153	
Liberia						63.9	229.2					
Mali	130.9	208.8	207.2	210.6	259.9	290.8	209.1	280.6				
Niger	168.1	162.5	144.7	168.7	253.6	192.9	140.2	114.1				
Sierra Leone		115.9	129.2	122.8			93.4	80.1	206.3	222.5	283.5	
		184	228.3	235.9	271.8	316.6	239.6					

 Table 39: Initial government funding per secondary student, constant PPP

Central Africa												
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Chad	267.6	366.8	230.7	327.6					218.5			
Eastern Africa												
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Mauritius	3166.4	2864.3	3348.7	3651.6	5660	6250.3	6233.5	6598.7	6708.2	6757.2		
Rwanda	470.9	513.6	493	603.6		540.5	681.3		422.7			
Seychelles		1698.4	2230.5	3090.4	4216.4		4124.5					
Northern Africa												
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Egypt								1489.5		1343.1		
Mauritania	997.6	702.7	757.5	604.2		734.8	541.1			463.5		
Southern Africa												
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Lesotho									895.5			
Malawi	187.6	285.1		325.4	286.3	378.3	344.1					
South Africa	2375.8	2669.3	2670	2455.2		2458.8	2445.1	2485.6	2715.4	2896.8	3306.5	
Western Africa												
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021

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Burkina Faso	321.4	271.4	263	246.5	279.6	299.8	318.9				
Cabo Verde		979.9		1071.6	1051.3	1197.1	1319.4	1339.7		1124.8	
Côte d'Ivoire					1145.6	772.7	794.4	743.2	699.3		
Mali	757.6	559.3		502.8	466.1	499.9	456.5	583.7			
Niger	330.2	390.5	386.2	426.9	637.7	561	155.7	139.2			
Sierra Leone		196.4	196.2	173.5			90.9	240			

Table 40: Initial government funding per tertiary student, constant PPP

Eastern Africa												
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Mauritius	2139.9	1654.2	1547.8	1668.9	2131.5	2264.7	2096.2	1977.2			2294.2	
Rwanda	2368.9	1660.6	1338.4	1531.1		1869.4			1904.5			
Seychelles							19061					
Northern Africa												
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Mauritania		3289.7	2742.7	2668.6		3817.4	3656.8			3617.3	3396.7	
Southern Africa												
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Lesotho									1334.3			
South Africa				4995.6	4909.3	5156.6	4576.6	5949.5	6094.7	7027.3	7981.4	
Western Africa												
Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Burkina Faso	3537.1	2684.2	2704.3	3795.3	2023.7	2140	6050.7					
Cabo Verde		2309.4		2006.3	2159.1	2606.1	2606.3	2610.9				
Côte d'Ivoire	5391.6	11889		6168	5262.2	4066.5	4836.8	5493.2				
Niger	3498.4	4317.7	4694.1			2651.5	2557.7	2255.1	2268.7			
Senegal	5518.1	4096.3	3888.3	5603.7	4865.9	5357.2	4496.3		4636.8			

Appendix 1 - CESA 16-25 and SDG 4 Targets

Table 41: CESA 16--25 Strategic Objectives and SDG Targets

CESA S	trategic Objective	SDG Targ	et
SO 1	Revitalize the teaching profession to ensure quality and relevance at all levels of education	4.c	By 2030, substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least-developed countries and small island developing States
S0 2	Build, rehabilitate, preserve education infrastructure and develop policies that ensure a permanent, healthy and conducive learning environment in all sub- sectors and for all, so as to expand access to quality education	4.a	Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all
SO 3	Harness the capacity of ICT to improve access, quality and management of education and training systems		
		4.1	By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes
SO 4	Ensure acquisition of requisite knowledge and skills as well as improved completion rates at all levels and groups through harmonization processes across all levels for national and regional integration	4.3	By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university
		4.6	By 2030, ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy
SO 5	Accelerate processes leading to gender parity and equity	4.5	By 2030, eliminate gender disparities in education and ensure access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations
SO 6	Launch comprehensive and effective literacy programmes across the continent to eradicate the scourge of illiteracy	4.6	By 2030, ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy
S0 7	Strengthen the science and math curricula in youth training and disseminate scientific knowledge and culture in society		No specific target for science and math. Refer to UNESCO STEM/SAGA project
SO 8	Expand TVET opportunities at both secondary and tertiary levels and strengthen linkages between the world of work and education and training systems	4.3	By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university
		4.4	By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship
		SDG 8.6	Target 8.6: By 2020, substantially reduce the proportion of youth not in employment, education or training
SO 9	Revitalize and expand tertiary education, research and innovation to address continental challenges and promote global competitiveness	4.3	By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university

CESA Stra	CESA Strategic Objective SDG		SDG Target				
SO 10	Promote peace education and conflict prevention and resolution at all levels of education and for all age groups	4.7	By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development				
SO 11	Improve management of education system as well build and enhance capacity for data collection, management, analysis, communication, and use	SDG 17	Strengthen the means of implementation and revitalize the global partnership for sustainable development				
SO 12	Set up a coalition of stakeholders to facilitate and support activities resulting from the implementation of CESA 16-25						

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Appendix 2 - CESA 16-25 and SDG 4 Indicators

Table 42: CESA 16–25 and SDG Indicators

CESA strategic objective	CESA indicator	SDG4 target	SDG4 Indicator	Framework
	1.1 Percentage of teachers qualified to teach according to national standards	4.c	4.c.1	CESA SDG
a a <i>i</i>	1.2 Percentage of teachers qualified in Science or Technology or Engineering or Mathematics by Sex			CESA
S0 1	1.3 Existence of operational teacher development policy			CESA
	1.4 Percentage of Teachers who have undergone In-Service Training	4.c	4.c.7	CESA SDG
S0 2	2.1 Proportion of schools with access to (i) basic drinking water; (ii) single sex basic sanitation facilities; and (iii) basic hand-washing facilities			CESA SDG
50 Z	2.2 Proportion of schools with adapted infrastructure and materials for students with disabilities	4.a	4.a.1	CESA SDG
SO 3	3.1 Proportion of schools with access to (i) electricity (ii) the Internet for pedagogical purposes and (iii) computers for pedagogical purposes			CESA SDG
	4.1 Gross intake ratio for final year of primary, lower secondary and upper secondary	4.1	4.1.2	CESA SDG
	4.2 Existence of a National Qualifications Framework		4.1.2	CESA
	4.3 Membership in the Network of African Learning Assessments			CESA
S0 4	4.4 Percentage Distribution of Tertiary Graduates by field of study			CESA
	4.5 Proportion of children and young people (a) in grade 3; (b) at the end of primary education; and (c) at the end of lower secondary education achieving at least a minimum proficiency level in (i) reading (ii) mathematics and (iii) science, by sex7	4.1	4.1.1	CESA SDG
	4.6 proportion of population in a given age group achieving at least a fixed level of proficiency in a) functional literacy and b) numeracy skills, by sex	4.6	4.6.1	CESA SDG
	5.1 Gender Parity Index for Gross Enrolment Ratio	4.5	4.5.1	CESA SDG
	5.2 Percentage of Female Teachers			CESA
S0 5	5.3 Percentage of Female Head Teachers			CESA
	5.4 Girls' dropout rate per reason of drop out	4.1	4.1.4	CESA SDG
	5.5 Percentage of girls enrolled to STEM			CESA

CESA strategic objective	CESA indicator	SDG4 target	SDG4 Indicator	Framework
	6.1 Youth literacy rate		4.0.0	CESA SDG
SO 6	6.2 Adult Literacy Rate	4.6	4.6.2	CESA SDG
	6.3 Participants in literacy programmes as a percentage of illiterate population]	4.6.3	CESA SDG
S0 7	7.1 Percentage of teachers qualified to teach in Science or Mathematics according to national standards			CESA
	8.1 Percentage of Total Enrolment in Technical and Vocational Education and Training]		CESA
	8.2 Percentage of TVET Graduates	1		CESA
	8.3 Rate of Graduate Entry into the Labour Market	4.3	4.3.1	CESA
SO 8	8.4 Percentage of Students who Meet National Requirements for Academic programs in secondary or University but enroll for TVET			CESA
	8.5 Number of MoUs signed between TVET Institutions and Private companies	1		CESA
	8.6 Percentage of TVET Graduates who have participated in apprenticeships	4.3	4.3.3	CESA
	8.7 Youth not in Education, Employment or Training (NEET) (SDG 8.6.1)	8.6	8.6.1	CESA
	9.1 Number of earned doctoral degrees by field			CESA
	9.2 Expenditure on Research and Development as a Percentage of GDP	9.5	9.5.1	CESA SDG
	9.3 Enrolment of Students in Higher and Tertiary Education per 100,000 Inhabitants			CESA
	9.4 Inbound Mobility Ratio	1		CESA
SO 9	9.5 Outbound Mobility Ratio]		CESA
	9.6 The quality of graduates and their employability in the world economy	1		CESA
	9.7 Conducive environment for research and innovation through the provision of adequate infrastructure and resources]		CESA
	9.8 Proportion of Learners enrolled in: a. Distance Education, b. Open learning, c. E-Learning Programmes]		CESA
	10.1 Your government has developed and adopted strategies to ensure the continuation of education during armed conflict and support the re- establishment of educational facilities]		CESA
	10.2 National education policies exist to address psychosocial support, disaster risk reduction and other systems/mechanisms to protect education from attacks and support for rehabilitation of school infrastructure.			CESA

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CESA strategic objective	CESA indicator	SDG4 target	SDG4 Indicator	Framework
SO 10	10.3 Your Government has a policy or strategies to ensure the continuation of quality education during humanitarian situations.			CESA
	10.4 Extent to which (i) global citizenship education and (ii) education for sustainable development, including gender equality and human rights, (iii) Peace, Life Skills, Media and Information Literacy education, are mainstreamed in: (a) national education policies, (b) curricula, (c) teacher education and (d) student assessment	4.7	4.7.1	CESA SDG
	11.1 Funds allocated to EMIS (a) are used specifically for EMIS activities and (b) absorption capacity is optimal			CESA
	11.2 Your Government produces an Annual School Census Report: Last year available]		CESA
	11.3 School Census Return Rate]		CESA
SO 11	11.4 Your Government Conducts EMIS Assessments: Last year conducted]		CESA
	11.5 Education Sector Plan includes a chapter on EMIS]		CESA
	11.6 EMIS country performance level]		CESA
	12.1 Existence of School Management Committee Policy]		CESA
00.10	12.2 Existence of National Education Cluster			CESA
SO 12	12.3 Does your Government provide financial or political support to the CESA Implementation cluster on Education Planning?]		CESA
	12.4 Evidence of communications and advocacy for CESA objectives at country level			CESA
	A.1 Existence of African Language Policy]		CESA
	A.2 Percentage of pupils being taught using an African language as a medium of instruction			CESA
	A.3 Percentage of Learners learning an African language as a subject]		CESA
SO.Not Defined	A.4 National cultural festivals in Learning Institutions			CESA
	F.1 Public Expenditure on Education as a Percentage of Total Government Expenditure		1.a.2	CESA SDG
	F.2 Public Current Expenditure on Education as a Percentage of Total Education Expenditure by level	Financing	SDG 4.5.4	CESA SDG
	F.3 Public Expenditure on Education as a Percentage of GDP		FFA 2030	CESA SDG

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Table 43: Continental Education Strategy for Africa 2016-2025 – SDG 4 Indicators

CESA 16-25 indicators (March 2018 revision)	CESA indicators for reporting as per the agreement between the UIS and the AU \ensuremath{AU}	Benchmarked	Reporting status
SO 1: Revitalize the teaching profession to ensure quality and relevance at all lev	rels of education		
1.1 Percentage of Teachers Qualified to Teach According to National Standards	1.1 Proportion of teachers with the minimum required qualifications, by education level (SDG 4.c.1) $% \left(\left(SDG \right) \right) =\left(\left(SDG \right) \right) \right)$	Yes	Reporting
1.2 Percentage of teachers qualified in Science or Technology or Engineering or Mathematics by Sex	1.2 Percentage of teachers qualified in Science or Technology or Engineering or Mathematics by Sex		Under development
1.3 Existence of Operational Teacher Development Policy	1.3 Existence of Operational Teacher Development Policy		Under development
1.4 Percentage of Teachers who have undergone In-Service Training	1.4 Percentage of teachers who received in-service training in the last 12 months by type of training (SDG 4.c.7)		Reporting
SO 2: Build, rehabilitate, preserve education infrastructure and develop policies taccess to quality education	that ensure a permanent, healthy and conducive learning environment in all sub-se	ectors and for all, so	as to expand
2.1 Proportion of schools with access to (i) basic drinking water; (ii) single sex basic sanitation facilities; and (iii) basic hand-washing facilities	2.1 Proportion of schools offering basic services, by type of service (SDG 4.a.1): (i) basic drinking water; (ii) single sex basic sanitation facilities; and (iii) basic hand-washing facilities	Yes; (iii) basic hand-washing facilities	Reporting
2.2 Proportion of schools with (i) adapted infrastructure; (ii) materials for students with disabilities	2.2 Proportion of schools offering basic services, by type of service (SDG 4.a.1): (i) adapted infrastructure and materials for students with disabilities		Reporting
2.3 Existence of a National Safe Schools Policy	2.3 Existence of a National Safe Schools Policy		Under development
SO 3: Harness the capacity of ICT to improve access, quality and management of	education and training systems		
3.1 Proportion of educational institutions with access to (i) electricity (ii) the internet for pedagogical purposes and (iii) computers for pedagogical purposes	3.1 Proportion of schools offering basic services, by type of service (SDG 4.a.1): (i) electricity (ii) the internet for pedagogical purposes and (iii) computers for pedagogical purposes	Yes	Reporting
SO 4: Ensure acquisition of requisite knowledge and skills as well as improved c integration	ompletion rates at all levels and groups through harmonization processes across a	all levels for nationa	l and regional
4.1 Gross intake ratio to last grade of primary, lower secondary and upper secondary	4.1 Completion rate (primary education, lower secondary education, upper secondary education) (SDG 4.1.2) $$	Yes	Reporting
4.2 Existence of a National Qualifications Framework	4.2 Existence of a National Qualifications Framework		Under development

CESA 16-25 indicators (March 2018 revision)	\ensuremath{CESA} indicators for reporting as per the agreement between the UIS and the AU	Benchmarked	Reporting status
4.3 Membership in the Network of African Learning Assessments	4.3 Membership in the Network of African Learning Assessments		Under development
4.4 Percentage Distribution of Tertiary Graduates by field of study	4.4 Distribution of tertiary graduates by field of study		Reporting
4.5 Proportion of children and young people (a) in grade 3; (b) at the end of primary education; and (c) at the end of lower secondary education achieving at least a minimum proficiency level in (i) reading (ii) mathematics and (iii) science, by sex	4.5 Proportion of children and young people (a) in grades 2/3; (b) at the end of primary; and (c) at the end of lower secondary achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex (SDG 4.1.1)		Reporting
4.6 Proportion of population in a given age group achieving at least a fixed level of proficiency in functional (a) literacy and (b) numeracy skills, by sex	4.6 Proportion of population in a given age group achieving at least a fixed level of proficiency in functional (a) literacy and (b) numeracy skills, by sex (SDG 4.6.1)		Reporting
SO 5: Accelerate processes leading to gender parity and equity			
5.1 Gender Parity Index for Gross Enrolment Ratio	5.1 Completion Rate - Adjusted Gender Parity Index (SDG 4.5.1/4.1.2)	Yes	Reporting
5.2 Percentage of Female Teachers	5.2 Percentage of female teachers by teaching level of education		Reporting
5.3 Percentage of Female Head Teachers	5.3 Percentage of Female Head Teachers		Under development
5.4 Girls' dropout rate per reason of drop out	5.4 Out-of-school rate, by sex (SDG 4.1.4)	Yes	Reporting
5.5 Percentage of girls enrolled in STEM	5.5 Percentage of graduates from Science, Technology, Engineering and Mathematics programmes in tertiary education, both sexes		Reporting
SO 6: Launch comprehensive and effective literacy programmes across the cont	inent to eradicate the scourge of illiteracy		
6.1 Youth literacy rate	6.1 Youth/adult literacy rate - Youth (SDG 4.6.2)		Reporting
6.2 Adult Literacy Rate	6.2 Youth/adult literacy rate - Adult (SDG 4.6.2)		Reporting
6.3 Participants in literacy programmes as a percentage of non-literate population	6.3 Participation rate of illiterate youth/adults in literacy programmes (SDG 4.6.3)		Reporting
SO 7: Strengthen the science and math curricula in youth training and dissemination	ate scientific knowledge and culture in society		
$7.1\ \text{Percentage}$ of teachers qualified to teach in Science or Mathematics according to national standards	7.1 Percentage of teachers qualified to teach in Science or Mathematics according to national standards		Under development
SO 8: Expand TVET opportunities at both secondary and tertiary levels and stren	gthen linkages between the world of work and education and training systems		
8.1 Percentage of Total Enrolment in Secondary and tertiary Technical and Vocational Education and Training	8.1 Distribution of enrolment by programme orientation		Reporting
8.2 Percentage of TVET Graduates	8.2 Share of all students in vocational programmes, by level of education (%)	Yes	Reporting
8.3 TVET Graduates Labour Force Participation Rate	8.3 Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months, by sex (SDG 4.3.1)	Yes	Reporting

CESA 16-25 indicators (March 2018 revision)	\ensuremath{CESA} indicators for reporting as per the agreement between the UIS and the AU	Benchmarked	Reporting status
8.4 Percentage of Students who Meet National Requirements for Academic programs in secondary or tertiary and enrol for TVET	8.4 Percentage of Students who Meet National Requirements for Academic programs in secondary or tertiary and enroll for TVET		Second phase
8.5 State of National TVET policies and governance structures	8.5 State of National TVET policies and governance structures		Under development
8.6 Percentage of TVET Graduates who have participated in Apprenticeships	8.6 Participation rate in technical-vocational programmes (15- to 24-year-olds) by sex (SDG 4.3.3)		Reporting
	8.7 Youth not in Education, Employment or Training (NEET) (SDG 8.6.1)		
SO 9: Revitalize and expand tertiary education, research and innovation to addre	ss continental challenges and promote global competitiveness		
9.1 Number of earned doctoral degrees by field	9.1 Percentage of graduates by field of education (tertiary education)		Reporting
9.2 Expenditure on Research and Development as a Percentage of GDP	9.2 Research and Development Expenditure as a proportion of GDP (SDG 9.5.1)	Yes	Reporting
9.3 Enrolment of Students in Higher and Tertiary Education per 100,000	9.3 Gross enrolment ratio for tertiary education by sex (SDG 4.3.2)		Reporting
9.4 Inbound Mobility Ratio	9.4 Inbound Mobility Rate		Reporting
9.5 Outbound Mobility Ratio	9.5 Outbound Mobility Rate		Reporting
9.6 The quality of graduates and their employability in the world economy	9.6 Existence of tertiary education accreditation / Unemployment rate of tertiary education		Under development
9.7 Conducive environment for research and innovation through the provision of adequate infrastructure and resources	9.7 Conducive environment for research and innovation through the provision of adequate infrastructure and resources		Second phase
9.8 Proportion of Learners enrolled in: a. Distance Education, b. Open Learning, c. E-Learning Programmes	9.8 Proportion of Learners enrolled in: a. Distance Education, b. Open Learning, c. E-Learning Programmes		Under development
SO 10: Promote peace education and conflict prevention and resolution at all lev	els of education and for all age groups		
10.1 Existence of National Strategies to ensure the continuation of education during humanitarian situations, emergency situations such as armed conflict and support the re- establishment of educational facilities	10.1 Existence of National Strategies to ensure the continuation of education during humanitarian situations, emergency situations such as armed conflict and support the re- establishment of educational facilities		Under development
10.2 Existence of National education policies to address psychosocial support, disaster risk reduction and other systems/mechanisms to protect education from attacks and support for rehabilitation of school infrastructure	10.2 Existence of National education policies to address psychosocial support, disaster risk reduction and other systems/mechanisms to protect education from attacks and support for rehabilitation of school infrastructure		Under development
10.3. Extent to which (i) global citizenship education and (ii) education for sustainable development, including gender equality and human rights, (iii) Peace, Life Skills, Media and Information Literacy education, are mainstreamed in: (a) national education policies, (b) curricula, (c) teacher education and (d) student assessment	10.3 Extent to which (i) global citizenship education and (ii) education for sustainable development are mainstreamed in (a) national education policies, (b) curricula, (c) teacher education and (d) student assessment (SDG 4.7.1)		Reporting

SO 11: Improve management of education system as well build and enhance capacity for data collection, management, analysis, communication, and use

CESA 16-25 indicators (March 2018 revision)	CESA indicators for reporting as per the agreement between the UIS and the AU \ensuremath{AU}	Benchmarked	Reporting status
11.1 Funds allocated to EMIS (a) are used specifically for EMIS activities and (b) absorption capacity is optimal	11.1 Funds allocated to EMIS (a) are used specifically for EMIS activities and (b) absorption capacity is optimal		Second phase
11.2 Your Government produces an Annual School Census Report: Last year available	11.2 Your Government produces an Annual School Census Report: Last year available		Under development
11.3 School Census Return Rate	11.3 School Census Return Rate		Under development
11.4 Your Government Conducts EMIS Assessments: Last year conducted	11.4 Your Government Conducts EMIS Assessments: Last year conducted		Second phase
11.5 Education Sector Plan includes a chapter on EMIS	11.5 Education Sector Plan includes a chapter on EMIS		Second phase
11.6 EMIS Data Production Lag time (Timeliness)			Second phase
SO 12: Set up a coalition of stakeholders to facilitate and support activities result	ting from the implementation of CESA 16-25.		
12.1 Existence of School Management Committee Policy			Under development
12.2 Existence of National Education Cluster			Second phase
12.3 Does your Government provide financial or political support to the CESA Implementation cluster on Education Planning?	12.3 Does your Government provide financial or political support to the CESA Implementation cluster on Education Planning?		Second phase
12.4 Evidence of communications and advocacy for CESA objectives at country level	12.4 Evidence of communications and advocacy for CESA objectives at country level		Second phase
ADDITIONAL INDICATORS			
Agenda 2063 Aspiration 7: Africa with a strong cultural identity, common heritag	e, values and ethics		
A.1 Existence of African Language Policy	A.1 Existence of African Language Policy		Under development
A.2 Percentage of pupils being taught using an African language as a medium of instruction	A.2 Percentage of pupils being taught using an African language as a medium of instruction		Under development
A.3 Percentage of Learners learning an African language as a subject	A.3 Percentage of Learners learning an African language as a subject		Under development
A.4 National cultural activities in Learning Institutions	A.4 National cultural activities in Learning Institutions		Second phase
Finance indicators			
F.1 Public Expenditure on Education as a Percentage of Total Government Expenditure	F.1 Proportion of total government spending on essential services (education) (SDG 1.a.2) $% \left(1,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2$	Yes	Reporting
F.2 Public Current Expenditure on Education as a Percentage of Total Education Expenditure by level	F2. Education expenditure per student by level of education and source of funding (SDG 4.5.4)		Reporting

CESA 16-25 indicators (March 2018 revision)	CESA indicators for reporting as per the agreement between the UIS and the AU $% \left({{\boldsymbol{\omega }}_{i}} \right)$	Benchmarked	Reporting status
F.3 Public Expenditure on Education as a Percentage of GDP	F3. Government expenditure on education as a percentage of GDP (FFA 2030)	Yes	Reporting

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Appendix 4 - Data gaps in African countries for the CESA indicators

The dashboard below shows the coverage of the CESA indicators using a traffic light approach:

- green: if the country has at least one data point in the last period of 4 or 5 years and at least one data point in the precedent period of 4 or 5 years allowing for data trend analysis.
- red: if the country does not have any data in the last 8 to 10 years;
- yellow: if a country has at least one data point in the latest period of 4 to 5 years; and
- orange: if a country has at least one data point in the previous period of 4 to 5 years.

Mauritania Morocco Tunisia Algeria Egypt 4.c.1 - Upper Secondary 4.c.1 - Secondary 4.c.1 - Primary 4.c.1 - Pre-primary 4.c.1 - Lower Secondary SO 1 - 1.1 4.c.7 - Primary 4.c.7 - Lower Secondary SO 1 - 1.4 ÷ 4.a.1 - Upper secondary SO 2 - 2.1 4.a.1 - Primary 4.a.1 - Lower secondary 4.a.1 - Upper secondary 4.a.1 - Primary 4.a.1 - Lower secondary SO 2 - 2.2 ÷ 4.a.1 - Upper secondary 4.a.1 - Secondary 4.a.1 - Primary 4.a.1 - Lower secondary SO 3 - 3.1 4.1.2 - Upper Secondary 4.1.2 - Primary SO 4 - 4.1 4.1.2 - Lower Secondary 4.1.2 - Lower Secondary Tertiary - Unspecified fields Tertiary - Social Sciences, Journalism and Information Tertiary - Services Tertiary - Natural Sciences, Mathematics and Statistics Tertiary - Information and Communication Technologies Tertiary - Information and Communication Technologies Tertiary - Health and Welfare Tertiary - Engineering, Manufacturing and Construction Tertiary - Business, Administration and Law Tertiary - Agriculture, Forestry, Fisheries and Veterinary SO 4 - 4.4 4.1.1 - Primary l 4.1.1 - Primary 4.1.1 - Lower Secondary 4.1.1 - Grade 2 to 3 SO 4 - 4.5 4.6.1 - Numeracy 4.6.1 - Literacy SO 4 - 4.6 4.5.1 - Upper Secondary 4.5.1 - Primary 4.5.1 - Lower Secondary SO 5 - 5.1 Upper secondary ļ Post-secondary non-tertiary Primary Post-secondary non-tertiary Lower secondary į ÷ SO 5 - 5.2 4.1.4 - Upper Secondary 4.1.4 - Primary 4.1.4 - One Year Before Primary 4.1.4 - Lower Secondary SO 5 - 5.4 i ÷ Tertiary - Natural Sciences, Mathematics and Statistics . SO 5 - 5.5 4.6.2 - Youth ÷ SO 6 - 6.1 4.6.2 - Adult ÷ SO 6 - 6.2 Upper secondary vocational Upper secondary vocational Secondary vocational Secondary general Lower secondary vocational Lower secondary general SO 8 - 8.1 ł 4.3.1 - Non-Formal SO 8 - 8.3 4.3.3 - TVET SO 8 - 8.6 i. Tertiary SO 9 - 9.2 4.3.2 - Tertiary SO 9 - 9.3 Ì i. Tertiary SO 9 - 9.4 Post-secondary non-tertiary SO 9 - 9.5 4.7.2 - Upper secondary 4.7.2 - Primary 4.7.2 - Lower secondary 4.7.1 - Teacher education Ì SO 10 - 10 3 4.7.1 - Teacher education 4.7.1 - Student assessments 4.7.1 - National Policy 4.7.1 - Curricula Ì i 1.a.GDP - All ŧ. Ì i. Finance - F.1 1.a.GDP - All 4.5.4 - Upper secondary Admin data (%GDP per capita) 4.5.4 - Upper secondary Admin data (%GDP per capita) 4.5.4 - Tertiary HH survey (%GDP per capita) 4.5.4 - Tertiary Admin data (%GDP per capita) 4.5.4 - Tertiary Admin data (%GDP per capita) 4.5.4 - Secondary HH survey (%GDP per capita) 4.5.4 - Secondary HH survey (%GDP per capita) 4.5.4 - Secondary HH survey (%GDP per capita) 4.5.4 - Secondary Admin data (%GDP per capita) 4.5.4 - Secondary HH survey (%GDP per capita) 4.5.4 - Secondary HH survey (%GDP per capita) 4.5.4 - Primary Admin data (%GDP per capita) 4.5.4 - Primary Admin data (%GDP per capita) 4.5.4 - Primary Admin data (%GDP per capita) 4.5.4 - Pre-primary Admin data (%GDP per capita) 4.5.4 - Pre-primary Admin data (%GDP per capita) 4.5.4 - Pre-primary Admin data (%GDP per capita) 4.5.4 - Lower secondary Admin data (%GDP per capita) 4.5.4 - Lower secondary Admin data (%GDP per capita) ļ į Finance - F.2 į Ì ÷ i Ì i

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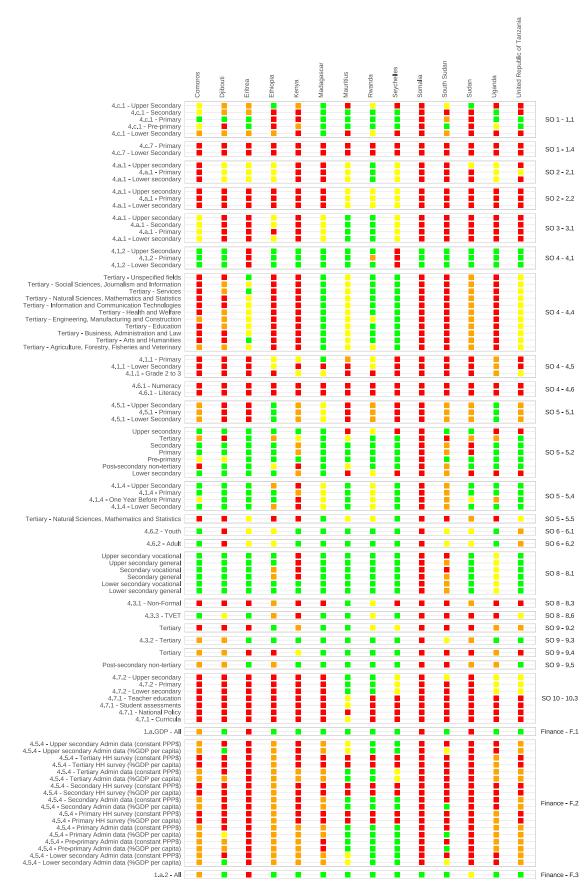
Finance - F.3

Figure 26: Data gaps in Northern Africa for the CESA indicators

1.a.2 - All

	Angola	Botswana	Eswatini	Lesotho	Malawi	Mozambique	Namibia	South Africa	Zambia	Zimbabwe	
		Bot	ESI	Les	Ma	Mo	Nai	Sol	Zar	Zin	
4.c.1 - Upper Secondary 4.c.1 - Secondary											
4.c.1 - Primary	<u>_</u>	- E	-	_		-		_	- E	<u></u>	SO 1 - 1.
4.c.1 - Pre-primary 4.c.1 - Lower Secondary			-								
4.c.7 - Primary	-	-	-	-	-	-	-	-		-	1
4.c.7 - Lower Secondary						Ē		-	- i		SO 1 - 1.4
4.a.1 - Upper secondary											-
4.a.1 - Primary											SO 2 - 2.
4.a.1 - Lower secondary			_	-		-			-		1
4.a.1 - Upper secondary 4.a.1 - Primary											SO 2 - 2.
4.a.1 - Lower secondary											
4 a 1 - Upper secondary									- 2		
4.a.1 - Secondary 4.a.1 - Primary		_			-			-	-		SO 3 - 3.
4.a.1 - Lower secondary											-
4.1.2 - Upper Secondary			•								-
4.1.2 - Primary 4.1.2 - Lower Secondary											SO 4 - 4.
Tertiary - Unspecified fields	-	-	-	-	-		-	-	-	-	1
Tertiary - Social Sciences, Journalism and Information		- -		-	-	•		- i -	-		
Tertiary - Services Tertiary - Natural Sciences, Mathematics and Statistics											
ertiary - Information and Communication Technologies	-			_	-	-	- i	- <u>-</u>	- I -		
Tertiary - Health and Welfare Tertiary - Engineering, Manufacturing and Construction											SO 4 - 4
Tertiary - Education		-	-	-		-	-	-	- I -		
Tertiary - Business, Administration and Law Tertiary - Arts and Humanities			-		-					-	
ertiary - Agriculture, Forestry, Fisheries and Veterinary		- F				Ē		Ē			-
4.1.1 - Primary				<u>.</u>							-
4.1.1 - Lower Secondary 4.1.1 - Grade 2 to 3				-				-	-		SO 4 - 4
4.6.1 - Numeracy	-		_	-	-	-	-		-		1
4.0.1 - Numeracy			-	-							SO 4 - 4
4.5.1 - Upper Secondary	-	-	-			-					1
4.5.1 - Primary		_	_	-		-	-			-	SO 5 - 5
4.5.1 - Lower Secondary		_								-	1
Upper secondary - Tertiary -		-						_			
Secondary	-	-	-	-	-	•	-	-	-	-	
Primary - Pre-primary -											SO 5 - 5
Post-secondary non-tertiary	- <u>i</u> -	_						-	_ <u>_</u> _		
Lower secondary	-	_				-		-	_		1
4.1.4 - Upper Secondary 4.1.4 - Primary	-										
4.1.4 - One Year Before Primary	-	-	-		-			- i	-	-	SO 5 - 5
4.1.4 - Lower Secondary		-				-			_	-	
Tertiary - Natural Sciences, Mathematics and Statistics											SO 5 - 5
4.6.2 - Youth					-						SO 6 - 6
4.6.2 - Adult											SO 6 - 6
Upper secondary vocational											-
Upper secondary general Secondary vocational											
Secondary general		- Ē	-	-	-	-	-				SO 8 - 8
Lower secondary vocational – Lower secondary general –	-									-	
			_						-]
4.3.1 - Non-Formal		_				-				-	SO 8 - 8
4.3.3 - TVET				-				-			SO 8 - 8
Tertiary		_									SO 9 - 9
4.3.2 - Tertiary											SO 9 - 9
Tertiary			-		-					-	SO 9 - 9
Post-secondary non-tertiary									-		SO 9 - 9
4.7.2 - Upper secondary			-	-	-			-			1
4.7.2 - Primary	_	-	-	1	1	1		Ĩ	-1-		
4.7.2 - Lower secondary 4.7.1 - Teacher education					- -					-	SO 10 - 1
4.7.1 - Student assessments							-				
4.7.1 - National Policy 4.7.1 - Curricula											
1.a.GDP - All	-	-	-	-			-	-	-	-	Finance -
4.5.4 - Upper secondary Admin data (constant PPP\$)	-	-	-			-				-]
.5.4 - Upper secondary Admin data (%GDP per capita)	-	-	-	-		-	- i			-	
4.5.4 - Tertiary HH survey (constant PPP\$) 4.5.4 - Tertiary HH survey (%GDP per capita)			_							-	
4.5.4 - Tertiary Admin data (constant PPP\$)			-			-				-	
4.5.4 - Tertiary Admin data (%GDP per capita) 4.5.4 - Secondary HH survey (constant PPP\$)				-						-	
4.5.4 - Secondary HH survey (%GDP per capita)	-		- i -	-			-			-	
4.5.4 - Secondary Admin data (constant PPP\$) 4.5.4 - Secondary Admin data (%GDP per capita)											Finance -
4.5.4 - Primary HH survey (constant PPP\$)			-			i				-	
4.5.4 - Primary HH survey (%GDP per capita) 4.5.4 - Primary Admin data (constant PPP\$)	-										
4.5.4 - Primary Admin data (%GDP per capita)	- Ē										
4.5.4 - Pre-primary Admin data (constant PPP\$)		-								_	
4.5.4 - Pre-primary Admin data (%CDD por copita)					-						
4.5.4 - Pre-primary Admin data (%GDP per capita) 4.5.4 - Lower secondary Admin data (constant PPP\$) 5.4 - Lower secondary Admin data (%GDP per capita)										-	

Figure 27: Data gaps in Southern Africa for the CESA indicators





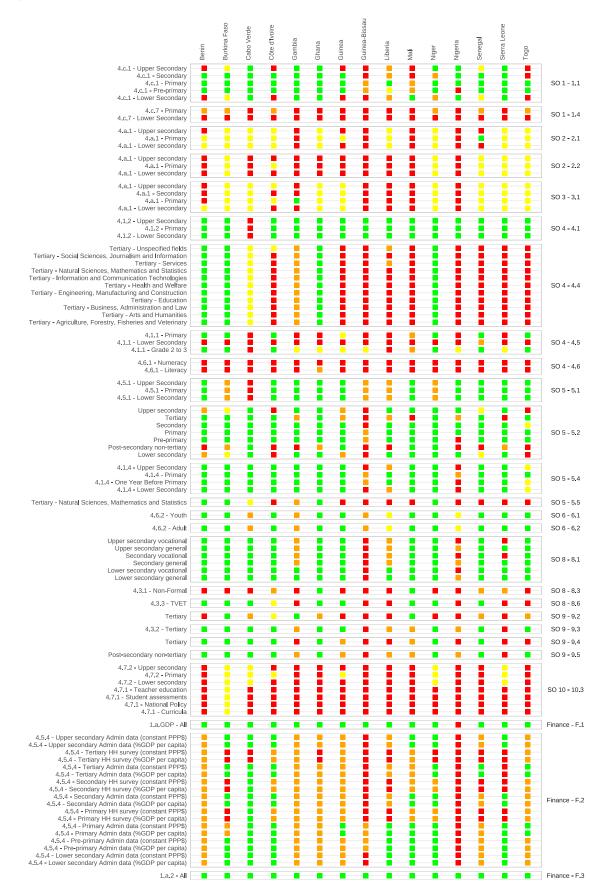
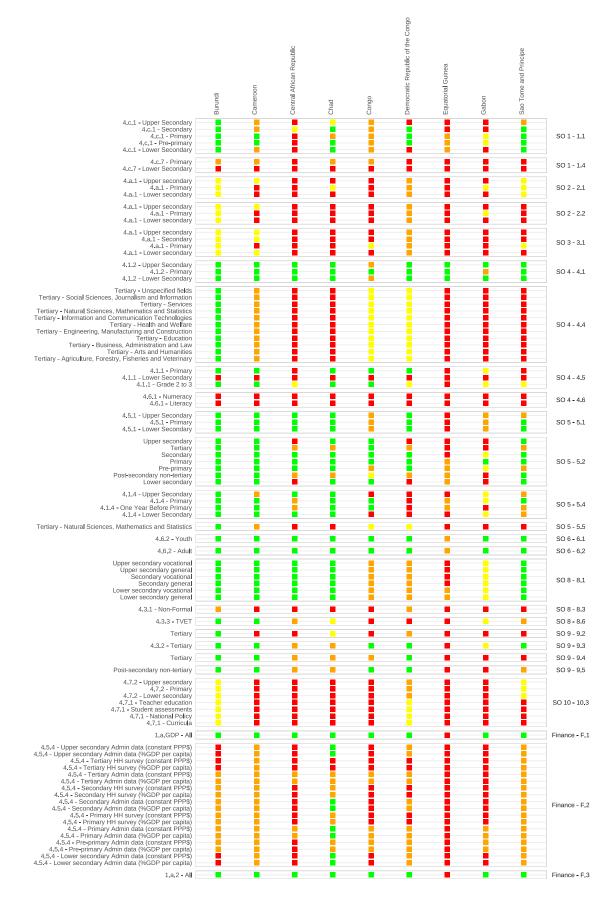


Figure 29: Data gaps in Western Africa for the CESA indicators





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