



CONTINENTAL EDUCATION STRATEGY FOR AFRICA

INDICATORS MANUAL

March 2018

FOREWORD

It is with immense pleasure and satisfaction that I am presenting the Continental Education Strategy for Africa (CESA 16-25) Indicators Manual. With the ambitious strategic goals in CESA, it was imperative to have a comprehensive framework for monitoring and evaluating the implementation of the continental education strategy, to register with the direction and pace of progress.

Education has long been recognized as a critical sector whose “performance directly affects and even determines the quality and magnitude of Africa’s development.” Agenda 2063 calls for an education and skills revolution underpinned by science, technology and innovation. In response to this demand, the Continental education Strategy for Africa (CESA 16-25) sets out with a mission to re-orient education and training systems to meet the knowledge, competencies, skills, innovation and creativity required to nurture African core values and promote sustainable development at the national, regional and continental levels, as necessary for the Africa We want. It is therefore essential that performance in education is measured against the fact that education is an agency for achieving the desired social economic development, while it is also a human right.

This Indicator Manual along with the list of indicators to monitor the Continental Education Strategy for Africa 16-25 and the annual Continental Education Strategy for Africa report form part of the wider CESA Monitoring and Evaluation Framework. The manual has been developed to empower education managers both inside and outside of African Ministries responsible for Education to perform their jobs more effectively. The selection of indicators for inclusion under the CESA 16-25 Monitoring and Evaluation Framework has been done with participation of Member States officials, representatives from Regional Economic Communities, key agencies working in education in Africa including ADEA, UNESCO and special interest groups, under the auspices of the CESA Education Planning Advisory group.

Focal officials who are tracking performance of their education ministry in achieving the objectives of the African Union’s Continental Education Strategy for Africa need a harmonized framework against which they can benchmark the progress of their countries. Furthermore, with Member States also being part of the global community, it is necessary that the African Union’s indicators for education performance are developed taking cognizance of the global Sustainable development Goal number 4. This way, the AU Continental Education Observatory, where Member States submit their data, would be the repository to which global entities go to find information on education in Africa. It is for this reason that the CESA Indicators Manual has been developed to serve as a valuable resource in

achieving the strategic objectives enshrined in CESA, while supporting the global SDG 4.

This indicators manual catalogues the indicators which will be used to measure progress on the twelve (12) Strategic Objectives of the Continental Education Strategy for Africa. It draws significantly from the African Union's work done under the Plan of Action for the Second Decade of Education and its Indicators manual. Use has also been made of some of the work of UNESCO's Institute for Statistics.

I therefore call on all member states and stakeholders to embrace this manual and make use of it to positively advance the course of CESA 16-25 and consequentially Agenda 2063 towards the Africa we want.

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The African Union Commission

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This work would not have been successful without partnership of a number of agencies that ensured that special interests were taken on board, for example issues of gender, children, vulnerability and values. Thus thanks are due to FAWE for having produced the gender mainstreaming guide for CESA. Thanks to all the agencies that are members of the AU Education Planning Advisory Group and the CESA Thematic Cluster on Education Planning. Thanks to UNESCO Institute of Statistics for making available relevant documentation and expertise. A very special thank you to the Association for the Development of Education in Africa (ADEA), who ably coordinate the CESA thematic cluster on Education Planning; and particularly the ADEA Working Group on Education Management and Policy Support, for continued technical support and partnership in every aspect of the production of this manual.

Who is the Indicator Manual for?

This Indicator Manual is aimed at statisticians, planners and education managers who are tracking their department's performance in achieving the objectives of the Continental Education Strategy for Africa. It is intended to serve as a resource for a greater understanding of how to use indicators, to measure, monitor and track education delivery within Ministries responsible for Education.

How is the Indicator Manual organized?

This Indicator Handbook is divided into twelve sections. Each section represents a Strategic Objective of the African Union's Continental Education Strategy for Africa 16-25. Indicators have been identified and agreed upon by the African Union Specialised Technical Group on Education, Science and Technology based on how well they reflect the goals of the CESA Strategic Objectives and the targets of Sustainable Development Goal Four as well as their feasibility for collection.

An effort has been made to ensure that these indicators are consistent with global goals. Many of these indicators are replicated in other frameworks. This was done in order to reduce the burden of reporting on various and differing education frameworks. This manual also includes a matrix in the annex section which indicates the parent framework the indicator falls under e.g. CESA 16-25 or SDG4.

Several other indicators have been included which do not fall directly under the Strategic Objectives of the CESA 16-25. However they reflect some of the core themes of the African Agenda 2063 and the underlying principles of CESA 16-25 on African values and financial commitments to making quality education a reality for all of Africa's people. These indicators can be found from page 29.

Some of the proposed indicators are still in their pilot phase. These are indicators which have been selected to help measure a particular target. They however have not been tested to determine whether they work in practice or whether they have any unintended consequences or if they are fit for purpose. All indicators still in the pilot phase are marked as such. One example is indicator 1.2 under Strategic Objective One: Proportion of teachers qualified in Science or Technology or Engineering or Mathematics by Sex. This indicator will need to be tested in order to determine its validity and reliability.

The Indicator Handbook accompanies the CESA 16-25 Logical Framework. Users of the handbook are given guidance on which indicators are to be disaggregated and accordingly to what classification, for example, rural or urban. Where the handbook indicates that an indicator is to be disaggregated, those filling in the CESA 16-25 Logical Framework should take note.

THE STRATEGIC OBJECTIVES OF THE CONTINENTAL EDUCATION STRATEGY FOR AFRICA

The Strategic Objectives are:

- SO 1: Revitalize the teaching profession to ensure quality and relevance at all levels of education
- SO 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
- SO 3: Harness the capacity of ICT to improve access, quality and management of education and training systems
- 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
- SO 5: Accelerate processes leading to gender parity and equity
- SO 6: Launch comprehensive and effective literacy programmes across the continent to eradicate the scourge of illiteracy
- SO 7: Strengthen the science and math curricula in youth training and disseminate scientific knowledge and culture in society
- SO 8: Expand TVET opportunities at both secondary and tertiary levels and strengthen linkages between the world of work and education and training systems
- SO 9: Revitalize and expand tertiary education, research and innovation to address continental challenges and promote global competitiveness
- SO 10: Promote peace education and conflict prevention and resolution at all levels of education and for all age groups
- SO 11: Improve management of education system as well build and enhance capacity for data collection, management, analysis, communication, and use
- SO 12: Set up a coalition of stakeholders to facilitate and support activities resulting from the implementation of CESA 16-25.

ACRONYMS

ADEA	Association for the Development of Education in Africa
AU	African Union
COMEDAF	Conference of Ministers of Education of the African Union
CESA	Continental Education Strategy for Africa
CSO	Central Statistics Office
ECD	Early Childhood Development
EMIS	Education Management Information Systems
GED	Global Education Digest
GER	Gross Enrolment Ratio
GPI	Gender Parity Index
HEMIS	Higher Education EMIS
ICT	Information and Communication Technology
ISCED	International Standard Classification system of Education
SDGs	Sustainable Development Goals
MoE	Ministry of Education
NER	Net Enrolment Ratio
NFE	Non Formal Education
NSO	National Statistics Office
OECD	Organization for Economic Cooperation and Development
PTR	Pupil-Teacher Ratio

REC	Regional Economic Community
TVET	Technical and Vocational Education and Training
UIS	UNESCO Institute for Statistics
UNESCO	United Nations Educational Scientific and Cultural Organisation
UNICEF	United Nations Children's Fund

TABLE OF CONTENTS

Acknowledgements

Who is the Indicator Manual for? 14

How is the Indicator Manual organized? 14

ACRONYMS 14

STRATEGIC OBJECTIVES INDICATORS 14

SO 1: Revitalize the teaching profession to ensure quality and relevance at all levels of education 14

1.1 Percentage of Teachers Qualified to Teach According to National Standards 14

1.2 Percentage of teachers qualified in Science or Technology or Engineering or Mathematics by Sex 15

1.3 Existence of Operational Teacher Development Policy 17

1.4 Percentage of Teachers who have undergone In-Service Training 17

SO 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 19

2.1 Proportion of schools with access to (i) basic drinking water; (ii) single sex basic sanitation facilities; and (iii) basic hand-washing facilities 19

2.2 Proportion of schools with (i) adapted infrastructure; (ii) materials for students with disabilities 20

2.3 Existence of a National Safe Schools Policy 21

SO 3: Harness the capacity of ICT to improve access, quality and management of education and training systems..... 22

3.1 Proportion of educational institutions with access to (i) electricity (ii) the internet for pedagogical purposes and (iii) computers for pedagogical purposes 22

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 23

4.1 Gross intake ratio to last grade of primary, lower secondary and upper secondary 23

4.2 Existence of a National Qualifications Framework..... 25

4.3 Membership in the Network of African Learning Assessments 26

4.4 Percentage Distribution of Tertiary Graduates by field of study 27

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 28

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.....	30
SO 5: Accelerate processes leading to gender parity and equity	31
5.1 Gender Parity Index for Gross Enrolment Ratio.....	31
5.2 Percentage of Female Teachers	32
5.3 Percentage of Female Head Teachers	34
5.4 Girls' dropout rate per reason of drop out	35
5.5 Percentage of girls enrolled in STEM.....	37
SO 6: Launch comprehensive and effective literacy programmes across the continent to eradicate the scourge of illiteracy	38
6.1 Youth literacy rate	38
6.2 Adult Literacy Rate	39
6.3 Participants in literacy programmes as a percentage of non-literate population	41
SO 7: Strengthen the science and math curricula in youth training and disseminate scientific knowledge and culture in society	42
7.1 Percentage of teachers qualified to teach in Science or Mathematics according to national standards.....	42
SO 8: Expand TVET opportunities at both secondary and tertiary levels and strengthen linkages between the world of work and education and training systems	44
8.1 Percentage of Total Enrolment in Secondary and tertiary Technical and Vocational Education and Training	44
8.2 Percentage of TVET Graduates	45
8.3 TVET Graduates Labour Force Participation Rate.....	46
8.4 Percentage of Students who Meet National Requirements for Academic programs in secondary or tertiary and enrol for TVET	47
8.5 State of National TVET policies and governance structures.....	48
8.6 Percentage of TVET Graduates who have participated in Apprenticeships	49
SO 9: Revitalize and expand tertiary education, research and innovation to address continental challenges and promote global competitiveness.....	50
9.1 Number of earned doctoral degrees by field	50
9.2 Expenditure on Research and Development as a Percentage of GDP.	51
9.3 Enrolment of Students in Higher and Tertiary Education per 100,000 Inhabitants	52
9.4 Inbound Mobility Ratio	53
9.5 Outbound Mobility Ratio	54
9.6 The quality of graduates and their employability in the world economy	55
9.7 Conducive environment for research and innovation through the provision of adequate infrastructure and resources	56
9.8 Proportion of Learners enrolled in: a. Distance Education, b. Open Learning, c. E-Learning Programmes.....	57

SO 10: Promote peace education and conflict prevention and resolution at all levels of education and for all age groups.....	59
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;	59
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.	60
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	61
SO 11: Improve management of education system as well build and enhance capacity for data collection, management, analysis, communication, and use	62
11.1 Funds allocated to EMIS (a) are used specifically for EMIS activities and (b) absorption capacity is optimal.....	62
11.2 Your Government produces an Annual School Census Report: Last year available	63
11.3 School Census Return Rate	64
11.4 Your Government Conducts EMIS Assessments: Last year conducted	65
11.5 Education Sector Plan includes a chapter on EMIS.....	66
11.6 EMIS Data Production Lag time (Timeliness)	67
SO 12: Set up a coalition of stakeholders to facilitate and support activities resulting from the implementation of CESA 16-25	68
12.1 Existence of School Management Committee Policy	68
12.2 Existence of National Education Cluster	69
12.3 Does your Government provide financial or political support to the CESA Implementation cluster on Education Planning?	70
12.4 Evidence of communications and advocacy for CESA objectives at country level	70
ADDITIONAL INDICATORS	71
Agenda 2063 Aspiration 7: Africa with a strong cultural identity, common heritage, values and ethics	71
A.2 Percentage of pupils being taught using an African language as a medium of instruction.....	72
A.3 Percentage of Learners learning an African language as a subject....	74
A.4 National cultural activities in Learning Institutions	75
F.1 Public Expenditure on Education as a Percentage of Total Government Expenditure.....	76
F.2 Public Current Expenditure on Education as a Percentage of Total Education Expenditure by level	77
F.3 Public Expenditure on Education as a Percentage of GDP	78

APPENDICES	80
APPENDIX ONE	80
DESCRIPTION OF ISCED LEVELS, CLASSIFICATION CRITERIA AND SUB-CATEGORIES	80
APPENDIX TWO	83
Definitions of Terms	83
APPENDIX THREE	85
REFERENCES	86

STRATEGIC OBJECTIVES INDICATORS

SO 1: Revitalize the teaching profession to ensure quality and relevance at all levels of education

1.1 Percentage of Teachers Qualified to Teach According to National Standards¹

Definition: Percentage of teachers qualified to teach is derived by expressing the number of teachers who are certified to have received the minimum organized initial professional teacher-training required for teaching at the relevant level of education, expressed as a percentage of the total number of teachers at that level.

Purpose: It provides an indication of the relative proportion of teachers who are sufficiently and officially qualified to teach at any given level of education.

Calculation method: Divide total number of teachers who have professional teacher training by the total number of teachers. Multiply the result by 100 to express as a percentage.

Formula:

$$PTT = \frac{\text{Number of certified teachers}}{\text{Total number of teachers}} \times 100$$

Where

PTT =Percentage of teachers qualified to teach according to national standards

Data required

Source of data

Number of certified teachers by level	EMIS - Ministry responsible for Education Teacher Service Commission
Total number of teachers by level	EMIS - Ministry responsible for Education Teacher Service Commission

¹ This indicator can be disaggregated by (a) those who are trained as teachers and are in service and (b) those who are trained but not in service using the total number of qualified teachers according to national standards as the denominator. Two formulas will be required.

Type of disaggregation for the indicator

This indicator is to be disaggregated by gender, by urban/rural and by level of education.

Interpretation: A higher percentage of trained teachers leads to higher quality education as it is assumed trained teachers can transmit knowledge more effectively.

Quality standard: Clarity on the notion of trained teachers is needed especially in cases where teachers have had short courses and in-service training that may or may not accrue to their qualifications.

Limitation: Definitional issues on what constitutes a teacher and what is an officially recognized pedagogically trained teacher.

Is the indicator to be piloted?

☐ Yes ☒ No

Methodology: Will the indicator be collected through a census or sample survey?

☒ Census survey ☐ Sample survey

General Remarks: Information on national qualification standards must be obtained from relevant department of the ministry.

1.2 Percentage of teachers qualified in Science or Technology or Engineering or Mathematics by Sex²

Definition: Percentage of teachers qualified to teach Science or Technology or Engineering or Mathematics by sex is derived by expressing the number of teachers male or female who are certified to have received the minimum organized initial professional teacher-training required in Science or Technology or Engineering or Mathematics for teaching at the relevant level of education, expressed as a percentage of the total number of teachers at that level.

Purpose: It provides an indication of the relative proportion of teachers male or female who are sufficiently and officially qualified to teach Science or Technology or Engineering or Mathematics at the relevant level of education.

Calculation method: Divide total number of teachers male or female who have professional teacher training in Science or Technology or Engineering or Mathematics by the total number of teachers. Multiply the result by 100 to express as a percentage.

² Refer to Annex 3 on Domains and Fields of R&D classification

Formula:

$$PTSTEM = \frac{\text{Number of certified teachers in S or T or E or M}}{\text{Total number of teachers}} \times 100$$

Where

PTSTEM = Percentage of teachers qualified in Science or Technology or Engineering or Mathematics by Sex.

Data required**Source of data**

Number of certified teachers in subject by sex	EMIS - Ministry responsible for Education
Total number of teachers by level	EMIS – Ministry responsible for Education

Type of disaggregation for the indicator

This indicator is to be disaggregated by gender and by urban/rural. The focus is on Secondary levels of education.

Interpretation: A higher percentage of trained teachers in Science or Technology or Engineering or Mathematics by sex leads to higher quality education in these subjects as it is assumed trained teachers can transmit knowledge more effectively. Having more female teachers in these subjects can increase the number of girls who take up these subjects and produce better outcomes for females.

Quality standard: Clarity on the notion of trained teachers is needed especially in cases where teachers have had short courses and in-service training that may or may not accrue to their qualifications.

Limitation: Definitional issues on what constitutes a teacher and what is an officially recognized pedagogically trained teacher. Definitional issues on the parameters of Science, Technology, Engineering or Mathematical subjects.

Is the indicator to be piloted?
☒

Yes

☐

No

Methodology: Will the indicator be collected through a census or sample survey?
☒

Census survey

☐

Sample survey

General Remarks: Information on national qualification standards and curriculum limitations must be obtained from the relevant department of the ministry.

1.3 Existence of Operational Teacher Development Policy

Definition: The availability of Teacher development policies in a given country. This could be part of the Ministry or government HRM policy or a separate policy.

Purpose: It provides an indication of the government or ministry commitment to develop and maintain the teaching profession

Calculation method: Yes / No and Proof provided

Data required

Source of data

Existence of Teacher Development Policy	EMIS - Ministry responsible for Education Public Service Commission
---	--

Limitations: Availability of such policy does not mean that teacher development and welfare is assured.

Is the indicator to be piloted?

☒ Yes ☐ No

Methodology: Will the indicator be collected through a census or sample survey?

☒ Census survey ☐ Sample survey

1.4 Percentage of Teachers who have undergone In-Service Training

Definition: Percentage of teachers currently in-service or undergoing professional development studies (in service training) by sex is derived by expressing the number of teachers male or female at the relevant level of education who have received in service training in the last year, expressed as a percentage of the total number of teachers at that level.

Purpose: It provides an indication of the relative proportion of teachers male or female who are undergoing continuous professional development (cpd) at the relevant level of education as well as the capacity of the system to provide cpd.

Calculation method: Divide total number of teachers male or female in-service training by the total number of teachers. Multiply the result by 100 to express as a percentage.

Formula:

$$PTSET = \frac{\text{Total number of teachers male or female in service training in year } t}{\text{Total number of teachers in year } t} \times 100$$

Where

PTSET =Percentage of teachers who have undergone In-Service Training.

Data required**Source of data**

Number of in-service teachers	EMIS - Ministry of Education
Total number of teachers by level	EMIS - Ministry of Education

Type of disaggregation for the indicator: This indicator is to be disaggregated by level, gender and by urban/rural.

Interpretation: A higher percentage of trained teachers in-service suggests that teachers' training is updated to the curriculum content and delivery and that these teachers can transmit knowledge more effectively.

Quality standard: Clarity on the notion of trained teachers is needed especially in cases where teachers have had short courses and in-service training that may or may not accrue to their qualifications.

Limitation: Definitional issues on what constitutes a teacher and what is an officially recognized pedagogically trained teacher. Teachers may receive In-Set from a wide range of stakeholders which EMIS may not be aware of or capture.

Is the indicator to be piloted?
☒

Yes

☐

No

Methodology: Will the indicator be collected through a census or sample survey?

☒

Census survey

☐

Sample survey

General Remarks: Information on national qualification standards and curriculum limitations must be obtained from the relevant department of the ministry.

SO 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

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

Definition: Percentage of schools with access to basic drinking water, single-sex basic sanitation facilities; and basic hand washing facilities. This factor helps measure how conducive the learning environment is by using the availability of WASH facilities separated by gender and by learner and teachers as a proxy.

Purpose: This indicator gives an indication of improvements in the safety and quality of education. It requires access to sufficient safe water, basic sanitation and improved hygiene services in education facilities.

Calculation method: Divide the number of schools with these facilities by the total number of schools in that year and multiply the result by 100.

Formula:

$$PSF = \frac{\text{Number of schools with basic drinking water or single sex basic sanitation or basic handwashing facilities}}{\text{Total number of schools in year } t} \times 100$$

Where

PSF = Proportion of schools with access to facilities.

Data required

Source of data

Number of schools with relevant facilities	EMIS – Ministry responsible for Education
Total number of schools	EMIS – Ministry responsible for Education

Type of disaggregation for the indicator

This indicator is to be disaggregated by level, gender and by urban/rural.

Interpretation: A higher percentage of schools with the relevant facilities suggest a safer and more conducive environment for students. This is particularly the case for girls where single sex sanitation facilities are available.

Quality standard: This measure is a composite indicator. In order to get the most meaning out of it, it is important to measure each facet separately i.e. basic drinking water/single sex basic sanitation facilities/basic hand washing facilities. Counting ideally should be guided by the minimum standards in use in that country which dictate the ideal number of facilities per school or per child. Where a country standard does not exist, reference can be made to WHO standards.

Limitation: As this is a very composite indicator, it will be difficult to interpret whether the facilities available are also adequate for the population of children.

Is the indicator to be piloted?

☒ Yes ☐ No

Methodology: Will the indicator be collected through a census or sample survey?

☒ Census survey ☐ Sample survey

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

Definition: Percentage of schools with access to adapted infrastructure and materials for students with disabilities. This factor helps measure how conducive the learning environment is for students with disabilities.

Purpose: This indicator gives an indication of how inclusive the education system for differently abled students. It requires access to facilities such as wide ramps at entrances, toilets and sanitation facilities. Materials may include hearing aids, prosthetics and sign language interpreters

Calculation method: Divide the number of schools with the relevant facilities by the total number of schools in year and multiply the result by 100.

Formula:

$$PSIM = \frac{\text{Number of schools with adapted infrastructure or materials for students with disabilities}}{\text{Total number of schools in year } t} \times 100$$

Where

PSIM = Proportion of schools with infrastructure or materials or students with disabilities.

Data required

Source of data

Number of schools with relevant infrastructure or material	EMIS - Ministry responsible for Education
Total number of schools	EMIS – Ministry responsible or Education

Type of disaggregation for the indicator

This indicator is to be disaggregated by types of infrastructure or materials, level and by urban/rural.

Interpretation: A higher percentage suggests that there is a genuine commitment to making schools more inclusive and accessible to learners with disabilities.

Quality standard: This measure is a composite indicator. In order to get the most meaning out of it, it is important to measure each facet separately i.e. adapted infrastructure/materials for students with disabilities. Counting ideally should be guided by the minimum standards in use in that country which dictate the ideal number of facilities per school or per child.

Limitation: As this is a very composite indicator, it will be difficult to interpret whether the facilities available are also adequate for the population of children.

Is the indicator to be piloted?

☒ Yes ☐ No

Methodology: Will the indicator be collected through a census or sample survey?

☒ Census survey ☐ Sample survey

2.3 Existence of a National Safe Schools Policy

Definition: A set of ideas or plans that is used as a basis for making decisions on how to make schools safe, healthy and conducive environments for learners.

Purpose: This indicator provides information on whether a commitment to improving learning environments has been made at the highest levels of Government and whether this commitment is supported by guidelines for implementation.

Calculation method: Yes or No question

Data required

Source of data

National Safe Schools Policy	Policy unit – Ministry responsible for Education/Training/Industry
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Type of disaggregation for the indicator: This indicator can be disaggregated by level.

Quality standard: Generally, the more recent and comprehensive the policy, the better.

Limitation: The indicator does not tell us about how whether the National Safe Schools Policy is in use.

Is the indicator to be piloted?

☐ Yes ☒ No

Methodology: Will the indicator be collected through a census or sample survey?

☒

Census survey

☐

Sample survey

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

Definition: Percentage of educational institutions with access to electricity or the internet specifically for pedagogical purposes (for teaching rather than administration) or computers for pedagogical purposes (for teaching rather than administration).

Purpose: This indicator is used to measure the use of ICT in education and how exposed learners are to technologies which are becoming more and more pervasive. It is also a measure of how broad the curriculum is and what access learners have to digital educational materials and tools.

Calculation method: Divide the number of schools with the relevant facilities by the total number of schools in a given year and multiply the result by 100.

Formula:

$$PEI = \frac{\text{Number of schools with electricity or internet for pedagogical purposes or computers for pedagogical purposes}}{\text{Total number of schools in year } t} \times 100$$

Where

PEI = Proportion of Educational Institutions with access to electricity or the internet for pedagogical purposes or computers for pedagogical purposes.

Data required

Source of data

Number of schools with relevant facility	EMIS – Ministry responsible for Education
Total number of schools	EMIS – Ministry responsible for Education

Type of disaggregation for the indicator

This indicator is to be disaggregated by types of infrastructure or materials, level and by urban/rural.

Interpretation: A higher percentage suggests that there is a genuine commitment to making schools more inclusive and accessible to learners with disabilities.

Quality standard: This measure is a composite indicator. In order to get the most meaning out of it, it is important to measure each facet separately i.e. adapted infrastructure/materials for students with disabilities. Counting ideally should be guided by the minimum standard in use in that country which dictate the ideal number of facilities per school or per child.

Limitation: As this is a very composite indicator, it will be difficult to interpret whether the facilities available are also adequate for the population of children.

Is the indicator to be piloted?

☒ Yes ☐ No

Methodology: Will the indicator be collected through a census or sample survey?

☒ Census survey ☐ Sample survey

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

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

Definition: The total number of new entrants in the last grade of primary education, lower secondary or upper secondary respectively regardless of age, but excluding repeaters expressed as percentage of the total population of the theoretical entrance age to the last grade of primary.

Purpose: Gross Intake Rate to Last Grade of Primary Education, Lower secondary or Upper secondary respectively is considered to be a measure of primary or lower or secondary completion in a country's education system.

Calculation method: Divide the number of new entrants in last grade of primary education, irrespective of age, by the population of the theoretical entrance age to the last grade of primary, and multiply the result by 100.

Formula:

$$\text{GIRLG}^t = \frac{\text{Total number of new entrants in the last grade of primary education (enrolments minus repeaters), in school-year } t}{\text{Population of the theoretical entrance-age to last grade of primary, in school-year } t} \times 100$$

Where

GIRLG = Gross intake ratio to last grade

Data required**Source of data**

Entrants in that grade excluding repeaters	EMIS – Ministry responsible for Education
Population data	NSO/CSO

Type of disaggregation for the indicator: This indicator can be disaggregated by level, gender, Urban/Rural and administrative level.

Interpretation: A high gross intake rate indicates a high degree of coverage, whether the pupils belong to the population of official graduation age or not. Care should be taken when comparing cross-cutting results since the duration of education levels varies from country to country.

Quality standard: Data on population used in deriving this indicator should refer strictly to the official/typical graduation age.

Limitation: The Gross Intake Ratio could be over-estimated due to the inclusion of over-aged and under-aged pupils because of early or late entrants. However, this problem will, in most cases cancel out over time.

Is the indicator to be piloted?☐

Yes

☒

No

Methodology: Will the indicator be collected through a census or sample survey?

☒

Census survey

☐

Sample survey

4.2 Existence of a National Qualifications Framework

Definition: A structure which allows Technical and Vocational Education and Training and Academic certifications to be significantly broadened, harmonized in line with industry requirements, unified and streamlined.

Purpose: This indicator gives an indication of whether a country can catalogue the skills that are being produced and whether these skills can easily be compared across institutions and countries. A National Qualifications Framework which is aligned to a Regional Qualifications Framework presents opportunities for regional integration.

Calculation method: Refer to Continental Strategy for Technical and Vocational Education and Training (TVET) to foster Youth Employment Annex 1 TVET Monitoring Tool indicator 12.

Data required

Source of data

National Qualifications Framework	Policy unit – Ministry responsible for Education/Training/Industry
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Type of disaggregation for the indicator: This indicator can be disaggregated by Lower Secondary, Upper Secondary and Tertiary Education.

Quality standard: See quality standards for the underlying indicators

Limitation: The indicator does not tell us about how whether the National Qualifications Framework is in use.

Is the indicator to be piloted?

☐ Yes ☒ No

Methodology: Will the indicator be collected through a census or sample survey?

☒ Census survey ☐ Sample survey

General Remarks: This indicator is collected for Lower Secondary Education going upwards as this is the point at which students begin to exit formal education in search of employment.

4.3 Membership in the Network of African Learning Assessments

Definition: The Network of African Learning Assessments (NALA) supports country level work on learning assessment and the use of assessment data to improve learning.

Purpose: This indicator indicates whether a country is part of a system which promotes the use of a set of criteria and measures for advocating best practice and benchmarking countries capabilities in being able to produce relevant, accurate, timely and comprehensive education Learning Assessment results and information. Such information can help a country determine whether it is meeting its learning outcomes targets.

Calculation method: Yes or No question

Data required

Source of data

Membership in the Network of African Learning Assessments	Curriculum Development Unit - Ministry responsible for Education
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Limitation: The indicator assumes that a 'Yes' value means that the member country participates in all the relevant capacity building activities undertaken by the NALA and that this is subsequently cascaded down to teachers and learners for better outcomes which might not necessarily be the case.

Is the indicator to be piloted?

☒ Yes ☐ No

Methodology: Will the indicator be collected through a census or sample survey?

☒ Census survey ☐ Sample survey

4.4 Percentage Distribution of Tertiary Graduates by field of study³

Definition: The proportion of graduates in higher and tertiary education in field of study expressed as a percentage of total graduates at that level.

Purpose: To determine the degree to which a country is able to develop sufficient skilled human resources to compete in the global economy.

Calculation method: Divide the number of students studying in each field of study in higher and tertiary education by the total number of students in higher and tertiary education.

Formula:

$$PDG = \frac{\text{number of graduates in higher and tertiary education in field of study}}{\text{Total number of graduates in higher and tertiary education}} \times 100$$

Where

PDG^t = Percentage Distribution of Graduates in year t

Data required

Source of data

Number of graduates in field of study from higher and tertiary education	EMIS
Total number of graduates in higher and tertiary education	EMIS

Type of disaggregation for the indicator: By gender, field of study, type of institution.

Interpretation: Countries with high numbers of graduates in particular fields (e.g. Science, Engineering, and Technology) are associated with having high growth potential in international markets. It also provides information for Labour Market Information Systems.

Quality standard: This indicator needs to include graduates from all higher and tertiary institutions including those from Technical Vocational Education and Training institutions.

Limitation: The indicator does not tell us about the quality of the graduates and their marketability in the world economy.

Is the indicator to be piloted?

☐

Yes

☒

No

³ Refer to annex on fields of study and their subsets.

Methodology: Will the indicator be collected through a census or sample survey?

☒

Census survey

☐

Sample survey

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 sex⁴

Definition: A measure of how many children or young children have achieved a minimum proficiency level in certain subjects. The Minimum proficiency level is the benchmark of basic knowledge in a domain.

Purpose: The indicator is a direct measure of the learning outcomes achieved in the subject areas being assessed at the relevant stages of education.

Calculation method: Divide the number of children and/or young people at the relevant stage of education achieving or exceeding a pre-defined proficiency level in a given subject by the number of children and/or young people in that stage of education.

Formula:

$$PL^t = \frac{\text{Number of students in a learning assessment at stage of education in a subject in year } t \text{ achieving the fixed level of proficiency}}{\text{Number of students at stage of education in year } t} \times 100$$

Where

PL^t = Performance above minimum level in year t

Data required

Source of data

Performance level data	National and Cross-national assessments
Enrolment data	EMIS

Type of disaggregation for the indicator: By age or age-group of students, sex, location, socio-economic status, migrant status and ethnicity.

⁴ Indicator parameters currently being developed further. Refer to <http://uis.unesco.org/sites/default/files/documents/sdg4-metadata-global-thematic-indicators.pdf>

Interpretation: This indicator is a measure of the quality of teaching and learning in specific subjects and can be used for cross national comparability.

(a) Below minimum is the proportion or percentage of students who do not achieve a minimum proficiency level as established by countries according to the globally-defined minimum competencies.

(b) At or above minimum is the proportion or percentage of students who have achieved at least the minimum proficiency level as defined in the assessment. Due to heterogeneity of performance levels set by national and cross-national assessments, these performance levels will be mapped to the globally-defined minimum performance levels. Once the performance levels are mapped, the global education community will be able to identify for each country the proportion or percentage of children who achieved at least minimum proficiency levels.

Quality standard: Results are comparable for countries which participated in the same cross-national learning assessments.

Limitation: Results are not comparable across different cross-national learning assessments. Assessments are typically administered within school systems, which are usually referred as school-based learning assessments. The current indicators cover only those in school. The proportion of in-school target populations varies from country to country due to differences in out-of-school children and youth populations in each country. Assessing competencies of children and young people who are out-of-school would require household-based surveys. Given that Assessments are usually not conducted in or on the Mother Tongue, some poor scores can end up being a misleading reflection of proficiency.

Is the indicator to be piloted?

☐

Yes

☒

No

Methodology: Will the indicator be collected through a census or sample survey?

☒

Census survey

☒

Sample survey⁵

⁵ Data for out-of-school children or young people will need to be collected using sample surveys

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

Definition: A measure of how many youth (aged 15-35 years) have achieved a minimum proficiency level in literacy and numeracy. The fixed level of proficiency is the benchmark of basic knowledge in a domain (literacy or numeracy) measured through learning assessments.

Purpose: The indicator is a direct measure of the skill levels of youth in the two areas: literacy and numeracy.

Calculation method: Divide the number of youth at the relevant stage of education achieving or exceeding a pre-defined proficiency level in a given subject by the number of children and/or young people in that stage of education.

Formula:

$$PFL = \frac{\text{Percentage of students in a learning assessment at stage of education in a subject in year } t \text{ achieving the fixed level of proficiency}}{\text{Percentage of students at stage of education in year } t} \times 100$$

Where

PFL^t = Proficiency at fixed level in year t

Data required

Source of data

Performance level data	National and Cross-national assessments
Enrolment data	EMIS

Type of disaggregation for the indicator: By age or age-group of students, sex, location, socio-economic status, and type of skill.

Interpretation: There is only one threshold that divides youth into below minimum or at or above minimum proficiency levels.

(a) Below minimum level is the proportion or percentage of youth who have not achieved the minimum proficiency level as established by countries according to the globally defined minimum competencies.

(b) At or above minimum level is the proportion or percentage of youth who have achieved at least the minimum proficiency level. Due to heterogeneity of performance levels set by national and cross-national assessments, these performance levels will have to be mapped to the globally-defined minimum proficiency levels. Once the performance levels are mapped, the global education community will be able to identify for each country the proportion or percentage of youth who achieved at least minimum proficiency level.

Quality standard: Results are comparable for countries which participated in the same cross-national learning assessments.

Limitation: The measurement of youth skills requires some form of direct assessment.

Is the indicator to be piloted?

☐

Yes

☒

No

Methodology: Will the indicator be collected through a census or sample survey?

☒

Census survey

☒

Sample survey⁶

SO 5: Accelerate processes leading to gender parity and equity

5.1 Gender Parity Index for Gross Enrolment Ratio

Definition: The Gross Enrolment Rate of Girls relative to that of boys, expressed as a value of one when there is parity between the sexes.

Purpose: The GPI measures progress towards gender parity in education participation and/or learning opportunities available for women in relation to those available to men. It also reflects the level of women's empowerment in society.

Calculation method: Divide the female value of a given indicator by that of the male.

Formula:

$$GPI_i^t = \frac{\text{Female value of given indicator}}{\text{Male value of given indicator}}$$

Where

GPI_i^t = Gender Parity Index of a given indicator i , in year t

⁶ Data for out-of-school children or young people will need to be collected using sample surveys

Data required**Source of data**

Male and female values of a given indicator	EMIS - Ministry of Education
---	------------------------------

Type of disaggregation for the indicator: This indicator can be disaggregated by urban and rural, geographic sub-division and level of education. The focus is on Secondary and Tertiary education in the post 2015 era.

Interpretation: A value of one indicates a high degree of gender parity or balance. Less than one indicates insufficient girls in school. Greater than one indicates insufficient boys in school.

Quality standard: This indicator uses Gross Enrolment Rates and should refer to quality standards for the underlying indicators i.e. GER.

Limitation: Gender Parity Indicator is a macro indicator that lumps pupils by gender and ignores the distribution by school, age or grade.

Is the indicator to be piloted?☐

Yes

☒

No

Methodology: Will the indicator be collected through a census or sample survey?

☒

Census survey

☐

Sample survey

General Remarks: This indicator is based on other indicators. When the data source indicator is not available, this indicator cannot be computed.

5.2 Percentage of Female Teachers⁷

Definition: The number of female teachers at a given level of education expressed as a percentage of total number of teachers (male and female) at the same level in a given school-year. Teachers are defined as persons whose professional activity involves the transmitting of knowledge, attitudes and skills that are stipulated in a formal curriculum programme to students enrolled in a formal educational institution.

Purpose: It indicates the gender composition of the teaching force and helps in assessing the need for opportunities and/or incentives to encourage women to participate in teaching at a given level of education.

⁷ The term 'Teacher' refers to all educators at all levels including lecturers.

Calculation method: Divide number of female teachers for a given level of education (e.g. Primary) by the total number of teachers in that level in a given year multiplied by 100.

Formula:

$$PFT = \frac{\text{Number of female teachers}}{\text{Total number of teachers}} \times 100$$

Where

PFT = Percentage female teachers in educational level in a given school year

Data required

Source of data

Number of female teachers	EMIS – Ministry responsible for Education
Total number of teachers	EMIS – Ministry responsible for Education

Type of disaggregation for the indicator: This indicator is to be disaggregated by geographical location (region, urban/rural), public and private and level of education.

Interpretation: Percentage of female teachers approaching 50% indicates gender parity in the composition of the teaching force. A value greater than 50% reveals more opportunities and/or preferences for women to participate in teaching activities at a specific level, grade or programme of education. Equitable utilization of female teachers is associated with less sexual harassment of female students by male teachers and students. Higher proportions of female teachers can also be interpreted as the feminization of the profession, and there is evidence to suggest that this has contributed to the underperformance of boys as well as the lowering of salaries for teachers.

Quality standard: When this indicator is calculated by level of education, care must be taken to avoid counting the same teacher twice as there are teachers who teach in more than one level of education.

Limitation: This indicator measures the level of gender representation in the teaching profession rather than the effectiveness and quality of teaching. The association with higher female enrolment is not yet statistically established.

Is the indicator to be piloted?

☐

Yes

☒

No

Methodology: will the indicator be collected through a census or sample survey?

☒

Census survey

☐

Sample survey

5.3 Percentage of Female Head Teachers⁸

Definition: The number of female head teachers at a given level of education expressed as a percentage of total number of head teachers (male and female) at the same level in a given school-year. Head teachers are the most senior managers present in a school on a daily basis and their professional activity involves the overall management of the school.

Purpose: It indicates the gender composition of the teaching force at the most senior level.

Calculation method: Divide number of female head teachers for a given level of education (e.g. Primary) by the total number of head teachers in that level in a given year multiplied by 100.

Formula:

$$PFHT = \frac{\text{Number of female head teachers}}{\text{Total number of head teachers}} \times 100$$

Where

PHFT = Percentage female head teachers in educational level in a given school year

Data required

Source of data

Number of female head teachers	EMIS – Ministry responsible for Education
Total number of head teachers	EMIS – Ministry responsible for Education

Type of disaggregation for the indicator: This indicator is to be disaggregated by geographical location (region, urban/rural), public and private and level of education. The focus is on primary and secondary.

⁸ The term 'Teacher' here refers to educators at all levels

Interpretation: Percentage of female head teachers approaching 50% indicates gender parity in the composition of the teaching force at the senior level. A value greater than 50% reveals more opportunities and /or preferences for women to participate in teaching activities at this specific level. Female head teachers and supervisors are important to ensure that a gender perspective is fully incorporated in schools.

Quality standard: Having a high number of acting or temporary head teachers in a country can distort the overall figure.

Limitation: This indicator measures the level of gender representation in the school management profession rather than the effectiveness and quality of school systems. This is a process indicator and does not guarantee positive outcomes.

Is the indicator to be piloted?

☐ Yes ☒ No

Methodology: will the indicator be collected through a census or sample survey?

☒ Census survey ☐ Sample survey

5.4 Girls' dropout rate per reason of drop out

Definition: The number of girls who dropout at a given level of education expressed as a percentage of the total number of girls at the same level in a given school-year. Completion of girls in school is a good indicator of quality and retention.

Purpose: It indicates the gender composition of the dropout rate in a given level of education.

Calculation method: Divide number of female students who drop out for a given level of education (e.g. Primary, secondary, tertiary) in a given year by the total number of girls enrolled in that level in a given year multiplied by 100.

Formula:

$$PGDO = \frac{\text{Number of girls who drop out in a given level in year } t}{\text{Total number of girls enrolled in a given level in year } t} \times 100$$

Where

PGDO = Percentage of Girls who drop out

Data required**Source of data**

Number of girls who drop out by reason	EMIS – Ministry responsible for Education
Total number of girls enrolled	EMIS – Ministry responsible for Education

Type of disaggregation for the indicator: This indicator is to be disaggregated by reason of drop out, level of education and by geographical location (region, urban/rural), public and private. The focus is on primary, secondary, tertiary.

Interpretation: The main reasons of dropping out must be analysed. A value greater than 50% for a specific reason reveals the importance of that reason in the girls dropping out rate in that level of education. This information can be used by policy makers to create targeted responses to keep girls in school.

Quality standard: It is important to have reliable enrolment records at the lowest levels crossed checked against drop out survey data. To illustrate, some girls may change schools rather than drop out and it is important that this be verified.

Limitation: This indicator measures the rate of dropping out based on reasons rather than the overall rate. This is a process indicator and does not guarantee positive outcomes.

Is the indicator to be piloted?
☐

Yes

☒

No

Methodology: will the indicator be collected through a census or sample survey?

☒

Census survey

☐

Sample survey

5.5 Percentage of girls enrolled in STEM

Definition: The number of girls enrolled in STEM at a given level of education expressed as a percentage of total number of girls enrolled in STEM at the same level in a given year.

Purpose: It indicates the gender composition of the enrollment in STEM in a given level of education. Attracting girls to STEM is a good indicator to close the gender gap in STEM.

Calculation method: Divide number of female students enrolled in STEM for a given level of education (e.g. Primary, secondary, tertiary) by the total number of enrolled in that level in a given year multiplied by 100.

Formula:

$$PGES = \frac{\text{Number of girls who enrolled in STEM}}{\text{Total number of enrolled in STEM}} \times 100$$

Where

PGES = Percentage of Girls Enrolled in STEM

Data required

Source of data

Number of girls enrolled in STEM	EMIS – Ministry responsible for Education
Total number of enrolled in STEM	EMIS – Ministry responsible for Education

Type of disaggregation for the indicator: This indicator is to be disaggregated by level of education and by geographical location (region, urban/rural), public and private. The focus is on primary, secondary, tertiary.

Interpretation: The percentage shows the gap in STEM between girls and boys.

Quality standard: It is important to understand which subjects fall into the category of STEM. Reference can be made to the annex on fields of study and their subsets.

Limitation: While a good measure, enrolment does not tell us how many females eventually graduate in STEM. For this reason, the indicator must be paired with indicators measuring graduates in order to give a more holistic picture.

Is the indicator to be piloted?

☐

Yes

☒

No

Methodology: will the indicator be collected through a census or sample survey?

☒

Census survey

☐

Sample survey

SO 6: Launch comprehensive and effective literacy programmes across the continent to eradicate the scourge of illiteracy

6.1 Youth literacy rate

Definition: The number of people aged 15-35 years who can both read and write with understanding of simple statement on their everyday life, divided by the population in that age group. Generally 'literacy' also encompasses 'numeracy', the ability to make simple arithmetic calculations.

Purpose: To reflect recent outcomes of the basic education process. Its a summary measure of the effectiveness of the education system.

Calculation method: Divide the number of people aged 15 to 35 years who are literate by the total population in the same age group and multiply the result by 100.

Formula:

$$LIT_{15-24}^t = \frac{\text{Literate Population aged 15 – 24 years old}}{\text{Population aged 15 – 24 years old}} \times 100$$

Where

LIT_{15-24}^t = Literacy rate of persons aged 15-35 years old in year t

Data required

Source of data

Number of literates (or illiterates) aged 15- to 35-years-old	CSO/NSO
Population aged 15- to 35-years-old	CSO/NSO

Type of disaggregation for the indicator: (e.g. Gender, geography, level of education, race/ethnic group, public/private/, urban/rural)

Interpretation: A high literacy rate among the 15- to 35-year-olds suggests a high level of participation and retention in primary education, and its effectiveness in imparting the basic skills of reading and writing. Because persons belonging to this age group are entering adult life, monitoring their literacy levels is important with respect to national human resources policies, as well as for tracking and forecasting progress in adult literacy.

Quality standard: The rate cannot exceed 100%. It is useful to align measurements of literacy with the standard international definition given above and to administer literacy tests on a sample basis to verify and improve the quality of the statistics.

Limitation: It has been observed that some countries apply definitions and criteria for literacy which are different from the international standards defined above, or equate persons with no schooling to illiterates, or change definitions between censuses. Practices for identifying literates and illiterates during actual census enumeration may also vary, as well as errors in literacy self-declaration can affect the reliability of the statistics.

Is the indicator to be piloted?

☐

Yes

☒

No

Methodology: will the indicator be collected through a census or sample survey?

☒

Census survey

☐

Sample survey

General Remarks: This indicator must be obtained from CSO/NSO

6.2 Adult Literacy Rate

Definition: The percentage of population aged 15 years and over who can both read and write with understanding a short simple statement on his/her everyday life. Generally, 'literacy' also encompasses 'numeracy', the ability to make simple arithmetic calculations.

Purpose: Adult literacy rate shows the accumulated achievement of primary education and literacy programmes in imparting basic literacy skills to the population, thereby enabling them to apply such skills in daily life and to continue learning and communicating using the written word. Literacy represents a potential for further intellectual growth and contribution to economic-socio-cultural development of society.

Calculation method: Divide the number of literates by the corresponding age-group of population and multiply the result by 100.

Formula:

$$LIT_{15+}^t = \frac{\text{Adult literate population (15+)}}{\text{Adult population (15+)}} \times 100$$

Where

LIT_{15+}^t = Adult Literacy Rate (15+) in year t

Data required**Source of data**

Number of literate population 15 years and over	CSO/NSO
Total population 15 years and over	CSO/NSO

Type of disaggregation for the indicator: This indicator is to be disaggregated by gender, geographical location (urban/rural).

Interpretation: High literacy rate (or low illiteracy rate) indicates a wide coverage of the primary education system and/or literacy programs in that a large proportion of the population have acquired the ability of using the written word in daily life and to continue learning. It is common practice to present and analyze literacy rates together with the absolute number of adult illiterates as improvements in literacy rates may sometimes be accompanied by increases in the illiterate population due to the changing demographic structure.

Quality standard: It will be useful to align measurements of literacy with the standard international definition given above, and to administer literacy tests on a sample basis to verify and improve the quality of literacy statistics.

Limitation: It has been observed that some countries apply definitions and criteria for literacy that is different from the international standards above, or equate persons with no schooling to illiterates, or change definitions between censuses. Practices for identifying literates and illiterates during actual census enumeration may also vary, as well as errors in literacy self-declaration can affect the readability of literacy statistics

Is the indicator to be piloted?
☐

Yes

☒

No

Methodology: will the indicator be collected through a census or sample survey?

☒

Census survey

☐

Sample survey

General Remarks: This indicator must be obtained from CSO

6.3 Participants in literacy programmes as a percentage of non-literate population

Definition: Number of youth (aged 15-35 years) and adults (aged 15 years and older) participating in literacy programmes expressed as a percentage of the illiterate population of the same age.

Purpose: To show the level of participation of illiterate youth and adults in literacy programmes.

Calculation method: The indicator is calculated as the number of illiterate persons in the relevant age group participating in literacy programmes expressed as a percentage of the illiterate population of the same age.

Formula:

$$PRLP = \frac{\text{number of illiterate persons in the relevant age group participating in literacy programmes}}{\text{illiterate population of the same age}} \times 100$$

Where

*PRLP*¹ = Participation rate of the population in age group in literacy programmes in year

Data required

Source of data

Number of participants in the relevant age group in literacy programmes	CSO/NSO
Illiterate population estimates for the same age groups.	CSO/NSO

Type of disaggregation for the indicator: This indicator is to be disaggregated by age, sex, location, and income (depending on the data source).

Interpretation: A high rate denotes a high degree of coverage of the illiterate population by the programmes designed to reach that specific group. The theoretical maximum value is 100%. Increasing trends can be considered as reflecting improved coverage by the literate programmes of their target population.

Quality standard: The indicator values must be analysed with caution and together with other indicators reflecting the literacy situation of the population because of its limitations. It will be useful to align measurements of literacy with the standard international definition given above, and to administer literacy tests on a sample basis to verify and improve the quality of literacy statistics.

Limitation: The degree of coverage of the illiterate population measured by this indicator might be underestimated because of the exclusion of illiterate population that have decided to attend primary education programmes instead of specifically-designed literacy programmes. When numerator and denominator are taken from household surveys, special attention should be given to the estimations' standard errors mainly in countries with very high levels of literacy where the sample sizes and design might not be appropriate for producing the indicator. When numerator and denominator are taken from different data sources (e.g. administrative data and household survey or population estimates), there will be possibilities of inconsistencies. Also refer to the limitations for indicators 6.1 and 6.2.

Is the indicator to be piloted?

☐ Yes ☒ No

Methodology: will the indicator be collected through a census or sample survey?

☒ Census survey ☒ Sample survey

General Remarks: This indicator must be obtained from CSO

SO 7: Strengthen the science and math curricula in youth training and disseminate scientific knowledge and culture in society

7.1 Percentage of teachers qualified to teach in Science or Mathematics according to national standards⁹

Definition: Percentage of teachers qualified to teach Science or Mathematics according to national standards is derived by expressing the number of teachers who are certified to have received the minimum organized initial professional teacher-training required for teaching Science or Mathematics at the relevant level of education, expressed as a percentage of the total number of teachers at that level.

Purpose: It provides an indication of the relative proportion of teachers that are sufficiently and officially qualified to teach Science or Mathematics at any given level of education

Calculation method: Divide total number of teachers who have professional teacher training in Science or Mathematics by the total number of teachers. Multiply the result by 100 to express as a percentage.

⁹ Refer to the definition and categories of these fields in annex

Formula:

$$PTQSM^t = \frac{\text{Number of certified teachers in Science or Mathematics}}{\text{Total number of teachers}} \times 100$$

Where

PTQSM^t = Percentage of teachers qualified to teach in Science or Mathematics in given year

Data required**Source of data**

Number certified teachers by level	EMIS - Ministry of Education (teacher profiles records)
Total number of teachers by level	EMIS - Ministry of Education

Type of disaggregation for the indicator: This indicator is to be disaggregated by gender, and by level of education. The focus here is on Secondary and Tertiary Education. At the Tertiary level, the label may read Lecturers.

Interpretation: A higher percentage of trained teachers in Science and Mathematics can lead to higher quality education in these subjects as it is assumed trained teachers can transmit knowledge more effectively. Higher numbers would also presumably result in greater numbers of students being able to take on and be taught these critical subject areas.

Quality standard: Clarity on the notion of trained teachers in Science and Mathematics is needed especially in cases where teachers have had short courses and in-service training that may or may not accrue to their qualifications.

Limitation: Definitional issues on what constitutes a teacher and what is an officially recognized pedagogically trained teacher. Also, the indicator restricts comparability across countries as national standards differ.

Is the indicator to be piloted?
☐

Yes

☒

No

Methodology: will the indicator be collected through a census or sample survey?

☒

Census survey

☐

Sample survey

General Remarks: Information on national qualification standards must be obtained from relevant department of the ministry.

SO 8: Expand TVET opportunities at both secondary and tertiary levels and strengthen 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

Definition: This indicator is the enrolment in Technical and Vocational Education and Training programmes as a percentage of total enrolment in Secondary and tertiary (see appendix one for ISCED levels and a definition of TVET).

Purpose: This indicator illustrates the proportion of students studying in the TVET sector compared to total enrolment.

Calculation method: Divide the total enrolment in Technical and Vocational Education and Training by the total number of enrolment in secondary and tertiary.

Formula:

$$PETVET = \frac{\text{Enrolment in TVET ISCED 2,3,4,5,6,7}}{\text{Total enrolment in ISCED 2,3,4,5,6,7}} \times 100$$

Where

PETVET = Percentage of enrolment in Technical & Vocational Education & Training

ISCED = International Standard Classification of Education

Data required

Source of data

Total in enrolment in Technical and Vocational Education and Training (ISCED 2,3,4,5,6,7)	EMIS – Ministry responsible for Education
Total enrolment in ISCED 2,3,4,5,6,7	EMIS – Ministries responsible for Education

Type of disaggregation for the indicator: Disaggregated by gender

Interpretation: A high percentage indicates mainstreaming and prioritising of TVET programmes as an alternative to the academic programmes typically found in the education system. It is important to track the participation of girls and young women in this field as an indicator of access to strategic job opportunities.

Quality standard: Countries must map their national understanding of technical vocational education and training to the definition provided by UIS for cross country comparability.

Limitation: The indicator does not provide insight into non-formal TVET which in some countries can significantly exceed that of the formal sector.

Is the indicator to be piloted?

☒ Yes ☐ No

Methodology: will the indicator be collected through a census or sample survey?

☒ Census survey ☐ Sample survey

8.2 Percentage of TVET Graduates

Definition: This is the number of graduates in Technical and Vocational Education and Training in secondary and tertiary as a percentage of total graduates graduating from secondary and tertiary level.

Purpose: To assess the number of graduates in Technical and Vocational training being produced relative to other graduates from the same level of education.

Calculation method: Divide total number of TVET graduates by the total number of graduate. Multiply the result by 100 to express as a percentage.

Formula:

$$PG_t = \frac{\text{Number of graduates in TVET in year } t}{\text{Total number of graduates in year } t} \times 100$$

Where

PG_t = Percentage of graduates in a given year

Data required

Source of data

Number of TVET graduates from secondary And tertiary	EMIS – Ministry responsible for Education
Number of total graduates from secondary and tertiary	EMIS – Ministry responsible for Education

Type of disaggregation for the indicator: This indicator is to be disaggregated by gender and field (i) primary sector, consisting of agriculture, (ii) secondary sector, formed by industry and (iii) the tertiary sector, incorporating all other activities that did not fit in the first two sectors.

Interpretation: Tracking TVET graduate outcomes relative to the mainstream production of graduates from secondary and tertiary education levels gives insight into the supply of potentially skilled workers and artisans – long recognized as a strategic area to boost a country’s employment and economic growth. It’s particularly pertinent to comment on the achievements of female graduates in this regard, as they provide a barometer of how successful TVET has become recognized as a critical to the labour market.

Is the indicator to be piloted?

☒ Yes ☐ No

Methodology: will the indicator be collected through a census or sample survey?

☐ Census survey ☒ Sample survey

8.3 TVET Graduates Labour Force Participation Rate

Definition: Measure of the proportion of TVET graduates (15-35 years old) that engages actively in the labor market, by either working or looking for work.

Purpose: The TVET graduate labor force participation rate plays a central role in the study of the factors that determine the size and composition of a country’s human resources and in making projections of the future supply of labor. It provides an indication of the size of the supply of labor available to engage in the production of goods or services, relative to the population of working age, relative to the whole population of TVET graduate. The breakdown by gender and age group gives a profile of the distribution of the economically active population in a country.

Calculation method: Divide total number of TVET graduates (15-35 year old) employed and unemployed by the total number of TVET graduate in the country. Multiply the result by 100 to express as a percentage.

Formula:

$$TGLFP = \frac{\text{Number of unemployed TVET graduates} + \text{Number of employed TVET graduates year } t}{\text{Adult Population in year } t} \times 100$$

Where

TGLFP = TVET Graduates Labour Force Participation Rate in a given year

Data required**Source of data**

Number of TVET graduates employed	Household survey or Labor force survey
Number of TVET graduates unemployed	Household survey or Labor force survey
Adult Population	NSO

Type of disaggregation for the indicator: This indicator is to be disaggregated by gender.

Interpretation: A high percentage indicates that a high number of TVET graduates are available to engage in the production of goods or services.

Limitation: Supply of TVET opportunities may not match demand and in such an instance, the indicator will not be very meaningful.

Is the indicator to be piloted?☐

Yes

☒

No

Methodology: will the indicator be collected through a census or sample survey?

☐

Census survey

☒

Sample survey

8.4 Percentage of Students who Meet National Requirements for Academic programs in secondary or tertiary and enrol for TVET

Definition: This is the number of graduates from either primary or secondary level in general education who qualify to enter the next level of academic study and enrol in TVET.

Purpose: To assess the number of graduates who enrol in TVET programmes.

Calculation method: Divide total number of students who have completed primary or lower secondary or upper secondary and are eligible for entry into academic programs but enroll for TVET by the total number of students in TVET at that level. Multiply the result by 100 to express as a percentage.

Formula:

$$PSMNRU = \frac{\text{Number of students qualifying for academic programmes from primary or secondary respectively but enrolled in TVET in year } t}{\text{Total number of students enrolled in TVET from primary or secondary respectively in the following year}} \times 100$$

Where

$PSMNRU^t$ = % enrolment in TVET for students meeting academic entry requirements in year t

Data required

Source of data

Number of qualified Primary school graduates to pursue academic studies and enroll in TVET	H/EMIS
Number of students enroll in TVET from primary or secondary respectively	H/EMIS

Type of disaggregation for the indicator: This indicator is to be disaggregated by gender.

Interpretation: This indicator can be used to reflect on status differentiation between different tracks (Academic and Vocational). A significant proportion of students entering into TVET suggests that it is a sought after track.

Limitation: The supply in the TVET system (lower capacity) can lead to a small value to this indicator.

Is the indicator to be piloted?

☒

Yes

☐

No

Methodology: will the indicator be collected through a census or sample survey?

☐

Census survey

☒

Sample survey

8.5 State of National TVET policies and governance structures

Refer to the Continental Strategy for Technical and Vocational Education and Training (TVET) to foster youth employment Annex 1 TVET Monitoring Tool indicator 1

8.6 Percentage of TVET Graduates who have participated in Apprenticeships

Definition: This is the number of TVET graduates who have taken part in an apprenticeship related to their field of study.

Purpose: To assess the number of TVET graduates who have on the job experience.

Calculation method: Divide total number of TVET graduates who have participated in an apprenticeship over the total number of TVET. Multiply the result by 100 to express as a percentage.

Formula:

$$PTGA = \frac{\text{Number of TVET graduates who have participated in an apprenticeship in year } t}{\text{Number of TVET graduates in year } t} \times 100$$

Where

PTGA = % enrolment in TVET for students meeting university entry in year t

Data required

Source of data

Number of TVET Graduates who have participated in an apprenticeship	H/EMIS
Number of TVET Graduates	H/EMIS

Type of disaggregation for the indicator: This indicator is to be disaggregated by gender.

Interpretation: A high percentage indicates that a significant number of TVET graduates have received some form of on the job training. Such training is associated with a higher degree of competence in the said field.

Limitation: A low supply of apprenticeship opportunities within the TVET system (lower capacity) can lead to a small value to this indicator.

Is the indicator to be piloted?

☒ Yes ☐ No

Methodology: will the indicator be collected through a census or sample survey?

☐ Census survey ☒ Sample survey

SO 9: Revitalize and expand tertiary education, research and innovation to address continental challenges and promote global competitiveness

9.1 Number of earned doctoral degrees by field

Definition: The number of students who have completed a doctoral degree via the academic route and in particular field. These distinguish themselves from honorary Doctors who are conferred with these degrees on the basis of their achievements.

Purpose: To measure the output of the tertiary sector at the highest level. Doctorate holders contribute new knowledge to their specific fields of study. This is a measure of the availability of Human Resources to teach and supervise research.

Calculation method: Count the number of earned Doctoral degrees conferred within a particular country in a particular field and by year.

Data required

Source of data

Total number of earned doctoral degrees by given year	HEMIS- Ministry responsible for Education
---	---

Type of disaggregation for the indicator: This indicator is to be disaggregated by field, age and gender.

Interpretation: In addition to reflecting a country's human capital resources available, it can also give an indication of research potential.

Quality standard: The Universities conferring these degrees must be appropriately accredited by the nationally recognized authority.

Limitation: Many students earn doctoral degrees outside of their countries of origin. This information is not always submitted or collected by the Ministry responsible for Education.

Is the indicator to be piloted?

☒ Yes ☐ No

Methodology: will the indicator be collected through a census or sample survey?

☒ Census survey ☐ Sample survey

9.2 Expenditure on Research and Development as a Percentage of GDP

Definition: Expenditures for research and development are current and capital expenditures (both public and private) on creative work undertaken systematically to increase knowledge, including knowledge of humanity, culture, and society, and the use of knowledge for new applications. R&D covers basic research, applied research, and experimental development.

Purpose: This ratio provides an indication of the level of financial resources devoted to R&D in terms of the share of the GDP.

Calculation method: The indicator is calculated by dividing gross domestic expenditure on R&D (excluding salaries of permanent staff) by GDP and expressed as a percentage. Both data on R&D expenditure and GDP can be expressed in current values and in the national currency.

Formula:

$$ERD = \frac{\text{Gross Domestic Expenditure on R\&D}}{\text{Gross Domestic Product}} \times 100$$

Where:

ERDPGDP = Expenditure on Research and Development as a Percentage of GDP

Data required

Source of data

Gross domestic expenditure on R&D	HEMIS/NSO
Gross Domestic Product	MOF/NSO

Type of disaggregation for the indicator: This indicator can be disaggregated by sector.

Interpretation: This indicator is required to assess the level and trends of R&D expenditure in relation to GDP, at a given point of time. Adequate R&D funding that is commensurate with economic growth and national income is necessary for ensuring development in the Science and Technology sector.

Quality standard: This information is best collected via survey.

Limitation: There are several weaknesses of measuring only expenditure. Expenditure does not reflect the potential of R&D in a given country, but only the effort conducted in a given year. A significant part of expenditure corresponds usually to the ups and downs of the economy, and in particular the public sector in developing countries. Data on expenditure can also be of poorer quality, since accounting systems are usually not well set up to reflect R&D. Also, inflation and the existence of vast informal sectors make the analysis of these figures more difficult.

Is the indicator to be piloted?

☐ Yes ☒ No

Methodology: will the indicator be collected through a census or sample survey?

☐ Census survey ☒ Sample survey

9.3 Enrolment of Students in Higher and Tertiary Education per 100,000 Inhabitants

Definition: The number of students enrolled in higher education institutions per 100,000 population. Please refer to the definition of Higher and Tertiary education in appendix one.

Purpose: To measure the level of access the population has to higher and tertiary education.

Calculation method: Divide full time enrolment in higher and tertiary education institutions by the total population and multiply by 100,000. Repeat the exercise separately for male and females.

Formula:

$$SPH_{tp} = \frac{\text{Total enrolment in higher and tertiary education}}{\text{Total Population}} \times 100000$$

Where:

SPH_{tp} = students enrolled in higher education institutions per 100,000 population in a given year

Data required

Source of data

Total number of full time students enrolled in higher and tertiary education by given year	HEMIS- Ministry of Education (Embassies abroad etc)/NSO
Total population by a given year	CSO/NSO

Type of disaggregation for the indicator: This indicator is to be disaggregated by age and gender.

Interpretation: This reflects a country's human capital resources available. The higher the figure the more a country is expected to have improved economic growth.

Quality standard: Population estimates differ from different sources. A country must have confidence in the population statistics used.

Limitation: Ideally the enrolment should be by full time equivalence which takes into consideration part-time students but most African Ministries don't collect this data. This limits the accuracy of the statistic.

Is the indicator to be piloted?

☐

Yes

☒

No

Methodology: will the indicator be collected through a census or sample survey?

☒

Census survey

☐

Sample survey

9.4 Inbound Mobility Ratio

Definition: The number of students from abroad studying in a given country, as a percentage of the total tertiary enrolment in that country.

Purpose: To gauge the extent of the number of students studying in the country from abroad. This may give an indication of the value attached to the quality of a country's tertiary institutions by other countries. It also gives an indication of mobility and integration.

Calculation method: Divide the number of students studying in the country from other countries by the total number of students in the country.

Formula:

IMR

$$= \frac{\text{Total number of students from other countries studying in higher \& tertiary education}}{\text{Total number of students in higher \& tertiary education in the country}} \times 100$$

Where:

IMR = Inbound Mobility Ratio

Data required

Source of data

Students from other countries studying in higher and tertiary education in the country	EMIS
Total number of students in higher and tertiary education	EMIS

Type of disaggregation for the indicator: This indicator is to be disaggregated by country and region.

Interpretation: A higher rate indicates a high inflow of students from abroad and implicitly recognition of the quality the country's tertiary institutions.

Quality standard: It is useful to collect the source information through the annual census questionnaire.

Limitation: This indicator may not be very meaningful in countries with large populations of students in the higher education sector.

Is the indicator to be piloted?

☐ Yes ☒ No

Methodology: will the indicator be collected through a census or sample survey?

☒ Census survey ☐ Sample survey

9.5 Outbound Mobility Ratio

Definition: The number of students in higher and tertiary education from any given country studying abroad as a percentage of the total tertiary enrolment in that country.

Purpose: To gauge the extent of student outflow to other countries. It may indicate the perceived gaps and weaknesses of a country's tertiary sector.

Calculation method: Divide the number of students studying in higher and tertiary education abroad by the total number of students enrolled in higher and tertiary education in the country.

Formula:

$$OMR = \frac{\text{Total number of students in higher \& tertiary education studying abroad}}{\text{Total number of students in higher \& tertiary education in the country}} \times 100$$

Where:

OMR = Outbound Mobility Ratio

Data required

Source of data

Number of students in higher and tertiary education studying abroad	EMIS
Total number of students in higher and tertiary education	EMIS

Type of disaggregation for the indicator: This indicator is to be disaggregated by country and region.

Interpretation: A high rate of Outbound Mobility may indicate the perceived insufficiency or lack of available programmes offered by higher and tertiary institutions in the country

Quality standard: It is useful to collect the source information through the annual census questionnaire.

Is the indicator to be piloted?

☐ Yes ☒ No

Methodology: will the indicator be collected through a census or sample survey?

☒ Census survey ☐ Sample survey

9.6 The quality of graduates and their employability in the world economy

Definition: How well graduates from tertiary institutions fit into the world of work. This is both in terms of hard skills-technical knowledge and soft skills-problem solving, team building etc.

Purpose: To determine whether institutions of tertiary are sufficiently preparing students for the world of work and whether curriculum development matches industry needs.

Calculation method: Survey with qualitative data collection.

Data required

Source of data

Location of graduate students	Ministry responsible for education/Alumni Associations
Opinions of industry	Ministry of Industry/Trade or NSO

Type of disaggregation for the indicator: This indicator can be disaggregated by gender, tertiary institution, and geography.

Interpretation: A favourable survey outcome will indicate that tertiary institutions are producing good graduates. It may also indicate a good working relationship between Academia and Industry.

Quality standard: The quality of the survey will determine the quality of the results.

Is the indicator to be piloted?

☒ Yes ☐ No

Methodology: will the indicator be collected through a census or sample survey?

☐ Census survey ☒ Sample survey

9.7 Conducive environment for research and innovation through the provision of adequate infrastructure and resources

Definition: A conducive environment for research and innovation refers to providing all the necessary tools as outlined within that field's Norms and Standards for teaching and learning or within the Ministry's policy on research and innovation. Ministries can also refer to international standards for guidance.

Purpose: To determine whether the basic minimum requirements are being met to allow the field to be taught and learnt adequately and whether the environment promotes good outputs and outcomes in these fields.

Calculation method: Compare Norms and Standards, Policy guidelines or international standards to what is obtaining on the ground through a survey.

Data required

Source of data

Equipment, tools, policies, resources for Research and Innovation	HEMIS
Norms and Standards, Policy Guidelines, International Standards	Policy Unit – Ministry responsible for Education

Type of disaggregation for the indicator: This indicator is to be disaggregated by tertiary institution, geography and administrative level.

Interpretation: A favourable result is indicative of a conducive environment for research and innovation. Such a result should ideally precede better quality research and innovation in a country.

Quality standard: The quality of the survey conducted will determine the outcomes which will be used to label the environment conducive or otherwise. It is also important to have a good benchmark by which to measure the environment.

Limitation: This indicator is a proxy and assumes that if the necessary standards are in place, it should lead to better quality research and innovation. This is not always the case.

Is the indicator to be piloted?

☒ Yes ☐ No

Methodology: will the indicator be collected through a census or sample survey?

☐ Census survey ☒ Sample survey

9.8 Proportion of Learners enrolled in: a. Distance Education, b. Open Learning, c. E-Learning Programmes

Definition: The number of learners within a country who are registered in distance education programmes or an open learning programme or E-Learning programmes expressed as a percentage of all learners in higher and tertiary education.¹⁰

Purpose: The purpose of this indicator is to determine what proportion of students are learning in alternative education programmes. It also gives a measure of whether the country is making varied learning modalities available. This is an indication of access to higher and tertiary education.

Calculation method: Divide the number of students studying in a. Distance Education, b. Open Learning and c. E-Learning Programmes at the higher and tertiary education level by the total number of students enrolled in higher and tertiary education in the country.

Formula:

$$PL_{doe} = \frac{\text{Total enrolment in Distance Education or Open Learning or E-Learning programmes in year } t}{\text{Number of students in higher and tertiary in year } t} \times 100$$

Where:

PL_{doe} = Proportion of Learners enrolled in Distance Education or Open Learning or E-Learning Programme.

Data required

Source of data

Number of learners enrolled in Distance Education or Open Learning or E-Learning Programme.	HEMIS-Ministry responsible for Education/NSO
Number of Learners in Higher and Tertiary education	HEMIS- Ministry responsible for Education/NSO

¹⁰ Refer to glossary for definitions

Type of disaggregation for the indicator: This indicator may be disaggregated by gender.

Interpretation: A high proportion of students learning in alternative education programmes may be an indication of how open the education sector in that country may be allowing students who live in hard to reach places, opportunities for learning. It may also demonstrate that traditional learning opportunities are limited, forcing students into non-traditional learning tracks. Choosing these options may also be an indication of prohibitive costs in the formal sector.

Quality standard: Up to date and robust records of Enrolment in Distance Education, Open Learning and E-Learning Programmes must be kept in a central repository.

Limitation: The flexibility associated with non-traditional education programmes can mean that a significant number of students do not register their programmes with a central authority. Having knowledge of the proportion of students in such programmes does not tell us about the quality of learning taking place.

Is the indicator to be piloted?

☒ Yes ☐ No

Methodology: will the indicator be collected through a census or sample survey?

☒ Census survey ☐ Sample survey

SO 10: Promote peace education and conflict prevention and resolution at all levels 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;

Definition: Armed conflict situations include periods of war, internal displacement, and civil unrest. Continued education in such cases would require creating new arrangements where normal schooling is no longer possible or safeguarding the right to education despite these occurrences.

Purpose: The purpose of the indicator is to determine whether Governments are safeguarding the right of children and people everywhere to receive an education.

Calculation method: Yes/No question with proof submitted. Proof can come in the form of policies and policy guidelines as well as strategies such as school protection mechanisms.

Data required

Source of data

Policies, Policy guidelines, Strategies

Policy Unit-Ministry responsible for education,
Disaster Risk Reduction Unit/Civil Protection Unit

Type of disaggregation for the indicator: This indicator can be disaggregated by administrative level and geography.

Interpretation: The absence of such mitigatory strategies would seem to suggest that in periods of armed conflicts, children and people are likely to miss out on schooling.

Quality standard: The necessary authorities must be aware of these strategies so that they can take advantage of them. Likewise, children and learners also need to be aware of these strategies so that they can request them when the need arises.

Limitation: The existence of strategies does not guarantee that the necessary protection and continuation will obtain.

Is the indicator to be piloted?

☒

Yes

☐

No

Methodology: will the indicator be collected through a census or sample survey?

☒

Census survey

☐

Sample survey

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.

Definition: Psychosocial support is support which addresses the mental, emotional and social needs of its target audience. Disaster Risk Reduction is the preemptive actions taken to limit the impact of disasters on the target audience.

Purpose: The purpose of this indicator is to gauge how prepared the government is to limit damage and provide support to learners in the event of attacks on schools and school infrastructure.

Calculation method: Yes/No Question with proof provided

Data required

Source of data

Policies, policy guidelines, strategies on Psychosocial Support and Disaster Risk Reduction

Policy Unit-Ministry responsible for education, Disaster Risk Reduction Unit/Civil Protection Unit

Type of disaggregation for the indicator: This indicator can be disaggregated by administrative level and geography.

Interpretation: The existence of policies, policy guidelines and strategies gives a measure of the country's commitment to protecting learners and learning environments.

Quality standard: The description covers all levels of education. It is also important for these policies, policy guidelines and strategies to be housed centrally where several departments share responsibility for execution.

Limitation: The indicator is a proxy and does not guarantee that in periods of crisis, the necessary support as outlined by the various policies, policy guidelines and strategies will be provided.

Is the indicator to be piloted?

☒

Yes

☐

No

Methodology: will the indicator be collected through a census or sample survey?

☒

Census survey

☐

Sample survey

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

Definition: 21st Century life skills such as global citizenship education, media and information literacy and education for sustainable development form critical pedagogical support tools for peace education by expanding the world view of students, promoting constructive engagement and inter-cultural dialogue and building resilience to radicalization.

Purpose: The acquisition of soft skills is becoming more important in the global discourse. This indicator measures whether these skills are being embedded in the education system through various means.

Calculation method: Yes/No question on a matrix

Data required

Source of data

Curriculum samples, Teaching and Learning Materials, Test Marks and Policies on the aspects mentioned above	Curriculum Development Unit/EMIS
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Type of disaggregation for the indicator: This indicator can be disaggregated by level, administrative level and geography.

Interpretation: Survey outcomes which indicate a high degree of mainstreaming also suggest commitment on the part of Government to teaching and learning these soft skills.

Quality standard: Collecting this information would require an in depth revision of all teaching and learning materials in the education sector. A scale would also need to be developed to measure 'extent.'

Limitation: This indicator is not a guarantee that these skills are being taught or learnt. Furthermore, it is highly subjective and may lead to comparability challenges.

Is the indicator to be piloted?

☒ Yes ☐ No

Methodology: will the indicator be collected through a census or sample survey?

☒ Census survey ☐ Sample survey

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

11.1 Funds allocated to EMIS (a) are used specifically for EMIS activities and (b) absorption capacity is optimal

Definition: EMIS refers to a system for collection, processing, analysis, publication, dissemination and rendering of Information services for the Management of Educational resources and services.

Purpose: To assess if a country has committed resources towards using evidence based decision making practices for the education and training sector and whether these resources are actually being used for their intended purpose.

Calculation method: Review official government documentation.

Data required

Source of data

Government allocation by sector	Ministry of Finance
Government expenditure by sector	Ministry of Finance

Type of disaggregation for the indicator: This indicator can be disaggregated by Pre-primary, Primary and Secondary, type of institution (private/public) and by year of availability of data.

Interpretation: The use of EMIS funds specifically for EMIS activities indicates the degree of commitment to EMIS from the Government.

Quality standard: Comprehensive, timely and accurate data is the quality norm.

Limitation: Availability of data is not a real reflection of the functionality of the EMIS system. The figures are likely to be given as aggregate sums which will not show what the funds were spent on in EMIS.

Is the indicator to be piloted?

☒

Yes

☐

No

Methodology: will the indicator be collected through a census or sample survey?

☒

Census survey

☐

Sample survey

11.2 Your Government produces an Annual School Census Report: Last year available

Definition: The Annual School Census Report is the annual statistical digest produced by the Ministry of Education or the National Statistical Office detailing numbers of educational inputs and outputs such as students and teachers among others.

Purpose: The purpose of this indicator is to determine whether the MoE EMIS is functional to the point of being able to collect and collate important statistical data. It also is a measure of whether the EMIS produces documentation which can be made widely available for policy and decision makers.

Calculation method: Year of Annual School Census Report or N/A

Data required

Source of data

Annual School Census Report	EMIS-Ministry responsible for education
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Type of disaggregation for the indicator: By administrative level, e.g. district Provincial Annual School Census

Interpretation: A recently produced Annual School Census Report indicates capacity of the EMIS to produce statistical products. It also suggests that policy makers are using up to date data to make decisions.

Quality standard: The EMIS department must use employ the whole range of EMIS Norms and Standards to ensure good quality outputs.

Limitation: The production of an Annual School Census report does not automatically mean that the information found in the report is reliable and/or valid. Furthermore, the availability of a statistical digest of this nature is not a guarantee that it is being used by policy and decision makers.

Is the indicator to be piloted?

☒

Yes

☐

No

Methodology: will the indicator be collected through a census or sample survey?

☒

Census survey

☐

Sample survey

11.3 School Census Return Rate

Definition: The School census return rate is defined as the number of questionnaires completed and returned from education institutions expressed as a percentage of total number of institutions expected to return the questionnaires.

Purpose: This indicator provides an indication of the comprehensiveness and accuracy of the national school educational statistics. It is expected that Ministries collect near 100% of schools' questionnaires. On the whole, the percentage indicates how well the data collection system is working.

Calculation method: Divide number of schools who have sent in their census questionnaire for that year by the total number of schools registered on the national master list of schools for the year.

Formula:

$$SCRr = \frac{\text{Number of schools which returned the completed annual questionnaire}}{\text{Total number of schools registered on national masterlist of schools}}$$

Where:

SCRr = School Census Return Rate

Data required

Source of data

No of School questionnaire filled and returned	EMIS - Ministry of Education
No of schools by type (public and private) and by level registered in the current census year	EMIS - Ministry of Education

Type of disaggregation for the indicator: This indicator is to be disaggregated by type of school (public, private, formal and non-formal education) - and by level of education (pre-primary, primary, secondary)

Interpretation: The response rate indicates the degree of coverage of the schools census. This indicator can also be used also to indicate the level of effective EMIS management and follow up at different levels (districts, provinces, and central ministry). It also indicates the level of accuracy in the reported annual national statistics.

Quality standard: The accuracy of this indicator is dependent on Ministries having up to date master lists or directories of registered schools (public and private)

Limitation: Ministries must prepare and complete list of schools by level of education annually. Master lists not regularly updated will provide an incomplete picture of number of schools which will affect the calculation of the return rate.

Is the indicator to be piloted?

☐

Yes

☒

No

Methodology: Will the indicator be collected through a census or sample survey?

☒

Census survey

☐

Sample survey

General Remarks: This information is essential for estimating missing data. Hence, should be compiled before the annual statistical bulletin is produced.

11.4 Your Government Conducts EMIS Assessments: Last year conducted

Definition: An EMIS Assessment is a review of a country's Education Management Information System. Such a review may cover areas such as Policy and Legal Frameworks, Resource allocation and utilization, Statistical processes and Education Information Reporting.

Purpose: An EMIS Assessment is conducted in order to determine the state of an Education Management Information System and its products.

Calculation method: Year of last EMIS Assessment or N/A

Data required

Source of data

EMIS Assessment Report	EMIS-Ministry responsible for education
------------------------	---

Type of disaggregation for the indicator: This indicator can be disaggregated by administrative level.

Interpretation: A recently conducted EMIS Assessment should result in a score on the country's EMIS. The lower the score, the greater the likelihood of poorer quality EMIS outputs. An EMIS Assessment can also help to pinpoint problem areas within the EMIS.

Quality standard: A thorough understanding of what an EMIS Assessment is and how one should be conducted is required. Using established EMIS Assessment tools such as the African Union EMIS Norms and Standards Assessment Framework and the UNESCO Data Quality Assessment Framework is advisable.¹¹

Limitation: An EMIS Assessment can only be useful if the results of the EMIS Assessment are accepted by the country and relevant ministry.

Is the indicator to be piloted?

☒

Yes

☐

No

¹¹ AU EMIS Norms and Standards Assessment Frameworks exist for the EAC, ECOWAS and SADC regions. Countries can also consult the AU HRST and ADEA for support in conducting EMIS Assessments.

Methodology: will the indicator be collected through a census or sample survey?

☒

Census survey

☐

Sample survey

11.5 Education Sector Plan includes a chapter on EMIS

Definition: The Education Sector Plan is the overall education blueprint and notes what sectors of the education area the country plans to focus on.

Purpose: The purpose of this indicator is to determine whether EMIS has been given priority at the highest policy level. It also determines whether resources have been allocated to the EMIS sector.

Calculation method: Yes/No question

Data required

Source of data

Education Sector Plan	Policy Unit-Ministry responsible for Education
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Type of disaggregation for the indicator: This indicator can be disaggregated by administrative level.

Interpretation: What sectors are included in the plan gives an indication of the priorities of a nation. Ideally the plan should also include financial information on the allocation to EMIS. This information can help policy and decision makers to track progress against the allocated funding.

Quality standard: An EMIS Assessment can help the MoE to determine what its needs are and subsequently produce a budget and EMIS plan which is meaningful and relevant.

Limitation: The existence on an Education Sector Plan does not guarantee that the commitments outlined in it will be followed.

Is the indicator to be piloted?

☒

Yes

☐

No

Methodology: will the indicator be collected through a census or sample survey?

☒

Census survey

☐

Sample survey

11.6 EMIS Data Production Lag time (Timeliness)

Definition: Lag Time your Government produces an Annual School Census Report: Last academic year available taking the current year minus the last year data was published.

Purpose: This indicator measures the efficiency of the system in terms of capacity to timely collect and report Annual Education Statistics by EMIS in a given country.

Calculation method: The Year of Latest available yearbook minus the current year available yearbook

Data required

Source of data

Year of the Latest available Yearbook	EMIS
---------------------------------------	------

Interpretation: The lower the value, the more efficient the EMIS system.

Type of disaggregation for the indicator: This indicator can be disaggregated by Pre-primary, Primary and Secondary, type of institution (private/public) and by year of availability of data.

Limitation: Data could be collected and not analysed and reported

Is the indicator to be piloted?

☒ Yes ☐ No

Methodology: Will the indicator be collected through a census or sample survey?

☒ Census survey ☐ Sample survey

SO 12: Set up a coalition of stakeholders to facilitate and support activities resulting from the implementation of CESA 16-25

12.1 Existence of School Management Committee Policy

Definition: This indicator is defined as whether the country in question has a policy supporting local level education coordination body composed of various education stakeholders, most often the Government, school proprietors, and the local communities (parents).

Purpose: To determine whether the involvement of local level stakeholders in the management of schools has been institutionalized and whether they receive support from the Government.

Calculation method: The existence of legislation or a legal instrument indicating the inclusion of School Management Committees into policy. This is a Yes/No indicator.

Data required

Source of data

Documents on School Management Committees	Government policy document
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Type of disaggregation for the indicator: This is by Country level

Interpretation: A short description on the policy and how it is interpreted in schools and other education institutions can go some way towards understanding how the School Management Committees are expected to work.

Quality standard: The description covers all levels of education where the policy is enforced. It is also critical to give a clear explanation of what constitutes an officially recognized government policy document.

Limitation: It does not tell us of the challenges of implementation e.g. how many schools have school management committees and how effective these are. It also does not tell us the relationship between the operations of the School Management Committee and the targets of CESA 16-25 and/or SDG4.

Is the indicator to be piloted?

☒ Yes ☐ No

Methodology: will the indicator be collected through a census or sample survey?

☒ Census survey ☐ Sample survey

12.2 Existence of National Education Cluster

Definition: This indicator is defined as whether the country in question has a National multi-sectoral Education Cluster/forums whose membership is often composed of national level education stakeholders including CSO's, Teacher Unions and Development Partners and which is formed to coordinate education efforts that are being run in parallel with Government activities.

Purpose: To determine whether the involvement of Education Stakeholders is coordinated at the local level.

Calculation method: The existence of official National Education Cluster is recognized by the Government. This is a Yes/No indicator

Data required

Source of data

Documents on National Education Cluster	Ministry of Education Archives
---	--------------------------------

Type of disaggregation for the indicator: This is by Country level

Interpretation: The existence of a National Education Cluster can give an indication of whether education efforts are coordinated and whether there is a partnership in place for the achievement of quality and relevance in Education as well as CESA 16-25 and even SDG4.

Quality standard: The description covers all levels of education. It would also help to know what status the Government has given the National Education Cluster.

Limitation: It does not tell us of the challenges of implementation e.g. how well the National Education Cluster is working and whether the National Education Cluster is working towards the targets of quality and relevance in Education as well as CESA 16-25 and even SDG4.

Is the indicator to be piloted?

☒ Yes ☐ No

Methodology: will the indicator be collected through a census or sample survey?

☒ Census survey ☐ Sample survey

12.3 Does your Government provide financial or political support to the CESA Implementation cluster on Education Planning?

Definition: The CESA Implementation Cluster is an organ put in place by the African Union Commission to oversee the execution of the objectives of the Continental Education Strategy for Africa 2016-2025. Financial and political support can include attendance of cluster meetings, execution of CESA Education Planning directives or sponsorship of cluster objectives.

Purpose: The purpose of this indicator is to measure how many countries are supporting are supporting the CESA Education Planning Cluster and with what kind of support.

Calculation method: Indicate what type of support has been provided and provide proof.

Data required

Source of data

Proof of support	MoE-Finance Unit
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Interpretation: The type of support afforded can be used to track whether the objectives are likely to be met. Performance can also be matched to whether support is being received in a particular area or not and can help policy makers design targeted responses.

Quality standard: This indicator must be cross referenced with the agreed needs of the CESA Implementation Education Planning as per yearly Work Plans and Terms of Reference.

Is the indicator to be piloted?

☒ Yes ☐ No

Methodology: will the indicator be collected through a census or sample survey?

☒ Census survey ☐ Sample survey

12.4 Evidence of communications and advocacy for CESA objectives at country level

Definition: The Continental Education Strategy for Africa 16-25 is the current Continental Education Framework. It will run from 2016 to 2025 and outlines the Continent's vision and education objectives. This indicator refers to the national level initiatives in place in support of CESA objectives.

Purpose: The purpose of this indicator is to measure how many countries are using communications and advocacy to support CESA objectives.

Calculation method: Indicate communications or advocacy support and provide proof.

Data required**Source of data**

Communications or advocacy for CESA objectives

MoE-Policy Unit

Interpretation: Country level communications and advocacy support can build social capital for CESA at grassroots level. This can make the execution of its objectives easier.

Is the indicator to be piloted?☒

Yes

☐

No

Methodology: will the indicator be collected through a census or sample survey?

☒

Census survey

☐

Sample survey

ADDITIONAL INDICATORS

Agenda 2063 Aspiration 7: Africa with a strong cultural identity, common heritage, values and ethics

A.1 Existence of African Language Policy

Definition: An African language is an indigenous or vernacular language spoken by a given African population. There is a high linguistic diversity in Africa as it is estimated that languages spoken in Africa range from 800 to just above 2000. This language would have originated in Africa and have its own recognized African culture. It includes languages such as Afrikaans and Creole (as spoken in Mauritius, Seychelles and other places).

Purpose: To promote the use of local languages and their associated cultures primarily and secondarily to ensure that higher levels of literacy and numeracy are obtained as children learn more fluently in their mother tongues.

Calculation method: The existence of legislation or a legal instrument indicating the promotion of indigenous African languages as the medium of instruction in schools and other education institutions.

Data required**Source of data**

Documents on African language policy

Government policy document

Type of disaggregation for the indicator: This is by Country level

Interpretation: A short description on the policy and how it is interpreted in schools and other education institutions. Identification of different forms of official recognition and promotion of use of the indigenous languages e.g. through media will indicate the priority to which government gives its local language

Quality standard: The description covers all levels of education where the policy is enforced. It is also critical to give a clear explanation of what constitutes an officially recognized indigenous African language nationally.

Limitation: It does not tell us of the challenges of implementation e.g. where there are insufficient children speaking a vernacular language in a school to warrant a full time vernacular teacher. It also does not tell us about the existence of other indigenous languages which lack an official status.

Is the indicator to be piloted?

☒ Yes ☐ No

Methodology: will the indicator be collected through a census or sample survey?

☒ Census survey ☐ Sample survey

A.2 Percentage of pupils being taught using an African language as a medium of instruction

Definition: The percentage of pupils being taught in their African mother tongues as a medium of instruction in education institutions in a given level of education and a year. This is limited to intentional, systematic use of the mother tongue as the medium of instruction supported by teacher training and pedagogic materials.

Calculation method: Divide number of learners being taught in their mother African tongues for a given level of education and a given year by the total enrolment in that level in a given year multiplied by 100. Do not count learners who are mother tongue speakers in the colonial languages.

Formula:

$$PUAL_{ht} = \frac{\text{Number of learners taught in mother language}}{\text{Total enrolment}} \times 100$$

Where

$PUAL_{ht}$ = Percentage use of African Language as a medium of instruction for year t and level h

Data required**Source of Data**

Total enrolment by level of education	EMIS
Number of learners being taught in their mother tongue	EMIS

Type of disaggregation for the indicator: This indicator is to be disaggregated by level of education (preprimary, primary and secondary) and where possible by grade.

Interpretation: The medium of instruction in mother tongue in schools is a controversial issue as parents want their children to also master fluency in internationally recognized languages such as English, French, Arabic but research demonstrates that it is important that children are introduced to numeracy and literacy in their mother tongue for improved learning outcomes in the long term.

Quality standard: The recommendation is that the early grades are taught in mother-tongue but the variations on which grade children make the shift into non-mother tongue instruction compromises cross country comparisons. Hence it's important that the grade at which this occurs is provided.

Limitation: There is a difference between policy and practice and in schools where teachers lack skills in non-mother tongue languages, mother tongue instruction may continue beyond the official grade. This indicator does not tell us about the other indigenous languages in the country that are not officially recognized. It also does not tell us the challenge of implementing such policy e.g. where there are insufficient children speaking a vernacular language in a school to warrant a full time vernacular teacher. Further the indicator is not measured by observation, but inferred from the number of pupils who attend schools that are recognized mother tongue medium schools. The two ways of measurement would give you very different results.

Is the indicator to be piloted?
☒

Yes

☐

No

Methodology: will the indicator be collected through a census or sample survey?

☒

Census survey

☐

Sample survey

General Remarks: Countries need to include information on the provision of mother tongue instruction in their school census questionnaires if it is not already collected

A.3 Percentage of Learners learning an African language as a subject

Definition: The percentage enrolment of learners taking an indigenous African language(s) as a curriculum subject at secondary and tertiary (teachers' colleges and universities) levels of education in a given year. A distinction must be made between required and optional courses as this would affect the enrolment statistics.

Purpose: To gauge the size of learners learning their indigenous African languages and their mother tongues at post primary level of education.

Calculation method: Divide the number of learners taking an indigenous language(s) as a curriculum subject for a given level of education and a given year by the total enrolment in that level in a given year multiplied by 100. Distinguish between required and optional courses.

Formula:

$$PLLAL_h^t = \frac{\text{Total learners taking an indigenous language as a curriculum subject}}{\text{Total enrolment}} \times 100$$

Where

$PLLAL_h^t$ = Percentage of Learners learning an African language as a subject year t and level h

Data required

Source of data

Number of students taking an indigenous language as a curriculum subject	H/EMIS- Ministry responsible for Higher/Education
Total Enrolment	H/EMIS-Ministry responsible for Higher/Education

Type of disaggregation for the indicator: This indicator is to be disaggregated by level of education (pre-primary, primary and secondary) and by type of higher and tertiary institution (teacher training colleges, technical colleges and universities)

Interpretation: The more active a country is in promoting the use of indigenous languages the more cohesive and coherent the local cultures will be. Higher percentage enrolments in national languages are an indicator of the importance given to local cultures and languages in a country.

Quality standard: Comprehensive coverage of the issue.

Limitation: Interpretation of this indicator is difficult as there are no clear benchmarks for cross comparability. Additionally, what is being assessed is the number of places where African languages are taught as a subject versus who is taking the courses that are available. These are separate statistics. Also, a distinction needs to be made between whether the courses are optional or required as this would affect the numbers too.

Is the indicator to be piloted?

☒ Yes ☐ No

Methodology: will the indicator be collected through a census or sample survey?

☒ Census survey ☐ Sample survey

General Remarks: Countries need to include information on the enrolment of pupils in national African languages in their school census questionnaires if it is not already collected.

A.4 National cultural activities in Learning Institutions

Definition: National cultural activities are activities such as sport, art, music, dance, theatre and technology related to the traditions of a country. In this instance, these are practiced in schools by students.

Purpose: The purpose of this indicator is to determine whether culture is being sustained and propagated amongst future generations.

Calculation method: Yes/No Indicator and type of cultural activity

Data required

Source of data

Types of national cultural activities in schools	MoE-Culture or Policy Unit
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Type of disaggregation for the indicator: This indicator can be disaggregated by geographical region and type of cultural activity.

Interpretation: A yes response can go some way to understanding whether culture is being promoted in a country as well as whether the vision of an African Renaissance can be achieved.

Is the indicator to be piloted?

☒ Yes ☐ No

Methodology: will the indicator be collected through a census or sample survey?

☒ Census survey ☐ Sample survey

Finance Indicators

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

Definition: Total public expenditure (current and capital) expressed as a percentage of total government expenditure.

Purpose: This indicator shows the proportion of a country's total government expenditure during a given financial year that was spent on education.

Calculation method: Divide total government expenditure on education in a given financial year by the total government expenditure of the same financial year and multiply by 100.

Formula:

$$PGXE_t = \frac{\text{Government expenditure on education}}{\text{Total government expenditure}} \times 100$$

Where

$PGXE_t$ = Percentage of government expenditure on Education in year t

Data required

Source of data

Government expenditure on education	Ministry of Finance
Total government expenditure	Ministry of Finance

Type of disaggregation for the indicator: This indicator is normally calculated at the national level only.

Quality standard: Total expenditure on education should include those incurred by all concerned ministries and levels of administration. Total government expenditure on education refers to all expenditure on education by the central or federal government, state governments, provincial or regional administrations and expenditure by municipal and other local authorities. Central government includes ministerial departments, agencies and autonomous institutions which have education responsibilities. The statistics on expenditure should cover transactions made by all departments or services with education responsibility at all decision-making levels. Government expenditure on education as a percentage of total government expenditure cannot exceed or even approach 100%.

Interpretation: A percentage of PGXE indicates a high allocation of Government budget to education which assumes that this is then a priority for government. However in fragile states, government budgets may be substantially supported financially by development partner contributions which depending on whether this is reported upon or not can distort the interpretation.

Limitation: In some instances data on total government expenditure on education refers only to the Ministry of education, excluding other ministries that spend a part of their budget on educational activities. Also it is often easier to access budget figures rather than expenditure data.

Is the indicator to be piloted?

☐ Yes ☒ No

Methodology: will the indicator be collected through a census or sample survey?

☒ Census survey ☐ Sample survey

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

Definition: Public current expenditure expressed as a percentage of total government expenditure on Education.

Purpose: This indicator shows how financial resources have been used in education. It measures the relative emphasis of government current spending on a particular level of education within the overall educational expenditure.

Calculation method: Divide the public current expenditure on education in a given financial year by the total government expenditure on Education of the same financial year and multiply by 100.

Formula:

$$PCGXE_h^t = \frac{\text{Government current expenditure on education}}{\text{Total government for expenditure}} \times 100$$

Where

$PCGXE_h^t$ = Percentage of public current expenditure on Education in a given year

Data required

Source of data

Current Expenditure on Education	Ministry of Finance
Government Expenditure on Education	Ministry of Finance

Type of disaggregation for the indicator: This indicator is normally calculated at the national level only.

Quality standard: Public current expenditure on education should include those costs incurred by the ministry responsible. The statistics on expenditure should cover transactions made by all departments or services with education responsibility at all decision-making levels. Government expenditure on education as a percentage of total government expenditure cannot exceed or even approach 100%.

Interpretation: Relatively high percentage of current expenditures shows the priority given to a specific level or activity in national educational policy and resource allocation. However in fragile states, government budgets may be substantially supported financially by development partner contributions which depending on whether this is reported upon or not can distort the interpretation.

Limitation: In some instances data on total government current expenditure on education refers only to the Ministry of education, excluding other ministries that spend a part of their budget on educational activities. Also it is often easier to access budget figures rather than expenditure data.

Is the indicator to be piloted?

☐ Yes ☒ No

Methodology: will the indicator be collected through a census or sample survey?

☒ Census survey ☐ Sample survey

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

Definition: This is the total government expenditure on education as a percentage of Gross Domestic Product.

Purpose: This indicator gives an indication of the priority given by governments to education relative to other areas of investment, such as health care, social security, defence and security.

Calculation method: Convert the national expenditures in the country's local currency to the average rate of your currency to the US Dollar in the most recent year. Divide total government expenditure on education for a specific level (or all levels combined) and year by the total Gross Domestic Product in that year and multiply by 100.

Formula:

$$PEEPG = \frac{\text{Total government expenditure on education}}{\text{Gross Domestic Product}} \times 100$$

Where

PEEPG = Public Expenditure on Education as a Percentage of GDP

Data required**Source of data**

Total government expenditure on education	Ministry of Finance
Gross Domestic Product	Ministry of Finance

Type of disaggregation for the indicator: This indicator is to be disaggregated by primary and secondary levels of education.

Quality standard: Total government expenditure on education should include expenses incurred by all concerned ministries and levels of administration.

Interpretation: If the percentage of GDP expended on education is high, this may indicate that the education represents a higher government priority. It is also indicative of the capacity of the government to generate revenue for public expenditure in relation to the size of the country's economy.

Limitation: In most instances data on expenditure on education cannot be obtained easily, or is incomplete. Further it is often not disaggregated by the levels of education as requested by the African Union.

Is the indicator to be piloted?☐

Yes

☒

No

Methodology: will the indicator be collected through a census or sample survey?

☒

Census survey

☐

Sample survey

APPENDICES

APPENDIX ONE

DESCRIPTION OF ISCED LEVELS, CLASSIFICATION CRITERIA AND SUB-CATEGORIES

International Standard Classification of Education (ISCED97)		
0 PRE-PRIMARY LEVEL OF EDUCATION		Main criteria
ECD	Initial stage of organized instruction, designed primarily to introduce very young children to a school-type environment.	Should be centre- or school-based, be designed to meet the educational and developmental needs of children of at least 3 years of age, and have staff that are adequately trained (i.e. qualified) to provide an educational programme for children.
1 PRIMARY LEVEL OF EDUCATION		Main criteria
	Normally designed to give pupils a sound basic education in reading, writing and mathematics.	Beginning of systematic studies characteristic of primary education, e.g. reading, writing and mathematics. Entry into the nationally designated primary institutions or sufficient criteria for classification of an educational programme at ISCED level 1.
2 LOWER SECONDARY LEVEL OF EDUCATION		Main criteria
	The lower secondary level of education generally continues the basic programmes of the primary level, although teaching is typically more subject-focused, often employing more specialised teachers who conduct classes in their field of specialisation.	Programmes at the start of level 2 correspond to the point where programmes are beginning to be organised in a more subject-oriented pattern, using more specialised teachers conducting classes in their field of specialisation. If this organizational transition point does not correspond to a natural split in the boundaries between national educational programmes, then programmes should be split at the point where national programmes begin to reflect this organisational change.
3 UPPER SECONDARY LEVEL OF EDUCATION		Main criteria
	The final stage of secondary education in most countries. Instruction is often more organised along subject-matter lines than at ISCED level 2 and teachers typically need to have a higher level, or more subject-specific, qualification than at ISCED 2.	National boundaries between lower secondary and upper secondary education should be the dominant factor for splitting levels 2 and 3. Admission into programmes at this level usually requires the completion of ISCED 2 for admission, or a combination of basic education and life experience that demonstrates the ability to handle ISCED 3 subject matter.

4 POST-SECONDARY NON-TERTIARY		Main criteria	
	<p>These programmes straddle the boundary between upper secondary and postsecondary education from an international point of view, even though they might clearly be considered as upper secondary or post-secondary programmes in a national context. ISCED 4 programmes typically have a duration of 6 months to 2 years. They are often not significantly more advanced than programmes at ISCED 3 but they serve to broaden the knowledge of participants who have already completed a programme at level 3. The students are typically older than those in ISCED 3 programmes.</p>		Students entering ISCED 4 programmes will typically have completed ISCED 3.
5 FIRST STAGE OF TERTIARY EDUCATION		Classification criteria for level and sub-categories (5A and 5B)	
	ISCED 5 programmes have an educational content more advanced than those offered at levels 3 and 4.		Entry into these programmes normally requires the successful completion of ISCED level 3A or 3B or a similar qualification at ISCED level 4A.
5A	ISCED 5A programmes are largely theoretically based and are intended to provide sufficient qualifications for gaining entry into advanced research programmes and professions with high skills requirements.		<ol style="list-style-type: none"> 1. have a minimum cumulative theoretical duration (at tertiary level) of three years; 2. typically require that the faculty have advanced research credentials; 3. may involve completion of a research project or thesis; 4. provide the level of education required for entry into a profession with high skills requirements or an advanced research programme.
5B	ISCED 5B programmes are generally more practical/technical/occupationally specific than ISCED 5A programmes.		<ol style="list-style-type: none"> 1. are more practically oriented and occupationally specific than programmes at ISCED 5A and do not prepare students for direct access to advanced research programmes; 2. have a minimum of two years' duration; 3. the programme content is typically designed to prepare students to enter a particular occupation.
6 SECOND STAGE OF TERTIARY EDUCATION (LEADING TO AN ADVANCED RESEARCH QUALIFICATION)			

	<p>This level is reserved for tertiary programmes that lead to the award of an advanced research qualification. The programmes are devoted to advanced study and original research.</p>	<ol style="list-style-type: none"> 1. requires the submission of a thesis or dissertation of publishable quality that is the product of original research and represents a significant contribution to knowledge; 2. are not solely based on course-work; 3. prepare participants for faculty posts in institutions offering ISCED 5A programmes, as well as research posts in government and industry.
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APPENDIX TWO

Definitions of Terms

African Languages

Indigenous languages spoken by an African population. This language would have originated in Africa and has its own culture.

Attrition Rates

Attrition is defined as a person who worked in a school (or district) the prior year and is not working at that same school (or district) in the next year. School level attrition measures the number of teachers who left a school, including those teachers who transferred to other schools within a district.

Existence of an African Language Policy

The existence of legislature or policy documents stating how languages are used, which languages are official. Language policy can also be used to cultivate native language or ensure the existence of threatened languages

Gross Completion Rates

All graduates in ISCED 5A programmes (first degree) expressed as a percentage of the population of the age where they theoretically finish the most common first degree programme in the given country.

Gross Domestic Product

Gross domestic product is an aggregate measure of production equal to the sum of the gross values added of all resident institutional units engaged in production (plus any taxes, and minus any subsidies, on products not included in the value of their outputs). The sum of the final uses of goods and services (all uses except intermediate consumption) measured in purchasers' prices, less the value of imports of goods and services, or the sum of primary incomes distributed by resident producer units.

Higher and Tertiary Education

Programmes with an educational content more advanced than what is offered at ISCED levels 3 and 4. The first stage of tertiary education, ISCED level 5, covers level 5A, composed of largely theoretically based programmes intended to provide sufficient qualifications for gaining entry to advanced research programmes and professions with high skill requirements; and level 5B, where programmes are generally more practical, technical and/or occupationally specific. The second stage of tertiary education, ISCED level 6, comprises programmes devoted to advanced study and original research, and leading to the award of an advanced research qualification.

Inbound Mobility

The number of students from abroad studying in a given country, as a percentage of the total tertiary enrolment in that country.

Life Skills

A large group of psycho-social and interpersonal skills which can help people make informed decisions, communicate effectively, and develop coping and self-management skills that may help them lead a healthy and productive life. Life skills may be directed toward personal actions and actions toward others, as well as actions to change the surrounding environment to make it conducive to health.

Live birth

This is the complete expulsion or extraction from its mother of a product of conception, irrespective of the duration of the pregnancy, which, after such separation, breathes or shows any other evidence of life—such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles—whether or not the umbilical cord has been cut or the placenta is attached. Each product of such a birth is considered a live birth.

Outbound Mobility

The number of students from a given country studying abroad as a percentage of total tertiary enrollment in that country.

Science and Technology in Higher Education

Science is search for the profound knowledge and technology is the use of scientific knowledge to create new things. Science and technology in higher education seeks to study how social, political, and cultural values affect scientific research and technological innovation, and how these in turn affect society, politics, and culture.

Teacher Morale

The state of the spirits of a person or group as exhibited by - among others - confidence, cheerfulness, discipline, and willingness to perform assigned tasks.

Technical Vocational Education and Training (TVET)

This refers to the deliberate interventions to bring about learning which would make people more productive (or simply adequately productive) in designated areas of economic activity (e.g., economic sectors, occupations, specific work tasks).

TVET will also have other purposes which are not unique to TVET, and which also apply to other forms of education, e.g., knowledge, skills, insights and mindsets which are deemed to be generally valuable for the learners, not only in designated areas of economic activity.

APPENDIX THREE

Domains and Fields of R&D classification as used by the international community (Frascati 2015)

Broad classification	Second level classification
1. Natural sciences	Mathematics ; Computer and information sciences ; Physical sciences ; Chemical sciences ; Earth and related environmental sciences; Biological sciences ; Other natural sciences
2. Engineering and technology	Civil engineering ; Electrical engineering, electronic engineering & information engineering ; Mechanical engineering ; Chemical engineering ; Materials engineering ; Medical engineering ; Environmental engineering ; Environmental biotechnology ; Industrial biotechnology ; Nano-technology ; Other engineering and technologies
3. Medical and health sciences	Basic medicine ; Clinical medicine ; Health sciences ; Medical biotechnology; Other medical science
4. Agricultural and veterinary sciences	Agriculture, forestry, and fisheries; Animal and dairy science ; Veterinary science ; Agricultural biotechnology; Other agricultural sciences
5. Social sciences	Psychology and cognitive sciences; Economics and business ; Education ; Sociology; Law ; Political science ; Social and economic geography; Media and communications ; Other social sciences
6. Humanities and the arts	History and archaeology ; Languages and literature ; Philosophy, ethics and religion ; Arts (arts, history of arts, performing arts, music); Other humanities

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6. OECD Data <https://data.oecd.org/>

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African Union (AU) First CESA Advisory Group Meeting

Meeting Report

Meeting venue: AU Scientific and Technical Research Committee

**Date:
20-21 March 2018**



Ushirika wa Maendeleo ya Elimu Barani Afrika
الرابطة لأجل تطوير التربية في إفريقيا
Association for the Development of Education in Africa
Association pour le Développement de l'Éducation en Afrique
Associação para o Desenvolvimento da Educação em África

INTRODUCTION:

DAY 1

OPENING SESSION:

1. Dr Beatrice Njenga, Head of the Education Division at the Department of Human Resources, Science and Technology (HRST), African Union Commission (AUC), welcomed the participants to the meeting and began by noting that the reason the group was gathered was to fine tune the final list of indicators selected to monitor the African Union's Continental Education Strategy for Africa 2016-2025 (CESA 16-25). The CESA Monitoring and Evaluation Framework and Indicators Manual in which the indicators are embedded were developed by AU IPED and ADEA. She thanked ADEA for its continued support and for co-sponsoring the event.
2. The host, Dr. Hamdi the Head of the Scientific and Technical Research Committee of the AU also gave a few remarks noting that it is important for Africa to develop and collect its own indicators. He noted that the indicators currently in circulation don't reflect the African experience e.g. the 48 per cent increase in Scientific research over the last 5 years. He spoke of the need for the Science Technology and Innovation Strategy for Africa (STISA) to also develop Indicators.
3. Rachel Ogbe the ECOWAS Head of Education also gave a few remarks. She pointed out that Africa has a long term 2063 goal and the continent has shown widespread commitment towards this. She thanked the AU, ADEA, IPED, AOSTI and UIS for the work which has so far been done with regards to monitoring CESA 16-25
4. After introductions were made, the technical work began in earnest.
5. **Technical Work**
The background was given by Mr. Lukman Jaji on how we have arrived at where we are. He noted that for each Strategic Objective, we want to be able to measure progress. For this reason, a set of indicators was developed. He reminded the team to include gender in all its deliberations and also disaggregate by age as a means of working towards Youth inclusion. Thereafter the team began the process of reviewing and refining the indicators. This work took up all of day one and most of day two.

CONCLUSIONS AND WAY FORWARD

During the course of the review, several decisions were made

i.	Draft and complete the advisory groups work plan by end of May 2018
ii.	Agree on how to pilot the indicators which need piloting by December 2018
iii.	Share the indicators and indicators manual with Member States and RECS by end of May 2018
iv.	Conduct a mapping exercise of existing Learning Assessment bodies and initiatives on the continent by December 2018
v.	Produce a baseline African Education report by December 2018

6. CLOSING SESSION

The final list of indicators and the CESA M&E Framework were presented and adopted as amended.

The conveners AUC, and ADEA thanked participants for their commitment and contributions to the discussions and outcomes

ANNEX A
INDICATORS CESA 2016 - 2025

Strategic Objective		Accepted Indicators
SO1	Revitalize the teaching profession to ensure quality and relevance at all levels of education	1.1. Percentage of Teachers Qualified to Teach According to National Standards;
		1.2. Percentage of teachers qualified in Science or Technology or Engineering or Mathematics by Sex
		1.3. Existence of operational teacher development policy
		1.4. Percentage of Teachers who have undergone In-Service Training
SO2	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	2.1. Proportion of schools with access to;
		2.1.i. basic drinking water
		2.1.ii. single sex basic sanitation facilities
		2.1.iii. basic hand-washing facilities
		2.2. Proportion of schools with
		2.2.i. adapted infrastructure
		2.2.ii. materials for students with disabilities
SO3	Harness the capacity of ICT to improve access, quality and management of education and training systems	2.3.Existence of Operational Teacher Development Policy
		3.1 Proportion of schools with access to;
		3.1.i. electricity
		3.1.ii.the Internet for pedagogical purposes
SO4	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	3.1.iii.computers for pedagogical purposes
		4.1. Gross intake ratio to last grade of primary, lower secondary and upper secondary
		4.2.Existence of a National Qualifications Framework
		4.3.Membership in the Network of African Learning Assessments
		4.4.Percentage Distribution of Tertiary Graduates by field of study
		4.4.a. Mathematics
		4.4.b. Science
		4.4.c. Social Sciences
		4.4.d. Law
		4.4.e. Accounting
		4.5. Proportion of children and young people by sex
		4.5.a.i. in grade 3 achieving at least a minimum proficiency level in reading
		4.5.a.ii. in grade 3 achieving at least a minimum proficiency level in mathematics
		4.5.a.iii. in grade 3 achieving at least a minimum proficiency level in science
		4.5.b.i. at the end of primary achieving at least a minimum proficiency level in reading
		4.5.b.ii. at the end of primary achieving at least a minimum proficiency level in mathematics
		4.5.b.iii. at the end of primary achieving at least a minimum proficiency level in science
		4.5.c.i. at the end of lower secondary education achieving at least a minimum proficiency level in reading
		4.5.b.ii. at the end of lower secondary education achieving at least a minimum proficiency level in mathematics
		4.5.b.iii. at the end of lower secondary education achieving at least a minimum proficiency level in science

		4.6.Proportion of population in a given age group achieving at least a fixed level of proficiency in functional by sex
		4.6.a. literacy
		4.6.b. numeracy skills
SO5	Accelerate processes leading to gender parity and equity	5.1. Gender Parity Index for Gross Enrolment Ratio
		5.2. Percentage of Female Teachers
		5.3. Percentage of Female Head Teachers
		5.4 Girls' dropout rate per reason of drop out
		5.5 Percentage of girls enrolled to STEM
SO6	Launch comprehensive and effective literacy programmes across the continent to eradicate the scourge of illiteracy	6.1. Youth literacy rate
		6.1.a. Female youth literacy rate
		6.2. Adult Literacy Rate
		6.2.a. Female adult literacy rate
		6.3. Participants in literacy programmes as a percentage of illiterate population between 2008 and 2013
		6.3.a. Female participants in literacy programmes as a percentage of illiterate population between 2008 and 2013
SO7	Strengthen the science and math curricula in youth training and disseminate scientific knowledge and culture in society	7.1. Percentage of teachers qualified to teach in Science or Mathematics according to national standards
		7.1.a. Percentage of female teachers qualified to teach in Science or Mathematics according to national standards
SO8	Expand TVET opportunities at both secondary and tertiary levels and strengthen 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.a. Percentage of Total Female Enrolment in Secondary and Tertiary Technical and Vocational Education and Training
		8.2. Percentage of TVET Graduates
		8.2.a. Percentage of Female TVET Graduates
		8.3. TVET Graduates Labour Force Participation Rate
		8.3.a Female TVET Graduates Labour Force Participation Rate
		8.4. Percentage of Students who Meet National Requirements for Academic programs in secondary or tertiary and enrol for TVET
		8.5. State of National TVET policies and governance structures
		8.6. Percentage of TVET Graduates who have participated in Apprenticeships
SO9	Revitalize and expand tertiary education, research and innovation to address continental challenges and promote global competitiveness	9.1. Number of earned doctoral degrees by field
		9.2. Expenditure on Research and Development as a Percentage of GDP
		9.3. Enrolment of Students in Higher and Tertiary Education per 100,000 Inhabitants
		9.4. Inbound Mobility Ratio
		9.5. Outbound Mobility Ratio
		9.6. The quality of graduates and their employability in the world economy
		9.7. Conducive environment for research and innovation through the provision of adequate infrastructure and resources
		9.8 Proportion of Learners enrolled in
		9.8.a. Distance Education
		9.8.b. Open learning
		9.8.c. E-Learning Programmes

SO10	Promote peace education and conflict prevention and resolution at all levels 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
		10.2. 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
		10.3 Extent to which the following are mainstreamed;
		10.3.a.i. global citizenship education in national education policies
		10.3.a.ii. global citizenship education in curricula
		10.3.a.iii. global citizenship education in teacher education
		10.3.a.iv. global citizenship education in student assessment
		10.3.b.i. Peace, Life Skills, Media and Information Literacy education in national education policies
		10.3.b.ii. Peace, Life Skills, Media and Information Literacy education in curricula
		10.3.b.iii. Peace, Life Skills, Media and Information Literacy education education in teacher education
		10.3.b.iv.Peace, Life Skills, Media and Information Literacy education in student assessment
		10.3.c.i. education for sustainable development, including gender equality and human rights in national education policies
		10.3.c.ii. education for sustainable development, including gender equality and human rights education in curricula
		10.3.c.iii. education for sustainable development, including gender equality and human rights in teacher education
		10.3.c.iv. education for sustainable development, including gender equality and human rights in student assessment
SO11	Improve management of education system as well build and enhance capacity for data collection, management, analysis, communication, and use	11.1 Funds allocated to EMIS
		11.1.i. are used specifically for EMIS activities
		11.1.ii. absorption capacity is optimal
		11.2 Your Government produces an Annual School Census Report: Last year available
		11.3 School Census Return Rate
		11.4 Your Government Conducts EMIS Assessments: Last year conducted
		11.5. Education sector plan includes a chapter on EMIS
		11.6. EMIS Data Production Lag time (Timeliness)
SO12	Set up a coalition of stakeholders to facilitate and support activities resulting from the implementation of CESA 16-25.	12.1 Existence of School Management Committee Policy
		12.2 Existence of National Education Cluster
		12.3 Does your Government provide financial or political support to the CESA Implementation cluster on Education Planning
		12.4. Evidence of communications and advocacy for CESA objectives at country level
Additional Indicators		
2063	Africa with a strong cultural identity, common heritage, values and ethics	A.1 Existence of African Language Policy
		A.2 Percentage of pupils being taught using an African language as a medium of instruction
		A.3 Percentage of Learners learning an African language as a subject
		A.5 National cultural activities in Learning Institutions
Finance Indicators		F.1 Public Expenditure on Education as a Percentage of Total Government Expenditure by level
		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

LOGICAL FRAMEWORK CESA 2016-2025

Reorienting Africa's education and training systems to meet the knowledge, competencies, skills, innovation and creativity required to nurture African core values and promote sustainable development at the national, sub-regional and continental levels.										
Strategic Objective		Objectively verifiable indicators of achievement	score	YES	NO	Sources and means of verification	Expected result	Activities	Risks	Assumptions
Strategic Objective 1	Revitalize the teaching profession to ensure quality and relevance at all levels of education	1.1. Percentage of Teachers Qualified to Teach According to National Standards;				EMIS - Ministry responsible for Education				
		1.2. Percentage of teachers qualified in Science or Technology or Engineering or Mathematics by Sex				EMIS - Ministry responsible for Education				
		1.3. Existence of operational teacher development policy				EMIS - Ministry responsible for Education				
		1.4. Percentage of Teachers who have undergone In-Service Training				EMIS - Ministry responsible for Education/Teacher Service Commission				
Strategic Objective 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	2.1. Proportion of schools with access to;				EMIS - Ministry responsible for Education				
		2.1.i. basic drinking water				EMIS - Ministry responsible for Education				
		2.1.ii. single sex basic sanitation facilities				EMIS - Ministry responsible for Education				
		2.1.iii. basic hand-washing facilities				EMIS - Ministry responsible for Education				
		2.2. Proportion of schools with				EMIS - Ministry responsible for Education				
		2.2.i. adapted infrastructure				EMIS - Ministry responsible for Education				
		2.2.ii. materials for students with disabilities				EMIS - Ministry responsible for Education				
		2.3.Existence of Operational Teacher Development Policy				EMIS - Ministry responsible for Education/Teacher Service Commission				
Strategic Objective 3	Harness the capacity of ICT to improve access, quality and management of education and training systems	3.1 Proportion of schools with access to;				EMIS - Ministry responsible for Education				
		3.1.i. electricity				EMIS - Ministry responsible for Education				
		3.1.ii.the Internet for pedagogical purposes				EMIS - Ministry responsible for Education				
		3.1.iii.computers for pedagogical purposes				EMIS - Ministry responsible for Education				
Strategic Objective 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	4.1. Gross intake ratio to last grade of primary, lower secondary and upper secondary				EMIS - Ministry responsible for Education				
		4.2.Existence of a National Qualifications Framework				EMIS - Ministry responsible for Education				
		4.3.Membership in the Network of African Learning Assessments				EMIS - Ministry responsible for Education				
		4.4.Percentage Distribution of Tertiary Graduates by field of study				HEMIS - Ministry of Higher Education				
		4.4.a. Mathematics				HEMIS - Ministry of Higher Education				
		4.4.b. Science				HEMIS - Ministry of Higher Education				
		4.4.c. Social Sciences				HEMIS - Ministry of Higher Education				
		4.4.d. Law				HEMIS - Ministry of Higher Education				
		4.4.e. Accounting				HEMIS - Ministry of Higher Education				
		4.5. Proportion of children and young people by sex				EMIS - Ministry responsible for Education				
		4.5.a.i. in grade 3 achieving at least a minimum proficiency level in reading				EMIS - Ministry responsible for Education				
		4.5.a.ii. in grade 3 achieving at least a minimum proficiency level in mathematics				EMIS - Ministry responsible for Education				
		4.5.a.iii. in grade 3 achieving at least a minimum proficiency level in science				EMIS - Ministry responsible for Education				
		4.5.b.i. at the end of primary achieving at least a minimum proficiency level in reading				EMIS - Ministry responsible for Education				
		4.5.b.ii. at the end of primary achieving at least a minimum proficiency level in mathematics				EMIS - Ministry responsible for Education				
		4.5.b.iii. at the end of primary achieving at least a minimum proficiency level in science				EMIS - Ministry responsible for Education				
		4.5.c.i. at the end of lower secondary education achieving at least a minimum proficiency level in reading				EMIS - Ministry responsible for Education				
		4.5.b.ii. at the end of lower secondary education achieving at least a minimum proficiency level in mathematics				EMIS - Ministry responsible for Education				
		4.5.b.iii. at the end of lower secondary education achieving at least a minimum proficiency level in science				EMIS - Ministry responsible for Education				
		4.6.Proportion of population in a given age group achieving at least a fixed level of proficiency in functional by sex				EMIS - Ministry responsible for Education				
		4.6.a. literacy				EMIS - Ministry responsible for Education				
		4.6.b. numeracy skills				EMIS - Ministry responsible for Education				

ANNEX B

Strategic Objective 5	Accelerate processes leading to gender parity and equity	5.1. Gender Parity Index for Gross Enrolment Ratio				EMIS - Ministry responsible for Education				
		5.2. Percentage of Female Teachers				EMIS - Ministry responsible for Education				
		5.3. Percentage of Female Head Teachers				EMIS - Ministry responsible for Education				
		5.4 Girls' dropout rate per reason of drop out				EMIS - Ministry responsible for Education				
		5.5 Percentage of girls enrolled in STEM				EMIS - Ministry responsible for Education				
Strategic Objective 6	Launch comprehensive and effective literacy programmes across the continent to eradicate the scourge	6.1. Youth literacy rate				NSO				
		6.1.a. Female youth literacy rate				NSO				
		6.2. Adult Literacy Rate				NSO				
		6.2.a. Female adult literacy rate				NSO				
		6.3. Participants in literacy programmes as a percentage of illiterate population between 2008 and 2013				EMIS - Ministry responsible for Education				
Strategic Objective 7	Strengthen the science and math curricula in youth training and	6.3.a. Female participants in literacy programmes as a percentage of illiterate population between 2008 and 2013				EMIS - Ministry responsible for Education				
		7.1. Percentage of teachers qualified to teach in science or mathematics according to national standards				EMIS - Ministry responsible for Education/Teacher Service Commission				
		7.1.a. Percentage of female teachers qualified to teach in Science or Mathematics according to national standards				EMIS - Ministry responsible for Education/Teacher Service Commission				
		8.1. Percentage of Total Enrolment in Secondary and Tertiary Technical and Vocational Education and Training				HEMIS - Ministry responsible for Education				
		8.1.a. Percentage of Total Female Enrolment in Secondary and Tertiary Technical and Vocational Education and Training				HEMIS - Ministry responsible for Education				
Strategic Objective 8	Expand TVET opportunities at both secondary and tertiary levels and strengthen linkages between the world of work and education and training systems	8.2. Percentage of TVET Graduates				HEMIS - Ministry responsible for Education				
		8.2.a. Percentage of Female TVET Graduates				HEMIS - Ministry responsible for Education				
		8.3. TVET Graduates Labour Force Participation Rate				Household survey or Labor force survey				
		8.3.a Female TVET Graduates Labour Force Participation Rate				Household survey or Labor force survey				
		8.4. Percentage of Students who Meet National Requirements for Academic programs in secondary or tertiary education				HEMIS - Ministry responsible for Education				
Strategic Objective 9	Revitalize and expand tertiary education, research and innovation to address continental challenges and promote global competitiveness	8.5. State of National TVET policies and governance structures				HEMIS - Ministry responsible for Education				
		8.6. Percentage of TVET Graduates who have participated in Apprenticeships				HEMIS - Ministry responsible for Education				
		9.1. Number of earned doctoral degrees by field				HEMIS - Ministry responsible for Education				
		9.2. Expenditure on Research and Development as a Percentage of GDP				HEMIS - Ministry responsible for Education				
		9.3. Enrolment of Students in Higher and Tertiary Education per 100,000 Inhabitants				HEMIS - Ministry responsible for Education				
Strategic Objective 10	Promote peace education and conflict prevention and resolution at all levels of education and for all age groups	9.4. Inbound Mobility Ratio				HEMIS - Ministry responsible for Education				
		9.5. Outbound Mobility Ratio				HEMIS - Ministry responsible for Education				
		9.6. The quality of graduates and their employability in the world economy				HEMIS - Ministry responsible for Education				
		9.7. Conducive environment for research and innovation through the provision of adequate infrastructure and resources				HEMIS - Ministry responsible for Education				
		9.8 Proportion of Learners enrolled in				HEMIS - Ministry responsible for Education				
Strategic Objective 11	Improve management of education system as well build and enhance capacity for data collection, management, analysis, communication and	9.8.a. Distance Education				HEMIS - Ministry responsible for Education				
		9.8.b. Open learning				HEMIS - Ministry responsible for Education				
		9.8.c. E-Learning Programmes				HEMIS - Ministry responsible for Education				
		10.1 Existence of National Strategies to ensure the continuation of education during humanitarian situations, emergencies and conflict				Policy Unit - Ministry responsible for Education				
		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				Policy Unit - Ministry responsible for Education				
Strategic Objective 11	Improve management of education system as well build and enhance capacity for data collection, management, analysis, communication and	10.3 Extent to which the following are mainstreamed:				Policy Unit - Ministry responsible for Education				
		10.3.a.i. global citizenship education in national education policies				Policy Unit - Ministry responsible for Education				
		10.3.a.ii. global citizenship education in curricula				Policy Unit - Ministry responsible for Education				
		10.3.a.iii. global citizenship education in teacher education				Policy Unit - Ministry responsible for Education				
		10.3.a.iv. global citizenship education in student assessment				Policy Unit - Ministry responsible for Education				
Strategic Objective 11	Improve management of education system as well build and enhance capacity for data collection, management, analysis, communication and	10.3.b.i. Peace, Life Skills, Media and Information Literacy education in national education policies				Policy Unit - Ministry responsible for Education				
		10.3.b.ii. Peace, Life Skills, Media and Information Literacy education in curricula				Policy Unit - Ministry responsible for Education				
		10.3.b.iii. Peace, Life Skills, Media and Information Literacy education in teacher education				Policy Unit - Ministry responsible for Education				
		10.3.b.iv. Peace, Life Skills, Media and Information Literacy education in student assessment				Policy Unit - Ministry responsible for Education				
		10.3.c.i. education for sustainable development, including gender equality and human rights in national education policies				Policy Unit - Ministry responsible for Education				
Strategic Objective 11	Improve management of education system as well build and enhance capacity for data collection, management, analysis, communication and	10.3.c.ii. education for sustainable development, including gender equality and human rights education in curricula				Policy Unit - Ministry responsible for Education				
		10.3.c.iii. education for sustainable development, including gender equality and human rights in teacher education				Policy Unit - Ministry responsible for Education				
		10.3.c.iv. education for sustainable development, including gender equality and human rights in student assessment				Policy Unit - Ministry responsible for Education				
		11.1 Funds allocated to EMIS				EMIS/Finance - Ministry responsible for Education				
		11.1.i. are used specifically for EMIS activities				EMIS/Finance - Ministry responsible for Education				
Strategic Objective 11	Improve management of education system as well build and enhance capacity for data collection, management, analysis, communication and	11.1.ii. absorption capacity is optimal				EMIS/Finance - Ministry responsible for Education				
		11.2 Your Government produces an Annual School Census Report: Last year available				EMIS - Ministry responsible for Education				
		11.3 School Census Return Rate				EMIS - Ministry responsible for Education				
		11.4 Your Government Conducts EMIS Assessments: Last year conducted				EMIS - Ministry responsible for Education				
		11.5. Education sector plan includes a chapter on EMIS				EMIS - Ministry responsible for Education				

ANNEX B

	Communication, and	11.6. EMIS Data Production Lag time (Timeliness)				EMIS - Ministry responsible for Education			
Strategic Objective 12	Set up a coalition of stakeholders to facilitate and support activities resulting from the implementation of CESA 16-25.	12.1 Existence of School Management Committee Policy				Policy Unit - Ministry responsible for Education			
		12.2 Existence of National Education Cluster				Policy Unit - Ministry responsible for Education			
		12.3 Does your Government provide financial or political support to the CESA Implementation cluster on Education Planning				Policy Unit - Ministry responsible for Education			
		12.4. Evidence of communications and advocacy for CESA objectives at country level				Policy Unit - Ministry responsible for Education			
		12.1 Existence of School Management Committee Policy				Policy Unit - Ministry responsible for Education			
		12.2 Existence of Local Education Group				Policy Unit - Ministry responsible for Education			
		12.3 Does your Government attend CESA Implementation cluster on Education Planning meetings: Last year attended				Policy Unit - Ministry responsible for Education			
		12.4 Does your Government provide financial or political support to the CESA Implementation cluster on Education Planning				Policy Unit - Ministry responsible for Education			
Additional Indicators									
Agenda 2063 Aspiration 7:	Africa with a strong cultural identity, common heritage, values and ethics	A.1 Existence of African Language Policy				Non Ma.			
		A.2 Percentage of pupils being taught using an African language as a medium of instruction. A.3 Percentage of Learners learning an African language as a subject				Vous devrez attendre l'année prochaine puisque votre année se termine en novembre. d'ici là, les processus d'admission auraient fini.			
Finance Indicators		F.1 Public Expenditure on Education as a Percentage of Total Government Expenditure by level				Ministry of Finance			
		F.2 Public Current Expenditure on Education as a Percentage of Total Education Expenditure by level				Ministry of Finance			
		F.3 Public Expenditure on Education per Learner				Ministry of Finance			



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