Sustainable Development Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all by 2030

I. Introduction

1. Sustainable Development Goal 4, as defined, is operationalized in seven specific areas, each with clear targets and indicators of progress. The areas are the following: universal primary and secondary education; early childhood development and universal pre-primary education; equal access to technical, vocational and tertiary education; relevant skills for decent work; gender equality and inclusion; literacy and numeracy; and education for sustainable development and global citizenship.

2. The Continental Education Strategy for Africa (2016–2025),¹ adopted by the Assembly of Heads of State and Government of the African Union, is the framework for transforming education and training systems on the continent. The Strategy is designed to enable citizens to be effective change agents for realizing the vision of Agenda 2063: The Africa We Want, of the African Union. Fully aligned with Goal 4, the framework comprises twelve strategic objectives, along with six guiding principles and nine pillars to guide the implementation of these objectives. Furthermore, in 2020, African ministers of education acknowledged the critical need to transform the education systems of Africa, in order to respond to the coronavirus disease (COVID-19) pandemic, by adopting a range of measures in the areas of digital connectivity, online and offline learning, teachers as facilitators and motivators of learning, safety online and offline, and skills focused learning, known as the “DOTSS framework”, in line with the digital transformation strategy of the African Union.

3. Progress in achieving Goal 4 has a far-reaching impact on all the other Sustainable Development Goals, as education is a core building block of human

¹ The Continental Education Strategy for Africa has, as its stated mission, “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, subregional and continental levels” (section 3.2).
capital development, including civic duty, peaceful coexistence and democracy, as indicated in figure I below.

Figure I

Linkages between Sustainable Development Goal 4 and other Sustainable Development Goals

4. While acknowledging the indivisibility and interdependence of the Sustainable Development Goals, Goal 4 has a strong link with other Goals, as shown in figure I above.

II. Trends and progress towards achievement of the set targets of the Goal 4 and related goals of Agenda 2063

A. Background

5. Recent reviews of the Continental Education Strategy for Africa, the Education 2030 Framework for Action, and the joint African Union-United Nations Children’s Fund report on transforming education in Africa demonstrate how, over the last 10 years, African governments have undertaken a wide range of programmes

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and policy-level efforts to ensure that no child is left behind in the area of access to education. There have been substantial efforts on the continent to ensure access, completion and quality of basic education for all.

6. Children from marginalized communities, refugee children and children with disabilities have been particularly targeted in many countries, in an endeavour to ensure that education services are adapted to different needs, including the equitable distribution of resources. As of 2020, more than half of the countries in Africa have been pursuing inclusive education policies with a focus on children with disabilities. In such countries as Angola, Ethiopia, Kenya and Malawi, governments have taken steps to ensure that children with and without disabilities are learning in the same classroom and schools.

7. Overall, the proportion of out-of-school children has declined over the past 10 years, completion rates have risen in primary and lower secondary education, and access to and participation in technical and vocational education and training have been improved, as has access to pre-primary education, adult literacy classes and lifelong learning.

B. Progress against the various targets of Goal 4

1. Early childhood education

8. Children’s readiness to learn in school is described as an essential ingredient for a successful education. The global commitment to this aim is captured in target 4.2 of the Sustainable Development Goals: “Ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education”.

9. Since 2015, with the growing recognition of the role played by early childhood education in school readiness, several countries in Africa have expanded access to such education, through different approaches. Some, such as Kenya, have expanded access to early childhood education services through public, private and community-based services, without prioritizing any particular age group, and have provided services to all children in the official age range for early childhood education. Others, such as South Africa and more recently Ethiopia, have adopted a progressive universalization approach, starting by offering one year of early childhood education for all children, with the public sector taking the lead, aiming to gradually increase the number of years of such education through public, private and community-based services. Some countries, including Ethiopia, have adopted a pro-poor policy strategy, prioritizing children from disadvantaged households in their expansion efforts and introducing free pre-primary education, which, in some countries, may also be compulsory.

2. Universal primary and secondary education

10. With target 4.1, governments commit themselves to ensuring that “all girls and boys complete free, equitable and quality primary and secondary education”. Similarly, in the Continental Education Strategy for Africa, African governments undertake to ensure “improved completion rates at all levels”. While efforts to improve learning outcomes have gained increased prominence in policies at both national and continental levels, the challenge of getting all children to enrol in, progress through and complete primary and secondary school remains a top priority of most African governments’ policy agenda.
Figure II
Gross intake ratio to the last grade, primary education and lower secondary education, by income group

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**Source:** Data from the UNESCO Institute for Statistics database on Sustainable Development Goals indicator 4.1.3: “Total number of new entrants into the last grade of primary education or lower secondary general education, regardless of age, expressed as a percentage of the population at the intended entrance age to the last grade of primary education or lower secondary general education”, [http://data.uis.unesco.org/](http://data.uis.unesco.org/).


**Note:** Countries are listed in order of their gross intake ratio at the last grade in primary education.

LICs – low-income countries; LMICs – lower middle-income countries; UMICs – upper middle-income countries; HICs – high-income countries.

11. Progress in this area notwithstanding, the number of out-of-school children in Africa remains substantial. As of 2019, some 100 million children of primary and secondary school age remain out of school on the continent. In the country with the highest out-of-school rate, 1 in 5 primary school-age children (18.8 per cent), 1 in 3 lower secondary school-age adolescents (36.7 per cent), and 1 in 2 upper secondary school-age young people (57.5 per cent) are estimated to be out of school.

12. The road ahead for African governments in ensuring that all children complete primary and lower secondary education will entail enhanced unit costs, given the higher marginal cost of supporting difficult-to-reach children. Conflicts, natural disasters and pandemics risk disrupting the already not-so-smooth journey followed by millions of children through the education system — delaying their enrolment, forcing school closures and compelling families to make decisions that reshape children’s life trajectories, such as surrendering their children to child marriage and...
child labour. Given the fast-growing population of Africa, if the trends in out-of-school rates observed over the last two decades are to remain unchanged, it will take 100 years to achieve full school attendance for all children of primary school age, and 235 and 280 years, respectively, to achieve zero out-of-school rates among lower and upper secondary school-age children. A drastic change is therefore needed to address the number and proportion of those in education that have been left behind.

13. To meet the growing demand for transition to secondary school, many African governments have shifted their policy attention to secondary education so that the prospect of secondary education for young people and for economic growth is not undermined by inadequate learning outcomes and irrelevant skills. The challenge of access cannot be tackled in isolation but requires joint efforts to improve quality to enhance learning outcomes, which could help in surmounting the associated obstacles. Low-quality schooling and limited learning rank high among the factors leading children to drop out of education. Policies and investments in the provision of higher-quality schooling may also encourage more children to stay in school and complete secondary education.

3. Equal access to technical, vocational and tertiary education

14. The potential demographic dividend presents a window of opportunity to generate greater productivity, boost economic growth and end extreme poverty. To seize this opportunity, many African governments have intensified efforts to develop the skills of children and youth to prepare them for a rapidly changing and highly competitive global workforce, and to fortify the bridges between education, training and transition to the labour market.

15. The Continental Education Strategy for Africa emphasizes the relevance of education and training with a focus on training and vocational education in science and technology in its principles. Unfortunately, countries’ efforts to upgrade the status of technical and vocational education and training (TVET) contrast with low enrolment rates. In 2019, there were only about 10 million adolescents and young people enrolled in technical and vocational secondary education – a ratio of 762 learners per 100,000 inhabitants, compared to a global average of 801 learners per 100,000 inhabitants. The average proportion of young people between 15 and 24 years old enrolled in vocational education is 3 per cent. Factors explaining the low level of TVET development include the lack of adequate funding, limited strategic vision in managing the subsector and a persistent social misconception of TVET as an unrewarding area. There is need to transform TVET from a simple amalgamation of technical and vocational institutions into a coherent system for building skilled human resources of high quality.

16. Over the past two decades, the continent has also witnessed an impressive increase in access to tertiary education, although the fields of science and technology still do not receive adequate attention, compared to those of the humanities and social sciences. Lastly, the quality and relevance of university education in Africa remain major problems that continue to engage the attention of governments.

4. Relevant skills for decent work

17. While African governments push for a transition from a predominantly informal market to a formal market in which decent work is more widely available, they are also capitalizing on the realities of the informal market in designing appropriate and responsive TVET and school-to-work transition models. The

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5 Ibid., p. 16.
6 The pertinent literature on informality in the labour market underlines the difficulty of defining the terms “informal economy” and “formal economy”. Thus, Melanie Khamis, in “A note on informality in the labor market”, Discussion Paper No. 4676, Forschungsinstitut zur Zukunft der Arbeit (IZA), Bonn, December 2009, puts forward a productivity definition: “non-professionals, unskilled, marginal jobs, the self-
interaction between education, training and work is not linear. Building TVET systems that strengthen inclusive, flexible and alternative pathways coupled with improved skills anticipation policies can enhance the effectiveness of education and training systems in generating the skills demanded by employers.

18. The African Union has set a target of 1 per cent of gross domestic product (GDP) to be invested in research and development. As shown in figure III below, several African countries, including those in the middle-income bracket such as Algeria, Egypt, South Africa and Tunisia, and also low-income countries such as Burkina Faso, Rwanda and Senegal, are already above the 0.5 per cent level and continuing to push upwards.

Figure III
Research and development expenditure as a percentage of GDP

Source: Data are from the UNESCO Institute for Statistics database on Sustainable Development Goals indicator 9.5.1: “Research and development expenditure as a proportion of GDP”, http://data.uis.unesco.org/.


Note: Countries are listed in order of their research and development expenditure as a proportion of GDP.

LICs – low-income countries; LMICs – lower middle-income countries; UMICs – upper middle-income countries; HICs – high-income countries.

employed, domestic and family workers, and workers in small firms with up to five employees”, and a legalistic definition: “non-compliance (...) in terms of labor laws and social security systems”. For the purposes of this report, the legalistic definition is considered more relevant.
19. Several African governments, in particular in countries with very low completion rates, have introduced remedial education and skills training programmes for early school dropouts. Over the last decade or so, countries undertook structural reforms in designing their TVET programmes and shifted to a competency-based training approach. Competency-based training focuses on the skills that a learner can demonstrate for a given occupation and its scope is shaped by the labour market’s skill demands and standards. Some countries, such as Ethiopia and Ghana, adopted the competency-based training approach around the year 2000. The coverage and effectiveness of this training approach, however, and the duration of its experimental application vary widely from country to country. In Ethiopia, the adoption and implementation of the competency-based training approach to TVET has been relatively successful, with occupational competency standards developed through effective public-private partnerships.

Figure IV
Proportion of youth enrolled in vocational education

Source: Data are from the UNESCO Institute for Statistics database on Sustainable Development Goals indicator 4.3.3: “Research and development expenditure as a proportion of GDP”; http://data.uis.unesco.org/.


Note: Countries are listed in order of the proportion of female 15–24-year-olds enrolled in vocational education.

20. In response to the challenges of the COVID-19 pandemic, governments designed and carried out laudable interventions to ensure that TVET programmes continued despite the closures of training centres. In Côte d’Ivoire, the Government launched an operation under the slogan “Écoles fermées, cahiers ouverts!” (“Schools closed, books open!”) for both schools and TVET training centres and launched an online platform “Ma formation en ligne” (“My online training”) that provides learners in all TVET programmes with online courses and exercises.
5. **Literacy and numeracy**

21. Sustainable Development Goal 4 aims at ensuring that all “youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy”. Despite the weak performances observed thus far on the main related indicators, educational policies and programmes over the past decade did little to improve learning outcomes. The number of children completing basic education that can read and write and have basic proficiency in mathematics remains very low in Africa. In 2019, the World Bank introduced the concept of “learning poverty”, referring to the inability to read and understand a simple text by the age of 10, and estimated that 87 per cent of children in sub-Saharan Africa are “learning poor”.

22. In Africa, the proportion of children in the early grades of primary education who achieve the minimum proficiency level is on average 47 per cent in mathematics and 36 per cent in reading.\(^7\) The situation is much worse by the time pupils reach the end of primary education, with an average of only 22 per cent achieving the minimum level of proficiency in mathematics, compared to 35 per cent in reading. In addition, the disruptions caused by the COVID-19 pandemic are exacerbating the problem of learning poverty because of pupils’ unequal access to digital learning opportunities.

23. In addition, illiteracy among adults remains high. In 2018, about one in three people aged between 25 and 64 and one in five young people aged between 15 and 24 were illiterate. Parental illiteracy is one of the factors hindering the schooling of children, in particular among the most marginalized groups.

6. **Gender equality and inclusion**

24. The continent still exhibits persistent disparities within and between countries in respect of their ability to ensure learning for all. Young girls from the poorest communities, children with disabilities and children on the move experience particular difficulties in achieving their right to learning. They face a high risk of being left even further behind, as countries struggle to maintain the resources allocated to education.

25. While overall gender inequality in school attendance has declined sharply and, on average, has almost been eliminated for children of lower secondary school age or younger, such inequality, when skewed to wealth and residence, is still prevalent. A child from the richest quintile of households is eight times more likely to complete primary school and twelve times more likely to complete upper secondary level than a child from the poorest quintile. On average, two in five African children from the poorest households complete primary school, compared to four in five from the richest households. At the secondary level, only 6 per cent of the poorest children complete upper secondary school, compared to 46 per cent of the richest. Disaggregated by location, only 12 per cent of children living in rural areas complete upper secondary education, compared to 34 per cent of those living in urban areas.

7. **Teachers**

26. Pursuant to strategic objective 1 of the Continental Education Strategy for Africa, the continent is called upon to “Revitalize the teaching profession to ensure quality and relevance at all levels”. In addition, the need for a sufficient supply of trained and qualified teachers to achieve Sustainable Development Goal 4 has been enshrined in target 4. e.\(^8\)

27. Countries in Africa face a severe shortage of teachers that is not fully reflected in the average ratio of pupils to teachers on the continent. On average, the pupil-teacher ratios are 29, 37 and 24 to 1 at the preschool, primary and secondary levels, respectively.

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\(^8\)“By 2030, substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and small island developing States”. 

respectively. At the preschool and secondary levels, only a few countries have average ratios above 35 pupils per teacher (19 per cent at the preschool level, 12 per cent at the secondary level), but at the primary level, more than half of all countries (55 per cent) have ratios above 35 pupils per teacher. In 2015, it was estimated that achieving universal primary and secondary education by 2030 would require recruiting some 17 million teachers in sub-Saharan Africa.

28. Various studies, including sectoral analyses, have shown that, in several African countries, both the administrative and pedagogical management of teachers suffers from serious shortcomings.\(^9\)

29. Recognizing the vital role that teachers play in achieving learning outcomes and responding to the need to revitalize the teaching profession, several African governments have introduced changes to their education workforce management policies and systems. Various strategies, including the use of civil servants, contract staff and volunteers, the payment of teachers by parents, and the use of untrained or unqualified teachers, are employed in countries to secure a reasonable number of teachers while keeping the corresponding wage bill under control.

30. If governments could improve initial teacher education programmes and implement more effective and equitable recruitment and allocation policies, the formation of these new cohorts of qualified and highly motivated teachers would significantly revitalize the teaching workforce. That will necessitate changes to the education financing status quo: teacher salaries already represent a significant share of recurrent education budgets in most countries and, in some African countries, teacher salary costs across primary and secondary schools exceed the amount of government spending on education at all levels. Hence, the ongoing expansion of the education workforce requires broader conversations about the financing priorities of both governments and development partners. As witnessed during the COVID-19 pandemic, sudden school closures mean that teachers have to re-define their roles, learn to use technology to communicate and teach, and prepare for the challenges that they will face when schools reopen.

8. Strong institutions for education

31. Sustainable Development Goal 4 will not be attained without considering the role of strong, sound and accountable institutions, as captured by Goal 16. Ensuring that national education systems are backed by strong institutions will guarantee that high quality public expenditures are channelled towards education and that their impact is monitored in a transparent and accountable manner. This is key to delivering education to everybody in a fair, equitable and sustainable way. Countries in sub-Saharan Africa are spending an estimated 4.4 per cent of their GDP on education and government education expenditures account for 16.8 per cent of total national expenditure.\(^{10}\) These financial resources must, however, be equitably allocated and transparently managed.

III. Challenges, constraints and emerging issues

32. In its endeavour to attain the targets of Sustainable Development Goal 4, the continent needs to surmount the challenges outlined below.

33. COVID-19 pandemic and its consequences on education systems quality: Despite the best efforts by governments across the continent to reach children through remote learning in the context of COVID-19-necessitated restrictions, one out of two pupils, from pre-primary to upper secondary level, could not be reached. Millions of children also missed out on services that are often provided through schools, such as

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school meals, immunization, mental health and psychosocial support, and protection from violence. As a result, millions of children, in particular the most marginalized, are at risk of never going back to school and, in consequence, being at risk of lifelong poverty. The disruption caused by the pandemic has significantly widened the already deep gaps in access to inclusive quality education and training and, by so doing, constrained the implementation and the achievement of the targets of Goal 4 and its related agendas.

34. **Limited financing for education:** While governments have committed themselves, in the framework of Goal 4, to allocating at least 20 per cent of their public expenditure to education, many countries in the continent were still far from reaching this benchmark even before the COVID-19 pandemic. With the onset of the pandemic and its disruption of economic activities, the struggle for African governments to sustain their funding allocation to education became harder, faced by competing priorities in the effort to contain the outbreak. The African Union has estimated that the immediate response to the crisis will cost close to $130 billion from the public resources of African States. The limited budget for education has exacerbated the difficulty of reaching every learner, regardless of their situation, in fulfilment of the ideal of leaving no one behind. In this context, achieving the targets of Sustainable Development Goal 4 requires countries to sustain a certain level and quality of public investment in education, first, by considering the prioritization and efficiency in public spending in the education sector and, second, by exploring innovative financing solutions, as well as facilitating private investment and partnerships in their education and social protection programmes.

35. **Digital divide:** As the pandemic hit the continent, African governments were obliged to rapidly roll out or scale up remote learning programmes, but the ideal preconditions for such a rapid roll-out were not in place. Evidence shows that a large proportion of students did not have access to, or did not participate in, the remote learning that was provided. The main reasons for this lack of access were: limited availability of distance learning (it was only available for specific grades in some countries); lack of digital facilities and connectivity at home and in education and training facilities; and unpreparedness and inadequate capacity to adopt online learning approaches, especially for those living in rural areas, thereby exacerbating the existing disparities.

36. **Lack of quality and timely data:** The availability of educational, demographic and labour market data is crucial to informing policy, plans and programmes. Most African countries, however, lack up-to-date data on education, covering such areas as enrolment, retention, learning assessment, teacher profiles, expenditure, learning impact and others. This limitation makes it difficult to measure performance against set targets within a country and secure comparable data between and among countries. One of the reasons for the paucity of data is that countries lack the financial and technical capacity to collect, analyse and publish timely education data. This is a major limitation and efforts need to be made to remedy this situation, since success in meeting the targets of Sustainable Development Goal 4, the Education 2030 Framework for Action and the Continental Education Strategy for Africa is contingent on countries’ ability to collect and analyse accurate data.

IV. **Opportunities and the necessary transformative actions, partnerships and ambition**

37. To harness the opportunities for transformative action, efforts need to be made in the areas outlined below.

38. **Fostering climate change education:** One emerging issue confronting the world is climate change and its associated negative implications. Global warming, droughts, floods and rising sea levels are real threats and must be decisively tackled. There is an urgent need to change consumption patterns and aim at sustainable
development of the planet’s limited and finite resources. Equally, it is imperative to explore alternative and renewable sources of energy to reduce reliance on fossil fuels that pollute the environment and contribute to global warming. Education can play a very important role in mitigating the effects of climate change. This can be achieved through the integration of relevant topics on the issue in curricula and encouraging the sustainable use of resources by taking up the subject in schools and educational establishments.

39. **Countering violent extremism and intolerance:** Violent extremism and intolerance, in forms ranging from religious extremism and cultural chauvinism to the marginalization of vulnerable groups, pose a threat to education. To eradicate the lies and ignorance that feed extremism, dialogue and constant interaction must be promoted between opposing groups to get to the source of such negative thinking and to challenge its proponents with reasons and facts. Education can play an important role in this dialogue and positive interaction. Extracurricular activities, school clubs, inter-school projects and other such undertakings are some of the mechanisms through which schools and educational institutions can lessen and help to eliminate the threats of extremism and intolerance.  

40. **Building flexible and resilient education and training systems to withstand future pandemics:** Although the COVID-19 pandemic disrupted educational activities, it also created opportunities. The resulting closure of schools and educational institutions accelerated the digitization of education and training in many African countries designed to ensure continued learning. Despite the challenges encountered, the lesson was learned that the development and use of technology present a huge opportunity for a flexible, inclusive education system and its continuity even during the pandemic. The combination of traditional face-to-face teaching and learning and distance education platforms offers a hybrid model for the development of more flexible and resilient systems of education. However, in deploying a flexible and resilient education system, governments still need to address the critical issue of school infrastructure, such as the availability of adequate classrooms, electricity and Internet connections, clean drinking water and sanitation facilities and computers. In addition, in the dynamic conditions of today’s world, opportunities for skills acquisition, upskilling and upgrading need to be made available.

41. **Implementing a digital transformation policy and agenda:** With the gradual adoption of technology in education and the desire of African countries to build flexible and resilient education systems for the future, it is important that they design appropriate and duly costed digital transformation policies and related agendas for implementation in the education and training sector. Operationalization of the DOTSS framework must be accelerated in countries to transform the education system on the continent. This will require increased government investment in digital infrastructure. This not only represents an opportunity to ensure flexibility of the education system but will also to a large extent address the issue of equity and inclusion.

42. **Strengthening partnerships for education:** While most African countries swiftly activated the technologies available to them at the time to continue delivering education – principally radio and television – the global community, under the Global Education Coalition launched in 2020 and comprising United Nations agencies, private sector technology companies, civil society organizations and others, promptly mobilized and provided technical support to countries in their efforts to continue delivering education. The support was delivered on a pro bono basis and ranged from the provision of online learning platforms, access devices and curated content to the capacity-building of teachers and university lecturers in use of the platforms and

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materials. This tripartite partnership needs to be leveraged to continue to support countries in their efforts to recover from the effects of the pandemic on education systems and to build resilient education systems that can withstand future pandemics. The ongoing review of the global education coordination mechanism needs to get closer to countries and increase the effectiveness of its support. This requires reform of the global, regional and national structures, along with processes to ensure the quality and relevant coordination of efforts to attain Sustainable Development Goal 4 and to put into effect the Continental Education Strategy for Africa.

V. Key messages

43. In the light of the above review, the following key messages are put forward for further consideration:

- **Focus on school inclusion and reduction of the number of schools’ dropouts**: African governments need to reduce dropout rates through supplementary programmes such as school feeding, free uniforms, and books. Every effort should be made to keep children where they belong – in school and learning – so that they can build a future. The undertaking to leave no one behind is a promise that should drive initiatives to educate girls, children living with disabilities, and other people who have historically been excluded from education.

- **Focus on foundational learning from an early stage to raise knowledge and skill levels**: To break the cycle of learning poverty, countries need to put emphasis on foundational skills driven by basic reading and mathematics at early grades. The earlier that learning takes place, the better.

- **Prioritize digital connectivity and capacities to achieve learning for all and skills development**: The DOTSS framework must be operationalized by fostering partnerships with the private sector (telecommunications firms) and technology companies in order to extend access to online learning resources to all children, including the most disadvantaged and vulnerable. Teacher training must be prioritized, including imparting digital skills to teachers, by exploring innovative ways to reduce the shortage of qualified teachers, especially through the use of information and communications technology.

- **Develop efficient and innovative education and training funding mechanisms**: Partnerships should be built with the private sector to increase domestic resources for education. More funding must be allocated to neglected but critical sectors, such as those of early childhood education, and technical and vocational education, where early investments pay off in the long run.

- **Invest in developing more resilient education systems**: A risk-informed planning approach must be developed for the education sector to develop resilient educational plans. This approach to education management should integrate assessment, teaching and learning, monitoring and evaluation within the same framework.

- **Invest in improving the production and synergies between education information management systems and labour market data**: Financial resources in national budgets should be earmarked for the production and management of education data and labour market data. It is critical to have relevant education and job training programmes to reduce the mismatch between education and the skills needs of the labour market. Effective coordination mechanisms and functional data repositories must be established at the levels of the regional economic communities and the African Union to enhance harmonization between different education data producers and sources.