

AU Outlook on Education Report



AFRICAN UNION

2014

Continental Report



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Acknowledgements

This Outlook on Education Continental report was produced on behalf of the African Union (AU) - Department of Human Resources, Science and Technology (HRST) - for the 2014 Conference of Ministers of Education of the African Union (COMEDAF) meeting by a team from ADEA WGEMPS.

Under the direction and quality assurance of Angela Arnott and Shem Bodo, the report has been developed with chapter contributions from the following:

- Key highlights – key writer, Simbarashe Sibanda (ADEA WGEMPS) with contributions from Angela Arnott (ADEA WGEMPS).
- Chapter on Gender and Culture – key writer, Ibrahima Bah Layla (ADEA Working Group on Non Formal Education).
- Chapter on EMIS – key writer, Brighton Mutasa (ADEA WGEMPS) with contributions from Tegegn Nuresu Wako (ADEA WGEMPS).
- Chapter on Teacher Development – key writer, Houraye Mamadou Anne with contributions from Angela Arnott (ADEA WGEMPS).
- Chapter on Higher Education – key writer, Mohamed Cherif Diarra
- Chapter on Technical and Vocational Education and Training – key writers, Ayele Adubra and George Afeti (ADEA Triennale Resource Persons).
- Chapter on Curriculum, Teaching and Learning Materials Development – key writer, Shem Bodo (ADEA WGEMPS).
- Chapter on Quality Management – key writer, Angela Arnott (ADEA WGEMPS).
- Chapter on Early Childhood Development – key writer, Sherri Le Mottee with contributions from Norma Rudolf, Pablo Stansbery.

Four ADEA WGEMPS researchers produced summary information from the regional economic community reports that fed into the continental report.

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Association for the Development of Education in Africa (ADEA),

African Development Bank (AfDB), 13, Avenue du Ghana – BP 323 – 1002 Tunis Belvedere, Tunisia.

Email: adea@afdb.org website: www.adeanet.org

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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



As the African Union's lead technical agency in monitoring the implementation of the Plan of Action for Education in the Second Decade, the Association for the Development of Education in Africa, ADEA, is pleased to provide this report which assesses national, regional and continental progress in the key priority areas of the Plan.

ADEA advocates a vision of Africa as a continent with high quality education and training geared towards promoting its much-needed critical skills for accelerated and sustainable development. Its mission is to serve as an open and flexible pan-African organization that informs and facilitates the transformation of such a system in the continent. We have working groups, task forces and inter-country quality nodes (hosted by member countries) focusing on key areas in education and training, all of whom work with the AU's Plan of Action in various ways. Governed by the a group of Ministers, which includes the Bureau of the Conference of Ministers of Education of the African Union (COMEDAF) and key development partners, we are proud of our achievements in ensuring that the African Union's Priority Areas in its Plan of Action are increasingly realized.

We believe that the frank and open exchanges among African ministers of education, senior education officials, stakeholders from civil society and the private sector are essential in promoting common understandings of the challenges and solutions for progress towards achieving our continental goals. The availability of relevant information is a sine qua non for informed decision-making and public discourse, and the development of information systems is an essential part of the transformation of our Ministries of Education into responsive learning organizations capable of solving the critical developmental issues in Africa. Building national, regional and continental capacity in this area has been a major contribution on our part to Africa's development.

This report is produced in partnership with the AU's Restricted Technical Committee on EMIS under the leadership of the continental body's Human Resource, Science and Technology Division. Key contributors to this assessment include the UNESCO Institute for Statistics which provided the essential performance indicator data on the member states to facilitate in monitoring the member states' progress in implementing the Plan of Action for the Second Decade of Education for Africa. This report will assist African ministries of education and training, development partners and other key stakeholders in charting the way forward post-2015 as the Second Decade comes to a close. Lack of quality up-to-date data for effective monitoring, evaluation and evidence based policy development remains a very big challenge for Africa. Where data is available, there is a need to be aware that statistics may hide significant national/regional variations in resources, performance and achievement.

We commend this report to you as essential reading in preparation for the Conference of Ministers of Education of the African Union meeting in April 2014 in Yaoundé, Cameroon.

Hamidou Boukary

Acting Executive Secretary




In January 2006, Heads of State and Government of the African Union (AU) launched the Second Decade of Education for Africa. Ministers responsible for education and training collectively adopted a Plan of Action proposing African-led solutions to Africa's challenges, in the education sector. The priorities of the Plan were consensually identified by African Ministries of Education, education and training institutions and development partners. Under the leadership of the AU Commission, seven areas of focus were identified for the Second Decade. These were: Gender and Culture, Education Management Information Systems (EMIS), Teacher Development, Tertiary Education, Technical and Vocational Education and Training (TVET), Curriculum and Teaching and Learning Materials, and Quality Management. An additional priority area of Early Childhood Development (ECD) was added in 2009 in response to lobbying from Member States and partners for its inclusion.

Now in 2014, close to the expiry of the Second Decade, it is necessary to review the performance of the Plan of Action so as to chart the way forward post 2015. Education has once again occupied centre stage in the African union, as the new 50-year strategy "Agenda 2063" places a premium on human capacity development and youth empowerment. Significant progress has been achieved at numerous levels but there is a high degree of variation and impact of the Plan on education development across the continent. Given the heterogeneity of Africa's countries in terms of their socio-economic development, it is understandable that there are different developmental trajectories. Nevertheless, the picture is emerging that consistent actions, either directly initiated by the Plan or aligned to it, taken at the continental, regional and national levels, are harmonising and strengthening Africa's ability to respond positively to its challenges. This is particularly so in striving towards creating continental norms and standards in EMIS, especially in the regional economic communities of SADC, ECOWAS, EAC and ECCAS. The role of the AU Observatory, hosted by IPED, was crucial in promoting these strategies. Further, continental mechanisms for harmonising qualifications and establishing quality rating of higher education in Africa are far advanced. The Pan African University has been launched, and the first three campuses in Kenya, Nigeria and Cameroon admitted their first students one year ago, while the fourth located in Algeria will become fully operational with their first students in September this year.

The Plan of Action also places strong emphasis on addressing the education needs of disadvantaged groups, in particular girls, women, youth and those affected by conflict. This advocacy, in particular on gender, together with the establishment of CIEFFA, an AU centre specialising in girls and women's education, has given impetus to monitoring and tracking the implementation of policies targeted at vulnerable groups. With the burgeoning numbers of unemployed youth, the focus of the Plan on TVET has achieved resonance with many countries placing this under-served sub-sector higher on their agendas. Skills development for sustainable development has in recent years become the centre of attention of education decision makers. TVET must be seen to include not as a tool not just for addressing the middle level and high end skill needs for growth sectors, but also as a powerful means for bringing illiterate and under-skilled people into the formal and non-formal sectors. Africa needs to manage and add value to its wealth of resources with its own qualified and skilled people.

Regional economic communities, many of which at the start of the Decade had no education desks, are increasingly playing their role in integrating the Plan of Action's priorities into their regional initiatives and coordinating member states within these activities. This is an area to which the AU needs to pay more attention as there is uneven development and resourcing for education-oriented activities in some regional economic communities. This disadvantages their Member States who place less importance on the collective and collaborative action envisaged in achieving the goals of the Second Decade.

One of the important developments so far is the fact that a number of major development agencies have aligned their education support programmes with the AU agenda. This enhances the possibility of achieving collective goals if the trend continues.



Dr. Martial De-Paul IKOUNGA
Commissioner for Human Resources, Science and Technology
African Union Commission

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ACALAN	African Academy of Languages
AAU	Association of African Universities
ACBF	African Capacity Building Foundation
ADEA	Association for the Development of Education in Africa
AfDB	African Development Bank
AMU	Arab-Maghreb Union
ANCEFA	African Network Campaign on Education For All
AQRM	African Quality Rating Mechanism
AsgiSA	Accelerated and Shared Growth Initiative Economic Plan, South Africa
AU	African Union
AUC	Africa Union Commission
CAPEFA	Capacity Building for Education for All Initiative
CEN SAD	Community of Sahel-Saharan States
CIEFFA	Centre International pour l'Education des Filles et des Femmes en Afrique
COMEDAF	Conference of Ministers of Education of the African Union
CONFEMEN	Conference des Ministres de l'Education des pays ayant le francais en partage (Conference of National Education Ministers in French-Speaking World)
DHET	Department of Higher Education and Training, South Africa
EAC	East African Community
ECCAS	Economic Community of Central African States
ECCE	Early Childhood Care and Education
ECCEA	Early Childhood Care and Education Authority
ECD	Early Childhood Development
ECOWAS	Economic Community of West African States
EFA	Education for All
EMIS	Education Management Information Systems
EU	European Union
FAWE	Forum for African Women Educationalists
FET	Further Education and Training Act, South Africa
HE	Higher Education
HEI	Higher Education Institution
HRST	Human Resources, Science and Technology
ICQN	Inter-Country Quality Node
IGAD	Inter-Governmental Authority for Development
IICBA	International Institute for Capacity Building in Africa
ILO	International Labour Organization
IPED	Institute Pan-Africain de l'Education pour le Développement (Pan African Institute of Education for Development)
MDG	Millennium Development Goal
MNAUSS	Mwalimu Nyerere African Union Scholarship Scheme
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
NEPAD	New Partnership for Africa's Development
NGO	Non-Governmental Organization
OER	Open Educational Resources

PACTED	The Pan African Conference on Teacher Development
PATC	Pan African Teachers Centre
PAU	Pan-African University
PIF	Policy and Investment Framework
POA	Plan of Action
PTR	Pupil to Teacher Ratio
REC	Regional Economic Community
SADC	Southern African Development Community
SAIDE	South African Institute for Distance Education
SMT	Science, Maths and Technology
SSA	Sub-Saharan Africa
TESSA	Teacher Education in Sub-Saharan Africa Initiative
TVET	Technical and Vocational Education and Training
UEMOA	Commission d'Union Economiqueet Monétaire Oues Africaine (West African Economic and Monetary Union)
UIS	UNESCO Institute for Statistics
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children's Fund
UNIFEM	United Nations Development Fund for Women
UNEVOC	International Centre for Technical and Vocational Education and Training
UNIVOC	UNESCO International Centre for Technical and Vocational Education and Training
WGDD	Women Gender and Development Directorate
WGEMPS	Working Group on Education Management and Policy Support
WGHE	Working Group on Higher Education
WGTP	Working Group on the Teaching Progression
WGCOMED	Working Group on Communication for Education and Development





Gender and Culture

- The majority of countries have gender policies, however, few of these have been comprehensively implemented due to varied reasons. Chief among these reasons is resource constraints, gender norms and limited mainstreaming.
- Far too many women on the continent remain illiterate, with 2 out of 3 adults who are illiterate being female. Although there has been progress since 2006, it has been very slow with adult literacy rates rising by 4 percentage points to 62 per cent in 2012, while the youth literacy rate remained relatively stable at 72 per cent. The trend remains that girls from rural areas are far less likely to go to school than either rural boys or urban boys and girls.
- Progress in improving girls' participation has been considerable. Access to pre-primary has been improved by mainstreaming pre-primary grades into the formal system. Despite this growth, access to pre-primary education remains proportionally low continentally. Boys and girls have gained equally from this improved access to pre-primary.
- In some countries, boys are marginally losing access to primary schooling with more girls enrolled than boys in Congo, Mauritania, Senegal and Tanzania. Overall, however, primary school enrolment trends still favour boys over girls. Data on survival to the last grade of primary was available from 22 countries in 2012. It is noteworthy that in half of these countries girls had a higher survival rate than boys, while their chances of reaching the last grade of primary was marginally lower in the remaining countries. Although data is scarce, this seems to be a continental trend.
- In subsequent education cycles, girls begin to increasingly drop out of school more rapidly than boys resulting in levels of gender disparity particularly skewed in favour of males at secondary and tertiary level. While Africa has seen a marked increase in female secondary school enrolments, albeit from a low base, one out of two of the reporting countries with data are close to or have achieved gender parity at this level (GPI of 0.88 and higher). Parity achievements are overshadowed by the low participation (GPI less than 0.68) of girls in Niger, Chad and the Democratic Republic of Congo. Policies aimed at overcoming gender disparities are most likely to succeed when they are part of an integrated strategy. Central African Republic, Guinea, Mali, Mauritania and Togo reported a GPI of 0.4 or less at tertiary level. Algeria, Lesotho, Seychelles and Uganda are, however, an exception, with female learners outnumbering males by huge numbers, a GPI higher than 1.5.
- In 2006, there were 33 million African primary school-aged children out of school. Although the total out of school population for 2012 is unavailable, there is some good news as 23 countries recorded declines in the out of school population.
- Algeria, Botswana, Burundi, Cameroon, Central African Republic, Chad, the Democratic Republic of Congo, Djibouti, Ghana, Madagascar, Mauritius, Morocco, Mozambique and Sao Tome and Principe reported less than 2 out of 5 of TVET enrolments to be female. Eight Member States reported a decline in the rate of female students' participation in TVET programmes, the most notable being the 15 percentage points decline in Burundi and the 12 percentage points decline in Ghana. During the six year period under review, some increases in percentage of female TVET students at secondary level were recorded, however, participation remains subdued with only Niger and Ethiopia having more than 50 per cent of TVET enrolment being female.
- Significant achievements have been made to empower girls and women in gaining access to education and training in some African countries. Developments and performance improvements have been uneven in other countries and these need to devote more attention and resources to this priority area.

Education Management Information Systems

- The phenomena of data blanks remain the norm across the various Member States and priority areas. The dearth of statistics to monitor the performance of education systems has limited the continent's ability to monitor and evaluate progress or make policy revisions that are evidence driven. The challenges facing member states in producing regular and timely quality statistical data has meant that the evaluation for the current period 2006 to 2012 is not conclusive nor is it comprehensive this is particularly worrying as 2015 is around the corner.
- An analysis of reporting rates of 46 countries shows that 30 of these countries had provide less than 30 per cent of the internationally required data in 2012. Of concern is the fact that some countries are providing less data in 2012 than they did in 2006. Across all the regions Gender and Culture and Early Childhood Development have the highest rate of availability in most cases more than 60 per cent of the data available. Higher Education, Quality Management and TVET reporting is generally weak with less than 40 per cent of the required data available.
- The AU EMIS Restricted Technical Committee leads the development of the monitoring and evaluation systems of the

Plan of Action for Education in the Second Decade. Despite resource constraints the RTC has been able to carry out its mandate with meetings in 2012 and 2014 deliberating on issues such as reporting on the Plan of Action and the harmonization of statistics. The customised AU HRST database has been developed, stakeholders and Member States have been trained and the population of data is at an advanced stage. The focus is increasingly on collecting national data directly from Member States to create African based continental databases; progress on this front has been slow.

- Four regional economic communities, SADC, ECCAS, ECOWAS and EAC, have all undertaken AU-led EMIS assessments of their Member States. Three of the regions have through Member State expertise developed and are in the process of implementing regional EMIS capacity building strategies to enhance policy, resource allocation, statistical processes and staff development.
- Four regional economic communities EAC, ECCAS, ECOWAS and SADC have developed similar regional codes of practice of EMIS which have been endorsed by Member States EMIS experts and in the case of SADC and ECOWAS by its ministers of education. These EMIS norms and standards have been further elaborated into assessment frameworks which will allow regional secretariats to monitor the quality of statistics of their Member States. A peer review process on EMIS has been conducted in the SADC region.

Teacher Development

- Advances have been made over the six year period in the provision of sufficient teachers to meet the demands of education systems and to ensure that all teachers are properly qualified and possess the relevant knowledge, skills and attitudes to teach effectively.
- Since 2006, teacher supply has significantly improved in many African countries with a third having data for 2006 and 2012 reporting an increase in teacher supply of more than 40 per cent. The number of teachers in Niger increased by 88 per cent and Burundi reported a 72 per cent increase in teacher numbers. Teacher numbers in Algeria, Cape Verde and Namibia are on the decline. The growth in teacher supply at secondary level is at an even faster pace., The data available reports that Burkina Faso, Burundi, Mozambique and Rwanda recorded increases in teacher numbers ranging from 109 per cent to 199 per cent. Male teachers continue to outnumber females at secondary level.
- When reviewing continental averages of pupil teacher ratios of 40:1 at primary and 21:1 at secondary level, the demand for teachers seems to be improving. Huge national and regional variations persist at primary level with 20 of the 35 reporting countries in 2012 having pupil teacher ratios larger than 40:1. At secondary level, some 14 out of the 20 reporting African countries face severe teacher shortages with the challenge being most acute in Central African Republic. Teacher provision and development in Africa remains a crucial factor which could hinder achievements of the African Union's plan of action.
- Notwithstanding a wide variety of national and regional situations, the overall African teacher qualification profiles are improving. The challenge, however, remains for teachers to be adequately qualified for the grade or level at which they are teaching. Challenges remain in harmonizing qualification frameworks, building the training capacity of countries, teacher migration/brain drain and the dire lack of mathematics, science, engineering and technology teachers whose supply is about half the needed demand.
- Teacher policies are seldom comprehensive and where they exist, are not fully implemented. Although there are signs of progress, the culture of social dialogue on teacher welfare issues remains largely confrontational in most countries, despite the fact that several reforms are being designed and implemented.

Higher Education

- Although the restructuring, rebuilding and revitalization of higher education that started a decade ago is gaining impetus across Africa, progress is slow and an overwhelming majority of member States are off track. Most countries have not fully integrated the four strategic objectives of the higher education into their own sector plans.
- The research environment remains replete with challenges, universities are predominantly teaching institutions rather than research institutions. Africa produces less than 1 per cent of the total quantity of research produced worldwide, putting the continent at the very bottom of all the global regions.
- Quality mechanisms at the continental level, such as the African Quality Rating Mechanism (AQRM) and the African Quality Assurance Network (AFRIQAN) are making steady progress towards improving quality in higher education. These improvements are achieved through vehicles such as the Revised Arusha Convention on the harmonization of degrees, grades, diplomas and other qualifications in the Africa region.



- The financing model of African higher education puts the bulk of the cost of education, including students' direct costs such as tuition and fees as well as stipends and bursaries, on government. The fact that higher education is capital and labour-intensive, many African governments have been unable to allocate adequate resources to the sub-sector. Africa allocated only 0.78 per cent of its gross domestic product (GDP) to higher education in 2012, with an average of 6 per cent being allocated to the entire education sector. National budget allocation to higher education in Africa varies between 1 and 25 per cent. Given its strategic importance for the continent's development, this subsector requires additional funding.
- Generally, higher education in Africa has gone through some expansion since 2006 with increased learner access. Despite this growth, access remains very limited in comparison to other continents and the profile of Member States is diverse. Expansion has been particularly rapid in Cape Verde, Central African Republic, Ghana and Lesotho with increases in total tertiary students per 100 000 inhabitants ranging between 132 per cent and 184 per cent. The highest tertiary student enrolment is in Algeria, Mauritius and Tunisia with more 33 learners per 1000 inhabitants. Challenges in accessing tertiary education is particularly acute in Seychelles and Niger with access levels of 1 tertiary learner per 1000 inhabitants.
- Enrolments in social sciences and business subjects are low and action has to be taken to ensure the enrolments are reflective of the sectors that are driving Africa's economic growth.
- Inequity in higher education is a challenge with fewer women and students from rural areas and vulnerable groups gaining access. With a few exceptions such as South Africa, Lesotho and Mauritius, where there is equity, higher education enrolments show a marked imbalance in favour of male students. Furthermore, even when the gender parity is not heavily skewed, the distribution profile shows disproportionate figures in favour of "soft" sciences.
- The expansion of private providers on the continent has played an important role in ensuring access to a wide spectrum of society. As access to higher education is expected to grow even more, the role of private institutions will continue to expand.

Technical Vocational Education and Training

- Countries and regional economic communities are undertaking reforms to revitalize their TVET systems. TVET is high on the agenda of governments, the discourse in TVET is about relevance and quality of training, employability, involvement of the private sector and that some countries have started to design training programmes in the priority economic sectors identified by the AU 2007 TVET strategy. However, there is a gap between policy formulation and policy implementation in Africa and the TVET has failed to meet its biggest objective, reducing unemployment.
- The TVET system, especially the formal one, is not expanding fast enough to absorb youth progressing normally into TVET and the huge numbers of school drop-outs. TVET enrolment rates on the continent vary from about 1 per cent of the school going age cohort in countries like Ghana, Niger, Ethiopia, Chad, Kenya, and Senegal to about 36 per cent in Rwanda. The numbers of school drop-outs are alarming, for half of the 27 countries where data is available for 2011, the transition rate from primary to lower secondary is less than 70 per cent, with 7 countries around 50 per cent.
- countries have increased the number of their teaching staff, notable increases were reported in Ghana, Ethiopia and Mozambique. This increase is in line with these countries recent targeted efforts to develop a skilled labour force. In many countries there is a need to upgrade teacher skills regularly to ensure TVET teachers are pedagogically and technologically better qualified. In Uganda, about 90 per cent of the teachers in the private TVET sector have not had any pedagogical training. Teacher qualification also appears to be a challenge in the ECOWAS and EAC regions.
- Countries have been slow to formalize internal or institution-based quality audit strategies. Efforts at developing credible and enforceable accreditation systems are undermined by the absence of standards and norms. National qualifications frameworks (NQF), necessary harmonization tools, are being developed via national and regional initiatives. The SADC region at large has developed NQF's while countries such as Mali, Rwanda, and Ghana have taken a sectoral approach and have initiated the design of a TVET qualifications framework. Progress in French-speaking Africa has been much slower. The informal and non-formal skills acquisition systems are now just beginning to be given some consideration in the construction of NQFs.
- Female enrolment rates in formal TVET are generally very low, where data is available for 2011, it does not exceed 54 per cent. Yet evidence suggests that women face more obstacles in finding employment due to lower achievements in the acquisition of foundational skills. Few countries have provision for targeted skills development opportunities.
- TVET information systems, including the monitoring and evaluation of TVET supply, demand and financing, are

woefully inadequate in most countries.

- There is an increased emphasis placed on the role of the private sector not only in financing skills-development but also participating in shaping its character. New partnerships, networks and alliances are implied.
- There has been extensive coordination and regional-level activity in the area of TVET in recent years from 2009 onwards by the regional economic communities of ECOWAS, EAC and SADC.

Curriculum Development and Teaching and Learning Materials

- Activities with regard to this priority area have been limited at the regional and continental levels. Efforts to analyse the status of curricula, literacy and the publishing sector in order to come up with a continental book policy framework, with guidelines for developing national and regional policies are ongoing but progress has been slow. The EAC has embraced African languages by the establishment of the Kiswahili Commission which promotes the development of the language for regional and international interaction for the political, economic, social, cultural, educational, scientific and technological development of East Africa. The African Academy of Languages (ACALAN) - A key resource of the African Union in the promotion of African languages- as of 2012, has proposed the use of Fulfulde, Hausa and Mendenkan as the working languages of the ECOWAS region.
- At a national level, numerous countries have undertaken major curriculum reviews with improvements of teaching and learning materials in their education strategic plans or plan on reviews.
- Many countries face challenges in employing properly qualified curriculum research and development personnel and finding the sustainable and innovative mechanisms for undertaking regular reviews. This can be attributed to the underfunding of education, lack of properly constituted programmes for enhancing the qualifications or expanding research opportunities for curriculum developers, material writers and those that compile learning and reference kits for teachers in order to enrich learning opportunities. The need to provide university and other courses run by educational institutions to constantly upgrade the knowledge and skills of curriculum staff is imperative.
- Considerable progress has been made in states like Kenya, Nigeria, Rwanda, Sierra Leone and Uganda which have aligned their curriculum to the trends of the 21st century by integrating ICT in teaching and learning as well as incorporating HIV/AIDS education into their education systems. In the EAC region a number of countries have made reforms to incorporate aspects of peace education in the curricular. The SADC region has institutionalised the use of information and communication technologies for distance learning through the Distance Education Association of Southern Africa (DEASA).
- The provision of adequate teaching and learning materials remains a challenge for the continent. There are gaps in international data provision on learner-textbook mapping, especially for the core subjects of Mathematics, Science and Reading, although some countries have this data in their national reports. Available data generally show that a textbook is shared between a large number of learners, especially at the primary education level, possibly due also to the increased access arising from the policy of universal primary education. This negatively impacts on the quality of education at this and subsequent levels.
- Data on Mathematics textbooks was available from 22 countries. Of these, 6 had a textbook for each learner. Seventeen countries reported a pupil textbook ratio better than 1 text book for three learners. Four countries faced challenges in ensuring an adequate supply of Mathematics textbooks but the degree of shortages varied from Mauritius which had a pupil textbook ratio of 1:1 while in Cameroon up to 14 learners shared a single text in 2012. The continent's record is mixed on this aspect with some countries making limited progress while the situation in others is worsening. The availability of reading textbooks is much better with 14 countries having less than 2 learners sharing a single textbook.
- The dynamic nature of Africa's labour market, the perennial conflicts on the continent, the impact of HIV and AIDS and the state of easy access to information as a result of technology, are tangible reasons for governments to regularly and constantly review the schools and institutional curricula and devise innovative ways of developing new teaching and learning materials against the backdrop of limited resources and the ever-changing societal needs. The Network of African Science Academies was established in 2001 to accelerate the pace at which member academies implement best practices to advise their governments on science, technology and innovation policy. It has since 2006 created three new African science academies in the SADC countries of Mozambique, Mauritius and the United Republic of Tanzania.

Quality Management

- Partly because of the cross-cutting nature of this priority area as well as the lack of any one organization championing the



cause of quality management, progress in achieving any of the associated activities in the plan of action has been mixed.

- Less than one third of African countries have quality assurance bodies of any kind, which illustrates the importance of increased focus on this goal. Nevertheless, since 2006 there has been progress in establishing continental and regional quality assurance mechanisms and frameworks in higher education, through the revised Arusha Convention. The SADC region has made huge inroads in this area with eight of the 21 African countries that have established higher education accreditation bodies found in the region. Efforts are ongoing to implement the Africa Quality Rating in EMIS with regions adopting EMIS norms and standards frameworks and the introduction of measures to standardize non-formal education provision in countries.
- The proportion of appropriately-aged learners is on the rise across the continent, with notable increases in ECOWAS and AMU regions. From the reporting countries, Eritrea has a huge challenge with only 33 per cent of primary learners being appropriately-aged. Net enrolment rate at secondary level is significantly lower than primary level with all regional economic communities except CENSAD reporting net enrolment rates lower than 30 per cent.
- It is critical to look at the costs of sustainable development when there is poor quality management of education and training systems. The automatic promotion of children from one grade to the next is practised widely in Africa and has had mixed results, leading to hidden and unreported repetition as well as higher numbers of illiterate primary school graduates. Reported repetition in Sub-Saharan Africa averages 15 per cent, which is the highest in the world.
- There were some seven African countries in 2012 where fewer than half of their learners remained to participate in the last grade of the primary cycle. Burkina Faso, Burundi, Ethiopia, Guinea, Madagascar and Mozambique reported declines in the proportion of learners completing primary level. Some countries, including Cameroon, Togo and Senegal have, however, realized significant inter-cycle transition and have increased the access to secondary school in a very short time period. Senegal recently reported a 29 per cent increase in transition.
- Data on education expenditure available from eight countries shows that 11 to 31 per cent of total government spending was on education. Overall, African countries invest a relatively large portion of their budget in the education sector, despite their relatively low GDPs per capita. During the period under review, the limited data signals an increase on public expenditure on education, reflecting increasing government commitment. The spending increases as one moves up the levels of education with public expenditure per pupil at primary level being some 11 per cent of what is spent on a tertiary student. Nevertheless, recent research indicates that in many African countries learner achievements are not keeping abreast with increasing investment in unit costs. This implies that considerable effort needs to be invested in improving quality management of education and training systems.

Early Childhood Development

- African governments have improved efforts to provide early childhood development, having recognized its importance in preparing children for primary education. Ministries of education are integrating pre-primary grades into the formal education system and countries are increasingly adopting ECD policies. More than one of every two Member States have included ECD in their sectoral or development plans and 11 countries have included ECD in the Fast Track Initiative Action Plan. Progress on implementation has, however, been slow as a result of limited prioritization at political, policy and budgeting level.
- The under six population constitutes about 130 million children in Sub-Saharan Africa, 20 per cent of its total population, face significant challenges of deprivation amongst them; poverty, food insecurity, stunting, malnutrition, health risks, violence, conflict including war and as a result are often seriously at-risk and ill-prepared physically and mentally for school.
- For development, education and health are inseparable. Average annual population growth rate is on the decline but remains high in most regions, particularly ECOWAS, with up to seven children per woman. AMU is, however, showing signs of weak or negative population growth rates. Infant mortality has been on the decline but despite these improvements infant mortality remains stubbornly high with some SADC countries reporting in excess of 100 deaths per 1,000 live births, while the ECOWAS region has some Member States which reported infant mortality rates of 90 deaths per 1,000 live births. The huge under six population points to a possible future increase in the participation of children in ECD classes.
- There is strong evidence to suggest that malnutrition exists in most of the Member States. In Burundi, 58 per cent of children under the age of five are stunted while the incidence of stunting in 15 countries is higher than 40 per cent. Incidences of wasting and underweight children is also high in South Sudan, Niger, Benin, Chad, Sudan, Madagascar and Eritrea.

- At regional level, there have been a number of initiatives to encourage young children to enrol in pre-primary classes. In SADC, early childhood enrolment stands at 45 per cent, on average, and is clearly progressing. In EAC, levels are particularly high in Kenya and Tanzania, where they are above 30 per cent, and increasing steadily in other countries. Considerable progress has also been achieved by eight ECCAS Member States, where pre-primary enrolment has more than doubled. In ECOWAS (with the exception of Cape Verde and Ghana) and IGAD, progress has been more timid and rates (19 per cent on average) were well below the continental average (28 per cent) in 2012. Statistics show that pre-primary gross enrolment ratios (GER) increased by 5 per cent in six years. The relative parity in boys' and girls' enrolments in pre-primary education, coupled with the high female representation at this level, are encouraging signs.
- Despite the provision of pre-service training for ECD teachers and the development of national ECD training programmes, the challenge of un- and under-qualified teachers working in ECD centres remain. Low salaries and inadequate incentives contribute to the increasing employment of unqualified staff at these centres. This is in addition to inadequate teaching and learning materials and minimal supervision and monitoring of ECD services.
- Clearly, major efforts are still required for the continuous development of more ECD policies and the inclusion of ECD in other multi-sectoral and sectoral policies and strategic plans. Greater emphasis must be placed on policy advocacy and implementation in this area.
- The current African Union goal must be revamped with a view to accelerate progress. Critical requirements for facilitating accelerated progress such as renewed political commitment, dedicated and innovative financing, emphasis on subsidies for the poor and disadvantaged and a wider adoption of quality standards and their implementation and monitoring must be addressed as part of this process.

Overview

The African Union, together with its member States and regional economic communities, agreed to adopt a plan of action on achieving a number of objectives aimed at transforming education and training on the continent over the decade ending in 2015. Ministers of education meet biannually to take stock of the status of implementation of this Plan of Action and make decisions on how to address shortfalls and agree on strategic responses. This year's review falls mid-decade and hence it is important in determining the appropriate responses in achieving the Plan's goals for the second half of the decade.

The AU Outlook on Education Report, a continental report on the status of implementation, aims to provide a picture of the actions taken at the continental, regional, and national levels to execute the Plan of Action of the Second Decade. Although it is premature to determine the impact of the decade on educational development on the continent, the present report, however, undertakes to identify some initial lessons that may inform the review exercise later in the year.

The report is based on desk-top research, the regional reports compiled by the respective regional economic communities, some country reports and other reports from development partners involved in education on the continent. The African Union Human Resources Science and Technology Division (HRST), with the assistance of the ADEA¹ Working Group on Education Management and Policy Support and other partners, has made considerable progress in building the capacity of member States and their regional economic communities to report on progress in implementing the Plan of Action of the Second Decade of Education. Since 2008, the ADEA Working Group, jointly with the two AU observatories - IPED and CIEFFA² - and the secretariats of the regional economic communities, made significant strides in establishing and training countries on a monitoring framework of some 55 indicators linked to the priority areas of the Plan of Action. An AU Outlook database, customized on the basics of DevInfo software, covering over 200 data variables for all countries from 2006 onwards, was created and is used for monitoring purposes. This is a dynamic framework, with new demands for data for emerging areas of interest, in particular the intersection between education and training and employment.

Methodological and Historic Considerations

The methodology for producing the AU Outlook on Education reports for the Conference of Ministers of Education of the African Union (COMEDAF) has evolved over recent years with the assistance of the AU's Restricted EMIS Technical Committee, led by the AU Observatory with assistance from ADEA and other partners, in particular UIS, UNICEF, the regional economic communities, namely SADC, ECOWAS and COMESA, and representatives of member States. Since 2008, this AU-led initiative has created a framework for monitoring the implementation of the Plan of Action, identified, piloted and elaborated the properties of key performance indicators for the priority areas, designed reporting templates,

¹ The Association for the Development of Education in Africa (www.adeanet.org).

² The African Union International Centre for Girls' and Women's education in Africa (www.cieffa.org).



and developed the AU Outlook on Education database on time series education indicator data.

Over 40 member States, through a series of workshops, were introduced to and encouraged to domesticate the Second Decade goals in their national strategies. They were involved in reviewing the key indicators of the AU framework and trained in their reporting requirements for COMEDAF, which included the capacity to extract information from the AU Outlook on Education database. Despite this effort and allocation of resources, the country responses in producing national reports were generally weak. SADC and ECOWAS regions were the most responsive but fewer than half of all African countries supplied the required information. Nevertheless, these national reports feed into the regional economic community reports, which were structured upon the AU monitoring and evaluation framework.

A key challenge facing the production of the regional and continental reports is the comparability of achievements of countries and regions. The issue manifests itself where quantitative indicators measuring performance are not equivalent. It is essential that definitions of indicators, programmes and education cycles are properly harmonized, so that like is compared with like. Subsequently, despite the desire to use nationally reported statistics, it has been unavoidable not to use international comparable data, sourced largely from UIS, as the basis for this comparison. Apart from UIS, other sources - including UNICEF, the United Nations Population Division, the Southern and Eastern African Consortium for Monitoring Education Quality (SACMEQ), the Programme on the Analysis of Education Systems (PASEC), the MDGs database from the United Nations Statistics Division and the United Nations Inter-Agency Group for Child Mortality Estimation - were also used. Countries filled the remaining gaps with national data, where appropriate.

Assessing EMIS Performance Indicators

This priority area is measured by a number of proxy measures which approximate whether a member State has comprehensive EMIS for all its formal levels of education - pre-primary, primary, secondary and tertiary. One of these measures is the availability of international data, sourced by UIS, for the eight AU priority areas in education.

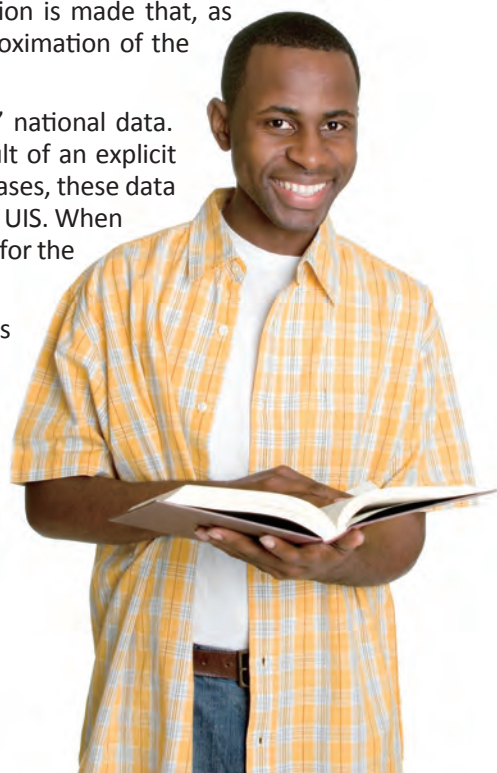
In order to establish a country's comprehensive coverage of performance indicators, a comparison is made of the expected number of indicators required against the actual number of indicators reported for each priority area of the Plan of Action.

Methodology for the Calculation of Weighted Regional and Continental Averages

In calculating regional averages for the AU education indicators, an assumption is made that, as a rule, some data are missing. In these cases, the regional average is an approximation of the unknown real value.

At UIS, regional averages are derived from both "publishable" and "imputed" national data. Publishable data are the data submitted to UIS by member States or the result of an explicit estimation made by the Institute based on pre-determined standards. In both cases, these data are sent to member States for review before they are considered publishable by UIS. When data are not available for all countries in the region, UIS "imputes" national data for the sole purpose of calculating regional averages.

In sum, the data informing the report rely to a considerable extent on the inputs from various partners, in particular UIS and ADEA, and also from regional economic communities and countries. The evaluation of performance, nevertheless, is informed by the framework of indicators developed by AU for monitoring the implementation of the Plan of Action.



Key Trends in the Implementation

The following chapters review progress achieved continentally, regionally and nationally on implementing the goals of the Plan of Action. The analysis is shaped by the matrix of agreed actions and interventions for each priority area found in the Plan of Action. The adherence to these strategies has not been consistent except in perhaps some priority areas, hence the degree to which progress can be measured against agreed benchmarks and outputs is tenuous. Implementation of the Plan of Action encountered a slow start-up in mobilising Member States, partners and regional economic communities, partly as Human Resource Science and Technology Commission was in the throes of establishing itself in 2006. In addition, the AU Observatory, the body responsible for monitoring implementation, was only officially launched in 2009 and although it has since played a significant role in coordinating and legitimating the process of creating a monitoring and evaluation system of the Plan of Action, it remains severely under-capacitated. Despite these challenges, the impact of the Second Decade on Education is progressively changing education and training developments on the continent. The subsequent chapters illustrate the sizeable achievements of countries and regions in reaching these goals as well as offering possible policy lessons on how to overcome the challenges in the second half of the Decade.

Priority Area I: Gender and Culture

Introduction

It is now widely recognised that the key to development lies in every country's citizens making an effective contribution to the common effort. This means that women and men of working age must have equal status, based on commonly-accepted cultural values and focused on the attainment of shared goals. However, research shows that women earn only a tenth of global income and own only 1% of the world's land, despite the fact that they work more than their male partners. To achieve greater equity, each of the partners should be given equal status and the culture of different contexts and situations should be given due consideration.

Education offers a highly effective platform for the promotion of gender equality. Education is a fundamental right and everyone must have access to it. However, as the UN Secretary General Ban Ki-Moon stated at the International Day for the Eradication of Poverty on 17 October 2013,

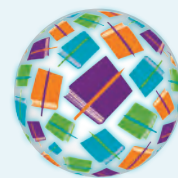
"Too many, especially women and girls, continue to be denied access to adequate health care and sanitation, quality education and decent housing. Too many young people lack jobs and the skills that respond to market demands. Rising inequality in many countries - both rich and poor - is fueling exclusion from economic, social and political spheres."

These rights are not yet fully enjoyed, despite the fact that access to quality education has been enshrined as a fundamental human right by numerous conventions. Of particular importance is the UN Convention of the Rights of the Child, which was ratified in 1989 and in which Article 28 stresses the importance of equal access to education. Also, the objectives of Education for All (EFA) and the Millennium Development Goals (MDGs) state that fundamental human rights will not be achieved without equality of opportunity for all sections of society.

Human rights are synonymous with equity and they begin with education. Access to education for all sections of society must be guaranteed by taking account of the wide range of needs and target groups, so that everyone can learn something that suits them. School curricula and literacy programmes must thus be adapted to ensure they meet the need for appropriate content. This would limit the number of school dropouts and reduce the rate of illiteracy, which is gradually increasing as the number of uneducated people grows. African cultures will play a vital role in the improvement of appropriate education programmes. They will be involved in the development of responsible, income-generating cultural industries.

There is an undeniable link between gender and culture. The considerable efforts to develop high-quality education will also ensure that current education systems are enriched by cultural input. This will also prevent mass-culture industries from generating inequality and from increasing prejudice against girls and women and discrimination against them. The 2012 ADEA Triennale provided an opportunity to reassert the need to take into consideration cultural aspects in education with a view to promoting equity through the inclusion of all sections of society.

The AU, UNESCO and their partners must step up efforts to help African countries fight against inequalities, in particular the unequal access to education for all. Such efforts should continue with the encouragement and provision of appropriate educational programmes to reduce school dropout rates. This will not be possible unless there is a real focus on African cultural values.



Guaranteeing Human Rights for All

Education is a fundamental right for everyone. It is guaranteed by Article 26 of the Universal Declaration of Human Rights of 1948, which states that: *“Everyone has the right to education. Education shall be free, at least in the elementary and fundamental stages. Elementary education shall be compulsory.”*¹ However, it is now clear that the Millennium Development Goals and EFA objectives will not be achieved by 2015. Current trends indicate that the number of uneducated children of primary school age fell from 108 million to 61 million between 1999 and 2004. On closer inspection of the data, some notable differences emerge. South and West Asia and Sub-Saharan Africa progressed at a different rate despite starting from a similar position. Between 2008 and 2010, the number of children outside school increased by 1.6 million in Sub-Saharan Africa, whereas the number declined by 0.6 million in South and West Asia.² Enrolment rates are even lower among girls, which can be explained by various factors such as poverty, the remoteness of certain rural areas, the existence of pockets of urban and peri-urban poverty, differential treatment according to gender and so on. However, the EFA Global Monitoring Report³ still states that disparities between boys and girls in the primary and secondary school enrolment rates have been reduced, but too slowly to eliminate them. They continue to be very high in French-speaking Sub-Saharan Africa. The same applies to South Asia. In 2007, girls accounted for 45% of the total number of children enrolled at primary school in Benin, while the percentage was 44% in Côte d’Ivoire and Mali, 41% in Niger and Chad, and 42% in the Central African Republic. Burkina Faso, Burundi, Guinea, Madagascar, the Democratic Republic of Congo (DRC) and Togo have percentages between 45 and 49%.⁴ Only Senegal (50%) and Rwanda (51%) achieve parity for this age group.

Such disparities also exist between rural and urban areas. If this problem is not dealt with, the objectives will not be met by 2015 because girls and women account for two-thirds of the 796 million illiterate people in the world. They constitute the most neglected group as far as education is concerned. The right to education should be a reality for everyone, and not just a slogan.

Ensuring Universal Access to Education

Universal access to education is the goal that international organisations and governments have set themselves within various international fora. Everyone has generally committed themselves to achieving universal primary education and eliminating gender disparity at all levels of education by 2015. Actions to promote access include measures such as free schooling at primary level, support for post-primary education, better training for teachers and increased funding for literacy programmes so that they account for at least 3% of education budgets. But here is no denying that, despite these measures, several countries, especially in Sub-Saharan Africa and South and West Asia, are struggling to provide education and literacy training for all their citizens. According to UNESCO statistics, over 72 million primary school-age children are not enrolled at school, while 775 million adults are illiterate and lack the skills they need to improve their lives and those of their families. 52% of children outside school across the world are in Sub-Saharan Africa and 54% are girls.

The many reasons for the lack of access to education include poverty, conflicts, lack of infrastructure, gender inequality, cultural identities that exclude others, reduced funding for education, and so on. The EFA Global Monitoring Report for 2013 estimates that in 14 countries (including Afghanistan, China, the Democratic Republic of Congo, Somalia, pre-secession Sudan and the United Republic of Tanzania), more than one million children had no access to school in 2011. In countries affected by conflict, of the 28.5 million children of primary school age not in school, 95% live in low or lower middle income countries. Girls, who account for 54% of the population in these countries, are the worst affected.

The problem is particularly serious for groups with special educational needs. According to recent research conducted in four countries, the children who have the highest probability of suffering from a disability are the least likely to go to school. The extent to which they are disadvantaged depends on the type of disability.

¹ United Nations, 1948, Article 26

² EFA Global Monitoring Report, 2012, page 8

³ EFA Global Monitoring Report, 2011. *The hidden crisis: Armed conflict and education*

⁴ EFA Global Monitoring Report, 2010, UNESCO, page 364

Ensuring Gender Parity in School Enrolment

The EFA Monitoring Report stipulates that: *“Gender parity - ensuring an equal enrolment ratio of girls and boys - is the first step towards the fifth EFA goal. The full goal - gender equality - also demands appropriate schooling environments, practices free of discrimination, and equal opportunities for boys and girls to realize their potential.”* In spite of having made significant progress, 68 countries have not yet achieved gender parity in primary education and girls are disadvantaged in 60 of these countries.⁵ This is also the case at secondary education level. While countries such as Ethiopia and Senegal have made extraordinary progress, others such as Angola and Eritrea have fallen behind. This situation varies in other African countries, where gross enrolment and admissions rates vary widely. Countries such as Burundi, India and Uganda have made sufficient progress to have now reached gender parity. This has been achieved through a combination of measures such as community involvement and specific support for girls regarding educational materials, funding, and so on. On the other hand, 97 countries fail to achieve gender parity at secondary level, with boys being less likely to be educated than girls. These countries are in Latin America, the Caribbean, Asia and the Pacific. They tend to be richer and enrolment rates are generally higher. Africa tends to have much lower levels, less than one in five in countries such as Niger, Chad, Burkina Faso, Mozambique and the Central African Republic.

With regard to literacy, Peter B. Easton, in his article *“Creating a ‘Literate’ Environment: Hidden Dimensions and Policy Implications,”*⁶ notes that: *“From an equity perspective, only three African countries of the 40 for which data are available have attained or exceeded gender parity in literacy rates (Botswana, Lesotho and Seychelles); three others are within 5% of parity; and only nine of the forty have gender parity indices above the average for all developing countries.”* This means that significant progress is required in order to achieve gender parity. This is for the same reasons as those mentioned above, namely poverty, socio-cultural obstacles, unsuitability of programmes and so on.

Children Who Have Never Attended School or Who Have Dropped Out

Children who have never attended school include those of school age who are unable to do so for various reasons, and most frequently due to conflicts, poverty and social marginalisation. In general, the richest countries have managed to curb the problem of non-attendance. Some middle-income countries have made progress. In Africa, where there are a variety of situations, the most alarming cases are in Sub-Saharan countries.

School dropouts are those who have had access to school but did not stay long enough to acquire a complete basic education. They include children, adolescents and adults. In addition to the above-mentioned reasons for non-attendance, people drop out of school due to factors such as the school’s educational content being ill-suited to the needs of the persons concerned, problems of accessibility (distance), unsuitable curricula, and so on.

According to the EFA Global Monitoring Report,⁷ 57 million children across the world were not in school in 2011, which means that the goal of universal primary education will not be achieved by 2015. This situation has been characterised by bad and good figures between 1999 and 2011, and the number of children out of school has fallen. The numbers fell by 1.9 million in 2010 and 2011, equivalent to a 25% decrease on the average numbers seen from 1999 and 2004. Sub-Saharan Africa lags far behind other areas in this field. For example, 22% of primary school-age children in 2011 are not in school. Half of all children are in school for less than 4 years. In some countries, such as Somalia and Burkina Faso, over 50% of children are enrolled in school for less than 2 years.

Aside from the high number of children outside school, the situation is particularly bad for girls, especially in Sahel-Saharan Africa and the Maghreb. Almost half of the children outside school in the world have no chance of going to school one day. This is above all the case for nearly two-thirds of girls in Arab states and Sub-Saharan Africa.

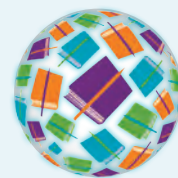
There were 69 million adolescents out of school in 1999. The numbers fell by 31% up to 2007, but the situation has levelled off since then. In Sub-Saharan Africa, 22 million adolescents out of school were registered in 1999 and the situation remains unchanged today. This is partly explained by the effect of population growth in this region.

The Issue of Children Dropping Out of School

According to Irina Bokova, Director-General of UNESCO, *“the countries in sub-Saharan Africa account for more than half of all out-of-school children and have the highest out-of-school rate. More than 20 per cent of African children have never attended primary school or have left school without completing primary education.”* The Director-General also pointed out the lack of progress made in reducing dropout rates. Approximately 137 million children started primary

⁵ 2010 Education for All Global Monitoring Report, UNESCO, page 14, summary
⁶ General Report on the ADEA 200 Biennale, Libreville, 2006

⁷ EFA Global Monitoring Report, 2013. Résumé. Paris UNESCO, p 9



school in 2011, but at least 34 million children are likely to leave school before reaching the last grade. This means that the early school dropout rate is 25%, which is the same as in 2000.

The number of school-drop outs, which includes those who fail as well as those who drop out, is still very high in Sub-Saharan Africa. The percentage of children dropping out before the end of primary school has remained more or less the same since 1999. The UNESCO report states that, in the world, in 2010, nearly 75% of primary school children reached the last year of this level. In Sub-Saharan Africa, the percentage of children reaching the final grade is declining. It has fallen from 58% in 1999 to 56% in 2010. However, in the Arab States, where the situation is improving, the percentage increased from 79% in 1999 to 87% in 2010.

The EFA Global Monitoring Report for 2013 points out that to determine whether EFA has been achieved, the primary completion rate must be taken into consideration, and not just the enrolment rate. However, of the 90 countries with available data, in only 13 will 97% of children reach the last grade by 2015. Ten of these are members of the OECD or the EU.

School dropout rates are particularly noticeable for girls. Despite a significant improvement in the primary completion rate in recent years in West Africa, and particularly in Burkina Faso, the dropout rate for girls is very high: in 2011/2012, the primary completion rate was 53.7% for girls and 56.6% for boys.⁸

According to Madelaine Kaboré/Konkobo,⁹ in Burkina Faso, boys repeat more than more than girls in the first three years. For the last three years, it is the other way round.

In non-formal education, the gap is even more noteworthy because, despite the mass registration of women in education and literacy centres, they account for the largest proportion of dropouts, mainly due to socio-cultural obstacles, economic problems, inadequate curricula and so on.

Improving Literacy Programmes

Literacy is crucial for the social and economic wellbeing of adults and adolescents who have not had access to school or who did not stay there for long, and of their children. It is a fundamental human right. According to the 2012 EFA Global Monitoring Report, some 775 million adults are still illiterate, of whom almost two-thirds are women. More than a fifth of illiterate people live in Sub-Saharan Africa. The situation displays no signs of improvement. About three-quarters of all illiterate adults in the world live in ten countries (India, China, Pakistan, Bangladesh, Nigeria, Ethiopia, Egypt, Brazil, Indonesia and the Democratic Republic of Congo). At the African level, adult literacy rates Arab states are rising sharply. Unfortunately, population growth is hampering progress. In Sub-Saharan Africa, the result has been a 37% increase in the number illiterate people since 1990, to a total of 182 million in 2011. The numbers are likely to keep going up until 2015.


These literacy challenges must be addressed as soon as possible, as has often been noted, for example by the Belém Framework for Action resulting from the Sixth International Conference on Adult Education (CONFINTEA VI). This acknowledged that, despite the progress that has been made in improving the literacy of young people and adults, it is imperative to develop larger-scale and more integrated literacy programmes with a wider scope and improved quality for all sections of society, particularly women, specific groups and people living in rural areas.

At the 2012 Triennale in Ouagadougou, ADEA directly tackled the problems facing education, and in particular non-formal education, through Sub-theme 1 on Common Core Skills for Lifelong Learning and Sustainable Development in Africa. This is why the Working Group on Non-Formal Education has developed a policy framework for a holistic, integrated and diversified vision of education, which has been put into practice. The results were presented in the context of Sub-theme 1 of the Triennale. This policy framework has been translated and published in French, English and Portuguese. It has been widely disseminated. Countries such as Burkina Faso, Senegal, Cape Verde and Benin have already begun taking into account the holistic vision in their education policies.

This work is continuing within the Group through a study on the development of a conceptual and methodological approach for a set of common core skills integrating the holistic vision and non-formal education. The objective is to provide ministries of education with a tool to promote an integrated and diverse vision of education.

In 2013, the Working Group on Non-Formal Education also developed a network concerned with vulnerable youngsters, with a view to meeting their needs in education programmes. It has done this in collaboration with the Canadian International Development Agency (CIDA) and the UNESCO Institute for Lifelong Learning (UIL).

⁸ The implementation report for the Strategic Development Programme for Basic Education (PDSEB), January to December 2012
⁹ Article published in 2008



This process is being continued at sub-regional level with multi-country action research on measuring the learning outcomes of participants in literacy programmes run by the UIL (RAAMA) in collaboration with the Regional Office for Education in Africa (BREDA), the UNESCO multi-country offices and the education ministries of five countries (Burkina Faso, Mali, Morocco, Niger and Senegal).

In 2013, the Inter-Country Quality Node on Literacy and National Languages started developing criteria for assessing alternative forms of education and training in order to provide its members with an evaluation tool to support decision-making. An assessment and analysis on the roll-out of alternative forms of education and training is also being undertaken by the Swiss Agency for Cooperation and Development (SDC) at the sub-regional level through its regional education and training programme.

Strengthening the Synergies Between Culture and Education

Culture plays an important role in people's lives and it is transmitted through education (social groups, family). In modern education systems, what role should indigenous African knowledge and know-how play in the big village that world has now become?

Bodies such as the UN General Assembly, UNESCO and ADEA have recognised the need to take account of indigenous knowledge in the development process. Better integration of traditional knowledge with modern know-how has become a requirement for education. This complementarity is all the more necessary because it takes into account the diverse range of participants and needs.

In 2005, the Convention on the Protection and Promotion of the Diversity of Cultural Expressions drawn up by UNESCO recognised that culture is a pillar of sustainable development.¹⁰ A final document of the 2005 Summit on the MDGs also acknowledged the world's diversity and noted that all cultures contribute to the enrichment of humankind.¹¹ More recently, in 2011, the General Assembly of the United Nations adopted Resolution 66/208 on Culture and Development, reasserting that culture is a key aspect of social integration and the fight against poverty. It ensures economic growth and helps people take ownership of development activities.

These conventions and resolutions demonstrate the importance of taking cultural aspects into account in different fields of development. Education is thus an important vector for the transposition and transmission of African cultures. Transposition takes place primarily through language. It begins with the recognition of local languages, whether or not they are classed as minority languages in policies, by incorporating them into educational programmes. There is also a need to integrate and take African cultures into account in the educational curriculum and in the manner of teaching (interculturalism). Aspects such as music, theatre and dance can be incorporated into learning materials.

In view of the Africa's cultural diversity, it is essential for schools to be integrated into the community. Endogenous knowledge and know-how must be taken into account to ensure that each group benefits. Culture constitutes a challenge for African educational programmes, to reduce dropout rates and improve access, equity and quality. The Charter for African Cultural Renaissance approved in 2005 supports the introduction of African cultural values in educational programmes. ADEA also encourages the promotion of African languages and multilingualism.

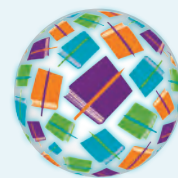
Bearing in mind the lessons learned from the Triennale, ADEA's Working Group on Non-Formal Education is currently conducting research on endogenous knowledge and know-how and looking at ways to use them as a means of promoting the integration of schools within the community. Related work is being carried out by ACALAN on topics such as research into languages spoken in border regions. A Hausa glossary has already been produced, for example. Several books are also being produced by ADEA and its partners on policies for incorporating African languages into education systems, on African languages and multilingualism, the introduction of languages into educational systems, and gender and culture. These books are available on the WGNFE website.¹²

The integration of culture in a globalised world will pose enormous challenges. It will be necessary to find a way of combining acculturation with the development of ICTs, which must be used carefully in education in order to limit potentially negative effects and enhance potentially positive ones. ICTs clearly offer an effective way to disseminate and promote African cultures across the world. They constitute a driving force in cultural industries in countries across the continent. However, they can also create serious problems and must be controlled to ensure they do not become Africa's Trojan horse. They must not be allowed to further the acculturation of the continent's sons and daughters or instil values contrary to those necessary for the development of their full potential and harmonious integration into the 21st century world.

¹⁰ Article 13

¹¹ Paragraph 14

¹² www.GTENF.ORG



The other question that arises is how to preserve the specific nature of local cultures while integrating them into the vast world of communication and information. How can education systems be reformed in a way that ensures they both integrate endogenous African knowledge and know-how and promote the successful use of a range of new technologies? How can the acceptance of cultural difference be guaranteed? It will be necessary to identify an appropriate and suitably sensitive approach. It will also be vital to invest in local resources, knowledge and expertise in order to develop initiatives that recognise cultural diversity, which will promote social stability through open and ongoing dialogue.

Conclusion

The issue of how best to take gender and culture into consideration in education remains a major challenge in Africa, particularly in Sub-Saharan Africa. Despite considerable efforts, access, equity and quality are hard to achieve. It is still difficult to eradicate illiteracy and reduce the high numbers of children who have never been to school or drop out during their education. Too many people still lag behind for various reasons, including inaccessibility, unsuitability of curricula, insufficient educational resources and so on.

Human rights are synonymous with equity and they begin with education. We need to develop an education system which all sections of society can access, and which is attentive to the wide range of needs and target groups, so that each individual can learn something that is suitable for them. Educational curricula must thus be adapted to reflect different cultures and values. This would help reduce the number of dropouts and curb illiteracy, which is becoming more widespread every year mainly due to high numbers of uneducated people. African cultures will play a vital role in improving education programmes and in ensuring they are suitable. They will also promote wellbeing by sustaining cultural industries, which will provide a substantial income for local populations.

This is why it is possible to say that the three-way relationship between gender, culture and education is fundamental in order to secure development, because the struggle against inequality in education will also entail the incorporation of African cultural values. Quality education must offer each individual something to suit them. It must meet the needs of all sections of society and develop critical knowledge and skills to enable people to take responsibility and further themselves. There must be an extensive review of African education and training systems (management, planning, educational curricula, teaching / learning approaches, assessment, etc.). This process will focus constantly on access, equity and quality. All relevant potential learning opportunities would be integrated to meet needs of a wide range of participants and provide openings for everyone. It will be necessary to promote and pursue education policies which have an integrated vision covering the different levels (pre-school, primary, secondary and tertiary) and types of education (formal, non-formal and informal), while constantly bearing labour market needs in mind and helping people to develop their full potential.



Priority Area 2: Education Management Information Systems (EMIS)

A major determinant of the analysis of existing education policy interventions and the development of context-appropriate education policies and strategies, assessment of progress made in some global education initiatives like the African Union Plan of Action, Millennium Development Goals and Education for All for Africa is the provision of timely, publishable and credible education statistics for Africa. EMIS is key to the actualisation of the above international treaties which includes the Plan of Action for the Second Decade of Education for Africa.

The primary goal of the EMIS priority area is to reverse the current phenomenon of 'data blanks', the provision of statistics on the performance of education systems. This priority area is very critical in the Plan of Action given that it is cross-cutting priority area since it provides data and information which will tend to be used to monitor progress in other priority areas. This is in recognition of the challenges facing member states in producing regular and timely quality statistical data. Africa needs to develop its own data with comprehensive databases that are comparable across countries particularly during this era when the discourse on national data has taken centre stage in most of the international statistically-oriented conferences and platforms across this continent. This priority area aims to promote sustainable EMIS at the continental, regional, and member state levels, while ensuring that rigorous monitoring and evaluation of education activities are in place. Importantly one of the goals is to establish an African Education Observatory, managed by the AUC, as a vehicle for coordinating EMIS activities.

Monitoring the Plan of Action

ADEA WGEMPS being the secretariat of the AU EMIS Restricted Technical Committee which decides upon the monitoring and evaluation systems of the Plan of Action for Education in the Second Decade, has traditionally funded, facilitated and coordinated this committee's annual meeting.

The EMIS Restricted Technical Committee's primary role is to provide technical advice and quality assurance to the African Union's Observatory on methodological, logistical and feasibility issues related to the implementation of the EMIS priority area of the Second Decade of Education for Africa Plan of Action. The committee is limited to AU specialized institutions, key representatives of Regional Economic Communities (RECs), countries being represented on the AU Bureau of Ministers and development partners having expertise and knowledge in the related to monitoring education and training developments. The main mandate of the Committee is to obtain expert consensus and to advise the AU HRST and its Observatory on EMIS.

With the advent of budget cuts ADEA WGEMPS strengthened its resource mobilisation strategy and sourced funds to undertake the 2012 and the 2014 EMIS Restricted Technical Committee meetings. Consequently, the December 2012 meeting was funded by the GIZ BackUP and the April 2014 meeting was co-funded by the GIZ BackUP initiative and the African Union Statistics Division.

The 2012 EMIS Restricted Technical Committee was attended by AU Education, Statistics and Youth Divisions; Representatives of Ministries of Education from Ethiopia, Burkina Faso, Zimbabwe and Nigeria; Regional Economic representative from East African Commission (EAC); UNESCO Regional office, UIS Montreal Office, UNESCO International Institute of Capacity in Africa (IICBA); ADEA Working Groups on Education Management Support, Early Childhood Development and Non Formal Education; Conference of Ministers of Education in countries sharing the French language (CONFEMEN); and the AU/UNESCO Centre for the Education of Women and Girls (CIEFFA). Below are the main issues that were discussed in this meeting;





- Monitoring the implementation of the Plan of Action
- Review of outcomes of AU Pilot of Indicators Study
- Presentation of the updated AU Outlook on Education database.
- Review of UIS African database and indicator development
- Review of ECD matrices and associated indicators.
- Review the LMIS -TVSD and associated indicators
- Update on AU EMIS initiatives on the continent.
- HEMIS Initiative for Zimbabwe and Burkina Faso
- Non Formal Education, ICT, Out of School and National Languages indicators

A Communique for the 2012 Forth AU Restricted EMIS Technical Committee meeting was jointly produced by the members in attendance.

The 2014 EMIS Restricted Technical Committee was attended by AU Education , Statistics and Youth Divisions; Representatives of Ministries of Education from Ghana, Nigeria, South Africa , Namibia and Cameroon; Regional Economic representative from (ECCAS); UNESCO Institute for Statistics (UIS) Montreal Office; ADEA Working Groups on Education Management Support, UNICEF EAST AND SOUTH AFRICA REGIONAL OFFICE (ESARO) , Conference of Ministers of Education in countries sharing the French language (CONFEMEN); GIZ , African Population and Health Resource Centre (APHRC); SACMEQ and the AU/UNESCO Centre for the Education of Women and Girls (CIEFFA). Below are the main issues that were discussed in this meeting among other things discussed the following;

- COMEDAF VI reporting process
- The Strategy for the Harmonization of Statistics in Africa (SHaSA) and outcomes of DGs of NSOs meeting
- Presentation of the Youth Charter Indicators
- AU Pilot of Indicator report
- Presentation of updated AU Outlook on Education database
- UIS African database and indicator development
- APHRC presentation on findings on African Working Group Data for Development
- Monitoring women and girls education and training
- Regional and Global Perspectives on Early Childhood Development
- Monitoring learner achievement
- Monitoring learner achievement
- Presentation of EMIS initiatives in the Regional Economic Communities (RECs) and the member states
- GIZ's donor initiatives in planning, finance and M&E

A Communique for the 2014 Fifth AU Restricted EMIS Technical Committee meeting was jointly produced by the members in attendance.

The African Union Outlook on Education Database

ADEA WGEMPS over the past years, as the lead technical agent for the African Union (AU)'s Human Resource Science and Technology Division's (HRST) Observatory, has developed a customised database for monitoring the AU's Plan of Action (PoA) for Education in the Second Decade. It has over 137 data variables covering all Member States from 2006 to 2012. Member States and the African Union Commission (AUC) have been separately trained on using the database as a basis for developing country, regional and continental reports for monitoring this PoA. The data source has largely been that of the UNESCO Institute for Statistics and UNICEF.

Recently, Heads of State, urged the African Union to commit itself to collecting national data directly from Member States to create African based continental databases. This is a significant departure from previous practices where statistics were produced internationally by other agencies.

In the light of this, the AU Statistics and HRST in collaboration with ADEA are pursuing launching the database online for countries to upload their national statistics directly. ADEA is exploring hosting arrangements with the Indian based

DevInfo Support Group after a successful testing of the database with its local area network in Harare. Key issues under consideration include the protecting of the AU identity through a unique domain name, having real time data entry, and the need for a multi stage quality assurance process by AUC and ADEA WGEMPS. This initiative is a major breakthrough which will ultimately address the perennial data blank phenomenon in Africa.

It is critical to note that one of the important products of this database this continental AU Outlook on Education report as well as its regional counterparts.

Development of African Union Education Indicators Manual

By mid 2009, an initial set of indicators for the monitoring and implementation of the AU Second Decade of Education by the member states was agreed upon and a manual produced. The indicator manual ensures a common understanding and outlines to calculate and interpret the selected indicators. The indicator manual is regularly updated through discussions held with member states, partners and experts in order to improve its quality. In 2010, the AU Restricted EMIS Technical Committee agreed to modify the initial set of indicators, to add indicators to measure the new priority area of Early Childhood Development (ECD) and to pilot some problematic and untried indicators. In 2011, a revised indicator manual was produced and disseminated to member states⁶⁶.

In order to build the capacity of the CIEFFA, as well as to ensure the gender dimension of the AU monitoring and evaluation framework, ADEA trained over 60 AU/CIEFFA gender focal persons on indicator development in a Francophone (2009) and Anglophone (July 2010) workshops. An outcome from this exercise was an updated list of key indicators which CIEFFA uses to monitor girls and women's education and training.

Piloting of AU Indicators

In response to the need to improve and strengthen the AU monitoring of its Plan of Action for Education in the Second Decade, and as proposed by the AU EMIS Restricted Technical Committee which took place in 2012, ADEA WGEMPS undertook a pilot study of new and challenging indicators in the areas of TVSD, Higher Education, Information Technology, Out of School, languages and Non Formal Education. Terms of reference were drafted and Zimbabwe and Burkina Faso selected as pilot countries. Ministry representatives from both basic and higher education and the national statistical offices were established and collaboratively undertook the study investigating the feasibility of some 25 new indicators. The Burkina team, however, failed to continue because of funding constraints but Zimbabwe completed the study and a report was published. This is to be launched by the Minister of Higher Education, Zimbabwe at a proposed conference in 2014.

Regional EMIS Initiatives ECOWAS

Involvement of ECOWAS in the EMIS programmes is traceable to its workshop at Lome in 2010 which produced a status report, identified common challenges and made concrete recommendations. The workshop was graced by the participation of focal persons from EMIS units of Member States and partners from UNESCO, UNICEF, ADEA, AU Observatory and others. As a result, the Education and Statistics Divisions of ECOWAS Commission, in partnership with the technical and financial partners - ADEA, UNESCO, AfDB, and the AU Observatory and Member States, undertook a number of actions and activities for strengthening the capacity of Ministries of Education and Training to establish robust and reliable education statistics production systems. These activities were aimed at equipping Member States to effectively support education policy planning and development as well as the sound utilization of the resources made available to the entire education sector. Regional efforts already made by ECOWAS and partners are enumerated as follows:

Since then, the following activities have been embarked upon with technical assistance from the ADEA WGEMPS;

- EMIS sensitization workshop
- EMIS Assessment Survey
- Inauguration of the regional EMIS Committee
- Development of EMIS Norms and Standards
- Adoption of ECOWAS EMIS Norms and Standards
- Validation of the ECOWAS EMIS Norms and Standards by Ministers of Education
- Development of a regional EMIS Capacity Building Strategy





EAC

The African Union's EMIS initiative for EAC was launched in 2011; Since then, two phases, of the three-phased strategy, have been completed ; These are the assessment of EMIS capacities of EAC Partner States (2012) and The development of a strategy for capacity building (2013) and the third phase, which involves advocating best practice and benchmarking countries is being planned for July September 2014, funds availability being the determining factor

This phase will aim at building capacity that will be able to produce quality education statistics, through a peer review process of the national EMIS; This process will use Norms and Standards Assessment Framework, containing 17 norms and 84 standards, the EAC peer review draft framework (attached) will be worked by the EAC EMIS experts within the stated period.

The EAC Secretariat will be focusing its activities on the areas of focus given below within the period from 2014 to 2016:

- Harmonisation of the eac education system and training curricula
- Teachers and teacher education
- EAC centres of excellence
- The youth in the EAC development agenda.
- E-learning in education strategy
- Mutual recognition agreements
- Science and technology

WGEMPS became proactive in the finalization of the East African Community's (EAC) capacity building strategy for EMIS earlier in the year. In a more subsequent phase in the same AU initiative, the regionally customized EMIS Norms and Standards Assessment Framework was adopted for the ECOWAS region by its Ministers of Education at their annual meeting in November 2013 in the Gambia.

ECCAS

EMIS in the ECCAS region is still in its infancy. ECCAS undertook a regional workshop and an EMIS Report validation workshop as well as an

Education Ministerial Conference. Some agreements made in these meetings are:- All the member states to have national focal points both at Education Ministry and at the NSO whose main mandate is the validation of national statistics before sending to the ECCAS Team. The regional validation workshops are key to ensure that data from all the member states are properly validated.

Some of the challenges facing the region in the implementation of EMIS are:-

- Lack of financial resource to support EMIS in this region
- Gap between member states commitment expressed during the Summit or Ministerial conference and their contribution to provide money to fund ECCAS PoA. ECCAS need more support by partners
- Weak coordination between the education ministries and the NSO at the national level and between Statistic Division and the Education Division.
- Lack of human resource both at Statistic Division and at Education Division who are responsible for the coordination of activities for 10 Countries

SADC

In 2013, WGEMPS was instrumental in the supporting regional economic communities in line with the AU Plan of Action. It supported the SADC Secretariat to produce a Ministers report on the performance of member countries in key education areas to facilitate dialogue at the annual Ministers of education meeting. This exercise was unusual in that the first report using UIS statistics was rejected by member states and WGEMPS was obliged to use national statistics provided by countries.

A decision was made by SADC Ministers of Education to implement the EMIS Norms and Standards in three or more countries. The WG facilitated the engagement of Mozambique and South Africa as the peers reviewing Swaziland's compliance with the assessment framework; and Namibia and Zambia reviewing Botswana. The final recommendations are to be presented to national Ministers and senior decision makers by countries in March 2014. This collaboration among member states has led to a proposal to sign an MOU among some with the country being reviewed.

Monitoring Learner Achievement in Africa

The global shift of paradigm from access to quality and attainment of cognitive skills has prompted the issue of monitoring learner achievements in Africa certainly indispensable. Consequently, the Southern and Eastern Africa Consortium for Monitoring Educational Quality (SACMEQ)'s main objectives are offering capacity development in research, conducting research and disseminating the research findings within the broader scope of learner assessments.

The ultimate impact of SACMEQ's projects are for the countries to make informed policy-making and decisions; reforms of educational systems and capacity development using their learner assessments.

Project	Year conducted
SACMEQ I	1995 - 1999
SACMEQ II	2000 - 2004
SACMEQ III	2006 - 2011
SACMEQ IV	2012 - 2014



The future goals of SACMEQ are to improve cooperation in learning assessment by lobbying for a continental policy document on cooperation with organizations outside Africa; inviting new members; increasing funding of learning assessment; using results of learning assessment and having more partnerships in data utilization.

Strategy for the Harmonisation of Statistics in Africa (SHaSA)

The process of socio-economic, political and cultural integration has always been a core concern of African leaders. Since 1960 several initiatives and legal frameworks adopted at the highest level have succeeded to accelerate the integration process. For it to fully succeed and ensure that they achieve their objectives, it requires not only quality statistical information, but also harmonized data across time and space in all areas of African integration. In order to address this issue the AU Commission, together with its partners, the African Development Bank and the United Nations Economic Commission for Africa, developed the Strategy for the Harmonization of Statistics in Africa (SHaSA). The broader purpose of the SHaSA is to enable the Africa Statistical System (ASS) to generate timely, reliable and harmonized statistical information. Its major objectives are the identification of key priority areas of the African integration process that need to be underpinned by statistics, Assessing the state of the ASS and various initiatives on statistical harmonization as well as elaborating a continental strategy for the production and dissemination of quality harmonised statistics to inform African development and integration efforts.

Delivering a Data Revolution in Africa

The conclusion of the MDGS, EFA goals and the Plan of Action for the Second Decade of Education for Africa is fast approaching hence discourse in the field of EMIS must not exclude the post 2015 agenda. The post-2015 agenda mainly calls for a data revolutions that will in turn lead to improved data.

A collaborative approach to a data revolution in Africa must include national, regional and continental level engagement implies that all the African EMIS experts should be consistently engaged

The African data revolution agenda should include the issues below;

- New deal for data between donors and countries
- More accurate, timely and accessible data (open data, transparency, meta data)
- Need for fixing the basics, as a solid foundation for new and exciting technologies

Challenges to the African Data Revolution Agenda

The data revolution agenda in Africa is likely not to be attained due to the existence of data challenges which are fuelled by the factors below;

- The majority of National Statistics Offices, (NSOs) and ministries of education's EMIS divisions have limited independence and unstable budgets.
- Misaligned and perverse incentives and limited data quality checks and balances
- Donor priorities which often dominate national priorities
- Limited data access and utilisation



Challenges Facing EMIS in Africa

Legal, Institutional Frameworks and Coordination Mechanisms

Establishing appropriate legal and institutional frameworks sets up obligations and allows collaboration between data providers and producers. Considerable effort has been made in the majority of African countries to develop EMIS policy and statistical acts to govern the production of national statistics. However, some countries still lack such a policy and legal framework. Countries with legal frameworks in place are hampered by the inadequacy or non-enforcement of these existing instruments to support the production and dissemination of statistical information. This has had a negative impact on the quality of education statistics, notably the low response rate to national census surveys, and inadequate coverage of all schools and structural challenges in obtaining a sector-wide analysis of all sub-sectors from formal to non-formal education, with often a very low reporting rate from private institutions.

Fragmentation of Education and Training Sector

Another challenge facing effective EMIS in Africa is the fragmentation of the education and training sector, which is characterised by a multiplicity of ministries which have statistics directorates that are often poorly structured and have weak institutional frameworks. This fragmentation is exacerbated by the lack of clarity concerning the mandate of the various ministries. In the Ivory Coast, for instance, the pre-primary education sub-sector is under the control of the ministry of national education and the ministry of social affairs and family. Multiple education and training ministries lead to a duplication of institutional and structural frameworks with numerous, separate EMIS systems operating, with limited collaboration and coordination. This leads to limited interaction among the various data producers, and key stakeholders within the same ministry often fail to share information vital for planning purposes.

Multiplicity of Data Sources

The multiplicity of data sources, without an appropriate statistical information sharing and exchange mechanism and protocol, under leadership of National Central Statistics Office, is caused mainly by the weak inter-sectoral coordination, dialogue and consultation mechanisms within education and training sectors' data producers. There is a need to set a unique repository of all national education statistics for the increased consistence and coherence of released and validated statistics. These factors have a huge impact on data quality and coverage, and consequently on the overall statistical products.

Advocacy Strength

The majority of ministries of education are often weak in terms of advocacy in promoting visibility of statistics as a critical function within the development process, due to a lack of statistics. A strong commitment of governments in integrating statistics to support evidence-based monitoring and evaluation would set acceptable accountability mechanisms in delivering services within any given nation.

Human Resources Constraints

Generally across the continent, EMIS departments are operating with human resources that are not adequately skilled and with high turnover and attrition rates. It is not possible to produce high quality statistics without the requisite competences to execute statistical processes and coordinate stakeholders and activities.

The majority of member states reported experiencing limited, skilled human resources across the entire statistical chain, particularly at lower levels. The low levels of motivation of the existing EMIS staff - planners, statisticians and IT specialists - together with the inadequate career development strategy, leads to high turnover rates. Staff mobility handicaps EMIS division's capacity to produce the expected statistical products such as the annual yearbook, and relevant analysis of education sectors on time for budget discussion. A vast number of African ministries of education in Ghana, Liberia, Mali, Namibia, Swaziland and Zimbabwe have relied on the technical assistance of consultants to perform certain EMIS activities. This challenge is compounded by inadequate information and communication and technology equipment.

Financial Resources Mobilization

In many developing countries, education statistics production is typically financed from the national budget, but the resources allocated for EMIS are seldom ring-fenced. In most instances the budget allocations are not adequate to cover all statistical operations which makes some countries dependent on external financial support to fill the funding gap.

This is particularly true in the ECCAS region for Burundi, Cameroon, Congo-Brazzaville, Chad, DRC and Equatorial Guinea. These countries depend on external aid to meet nearly 80 per cent of their funding needs for EMIS. In the SADC region, between six and eight member states expressed a marked reliance on external financial support for equipment purchases and human resources hiring in EMIS. In the ECOWAS region, between two and eight countries expressed a strong dependency on external funding to run EMIS activities.

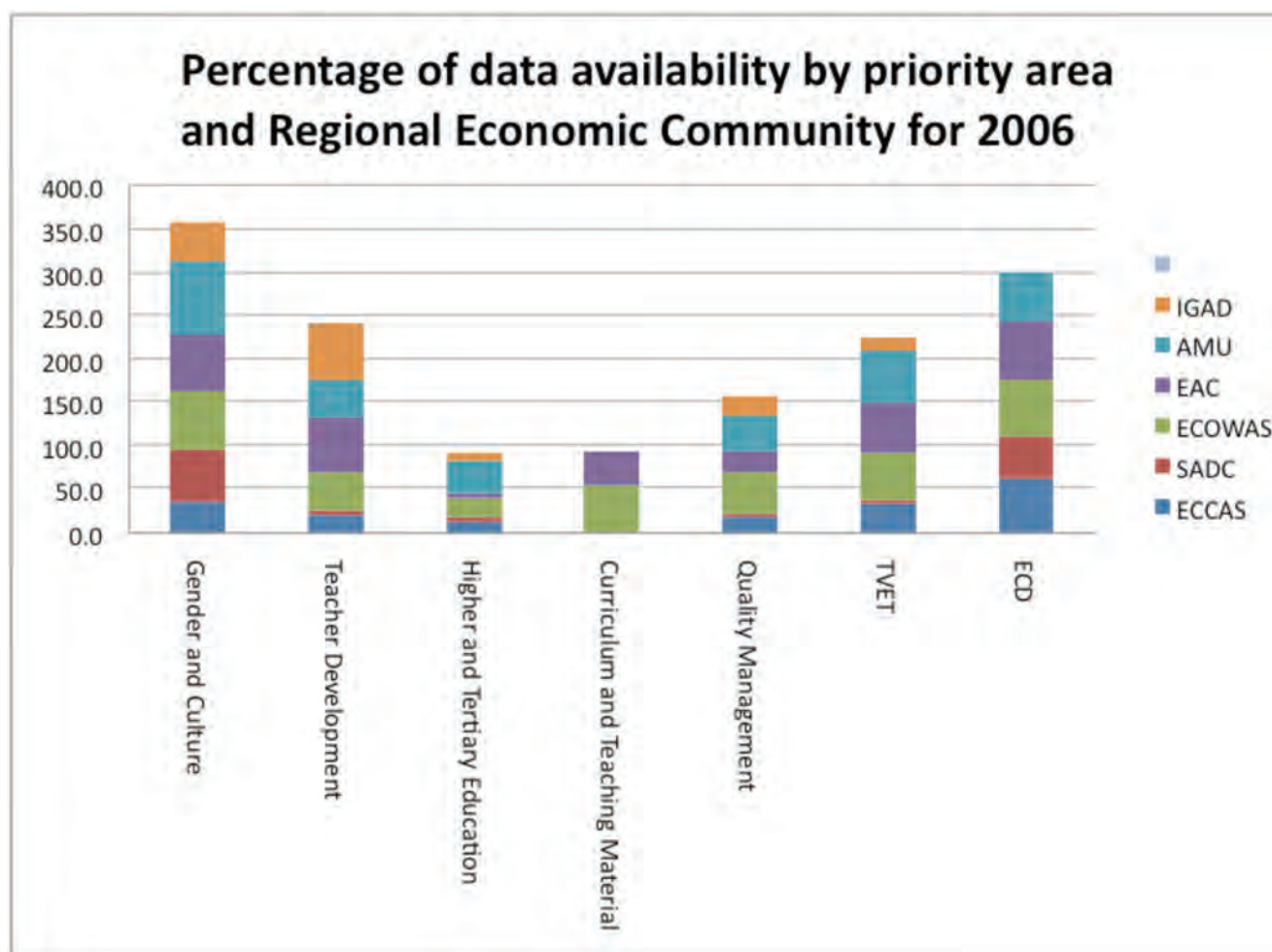
In addition, countries also face weak coordination mechanisms in the development partners' support for EMIS. External technical and financial support is not often used efficiently within national EMIS development plans.

Availability of International Data

A key indicator of EMIS statistical coverage is the degree to which countries provide the UIS with publishable data for the production of internationally comparable data. On average, less than half of the required indicators needed for monitoring the AU Plan of Action were produced by member states in 2009. The graph below illustrates the situation. It is critical, at this juncture, to note that the graph below was constructed based on the data which was published by the UIS. There are many variants of factors which contribute to the non-publishing of submitted data which are, however, outside the scope of this analysis.

Availability of international data by priority areas by REC in 2006

Figure I: Percentage of data availability on priority areas by REC in 2006

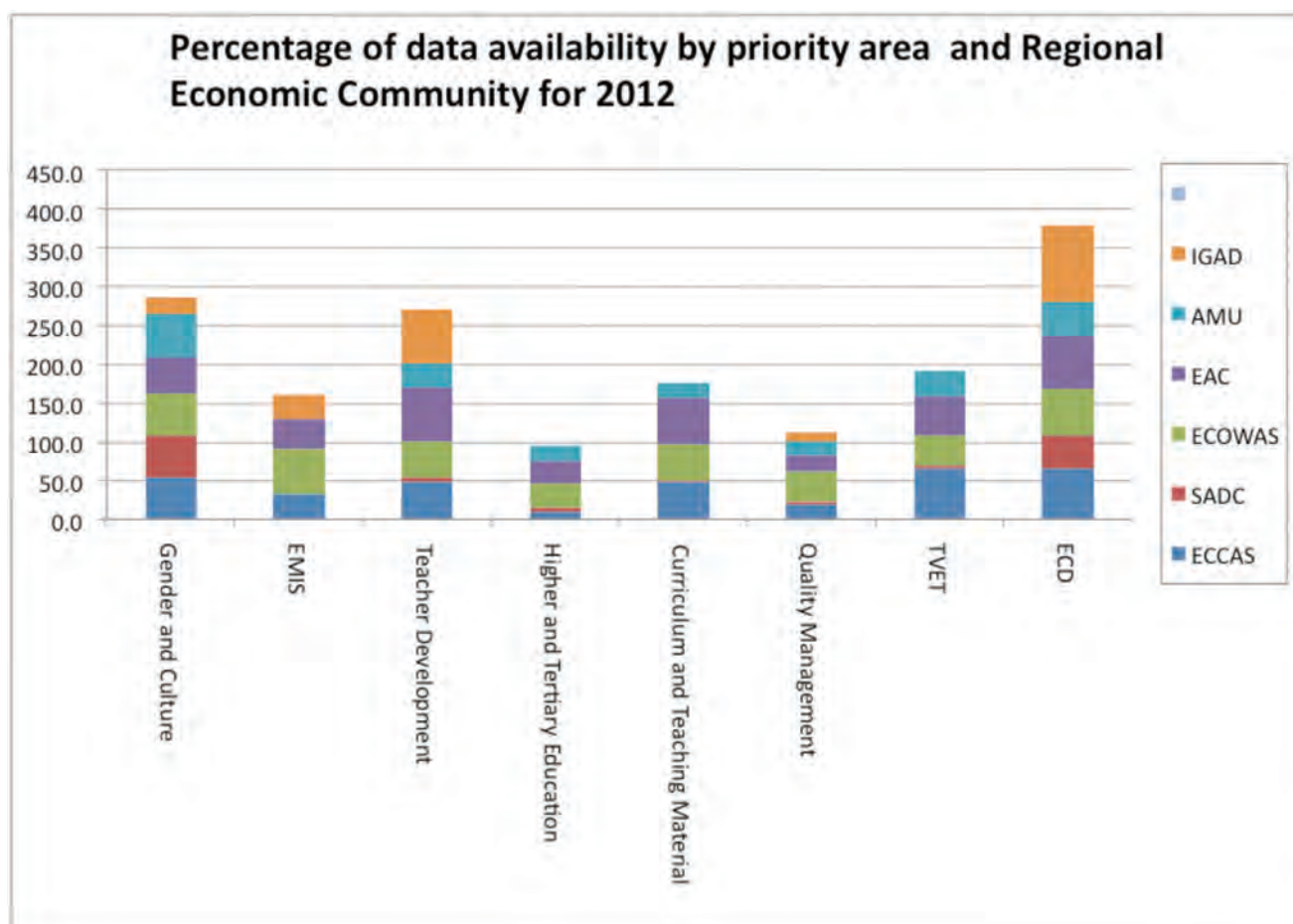


It is evident from the graph above that generally the ECOWAS region has higher availability for all the priority areas for the year 2006. EAC has the highest percentage of data coverage in the year 2006 for the Gender and Culture priority area. The SADC region had the least coverage of international indicators in four priority areas in 2006.



Availability of International Data by Priority Areas by REC In 2012

Figure 2: Percentage of data availability on priority areas by REC in 2006



There is a notable improvement in the data availability between the year 2006 and the 2012. However contrary to the scenario in 2006 where Gender and Culture was the most reported priority area, in 2012 ECD was the most reported priority area. As in the case for 2006, SADC's reporting was the least in five priority areas in the year 2012. IGAD had the highest reporting in 2012 in ECD. As in the case in 2006 the ECOWAS region exhibited higher reporting rate in all the priority areas during the year 2012

Regional Analysis of EMIS

AMU

EMIS systems in all five AMU member states were insufficient as evidenced by the figures 1 and 2 above which shows a reasonably low percentage of data coverage for all the priority areas. This is of serious concern, considering the central role of EMIS in national and regional development in terms of data and information provision as well as monitoring and evaluation. The declining rate of reporting on critical areas needs to be addressed in order to lead to effective analysis of the region's education system.

ECOWAS

The EMIS priority areas aim to reverse the phenomenon of 'data blank' and facilitate planning based on sound information, and rigorous monitoring and evaluation of the performance of education systems. In 2012 countries recording school census return rates in excess of 96 per cent, however data is limited to public institutions. Data availability is weakest for the Higher and Tertiary Education, TVET and Quality Management priority areas, lower than 40 per cent. Availability worsened across all priority areas during the six year period under review. The strength of EMIS systems across the region vary, Nigeria, Liberia and Guinea Bissau can be classified as having weak systems in

terms of providing data for international reporting with up to four fifth of data required not available. On the extreme end of the spectrum are countries such as Burkina Faso, Ghana and Cape Verde that provided more than 80 per cent of the internationally required data.

SADC

Despite the existence of a capacity-building strategy for education management information systems (EMIS) and the formation of an EMIS Technical Committee for the region, data availability within the Southern African Development Community (SADC) remains quite sparse. The highest percentage of data availability is only 51 per cent in Mauritius. Zimbabwe provides only 7 per cent of required indicators.

Data provision under the gender and culture, teacher development, quality management and early childhood education priority areas has fallen since 2006.

Regional assessments of individual country EMIS capacity have identified gaps such as the absence of legal enforcement mechanisms for ministries of education to collect data and the widespread use of manual data collection instruments.

Peer review exercises on EMIS have been undertaken in Botswana and Swaziland.

EAC

Numerous challenges related to institutional, organizational, human, material and technical deficits as well as weak data coordination and reporting mechanisms are faced in producing quality education statistics. The coverage of data in the region, for half of the priority areas has declined, except for improvements realised in EMIS, higher education, teacher development and curriculum, teaching and learning materials priority areas, in 2012.

Partner states like Rwanda and Tanzania have drastically improved the data availability on AU priority areas with reporting rates above 60 percent. The provision of data in Kenya has deteriorated to a mere 9 per cent in 2012, a 29 percentage point reduction compared to 2006 levels.

IGAD

IGAD region has poor coverage regarding reporting education data to UNESCO in both 2006 and 2012. For this region there is completely no published data for all its member states in the year 2012 for three priority areas.

Conclusion

It is critical to note that the AU Plan of Action on Education is ending and that discussions on a new agenda are imminent. The MDGs and EFA goals are also fast approaching their conclusions. African EMIS oriented towards the measurement of learning outcomes given the global growing need to measure quality learning outcomes from early childhood education through to tertiary education. There is also need for an increased priority and focus to be given to this area in the post 2015 period in Africa. There is therefore a desperate need for strong advocacy for adequate resources both financial and qualified personal for implementing EMIS functions at country, REC and AU Observatory levels. Emphasis needs to be placed on effective functioning of the AU Observatory as, despite collective efforts from technical and development partners, the Observatory is not yet functioning optimally.

There is need to reflect on the emphasis placed on a data revolution which is implied by the post 2015 discourse. It is therefore imperative for all the EMIS experts in Africa to be actively and consistently engaged in the 2015 post MDG development agenda in the fields of education. This is envisaged to ensure that the education goals so created will be relevant to African education context hence the development of national, regional and continental context-appropriate policies for Africa.

It is anticipated that this EMIS analysis will inform policy solutions and choices for the member states, regions and the continent at large. Putting in place EMIS systems that meet the needs of the goals outlined in the African Union's Plan of Action is fundamental and noting the benefits of adjusting our future programming to match the post-2015 education is particularly fundamental.

Priority Area 3: Teacher Development



This priority area of the African Union AU Second Decade for Education in Africa Plan of Action (PoA) tackles one of the most critical and yet most challenging quality input for education. The goal of the Teacher development focus area is *“to ensure the provision of sufficient teachers to meet the demands of education systems and to ensure that all teachers are properly qualified and possess the relevant knowledge, skills and attitudes to teach effectively. Teachers should also be properly supported and adequately remunerated, to ensure high levels of motivation”*. To address this general objective, specific objectives are organized around five thematic priority areas that are (i) addressing the shortage of teachers, (ii) the improvement of their competence, (iii) the development of school leadership, (iv) the improvement of teachers’ status, morale and welfare, and (v) the enhancement of the quality and relevance of pedagogical research. *“The quality of an education system cannot exceed the quality of its teachers.”* McKinsey et al (2007)

Teacher Gap

With its commitment to achieving the AU’s Plan of Action for Education in the Second Decade, demand for education and training has increased in all African countries.

The demand for school education has been spurred on by countries commitment to providing quality universal basic education (UBE) to all. This requires establishing learning-friendly schools and institutions; increasing the number of teachers and enhancing their quality through comprehensive policies that address issues of recruitment, training, retention, professional development, evaluation, employment and teaching conditions as well as the status of teachers, through increased national capacity.

In 2011, it was estimated that 99 countries will need at least 1.9 million more teachers in classrooms by 2015 than in 2008 to provide quality primary education for all¹. More than half of the additional teachers are needed in Africa. Across the continent, an average of 306,000 teachers should be hired each year until 2015 to universalize primary education and to compensate for attrition whereby teachers retire or leave the workforce. Sub Saharan Africa (SSA)² accounts for 57 per cent of the additional primary teachers needed in the world. Stated otherwise, this means that SSA needs a yearly recruitment of 225,000 additional teachers between 2011 and 2015 or more than double the region’s capacity which, over the past decade, has only been able to increase its teaching work force by 102,000³.

Countries with Primary Teacher Gaps to achieve UPE by 2015 in Africa

No of Countries	Countries	Teacher gap in annual percentage of increase
8	Benin, Burundi, Cape Verde, Comoros, Ghana, Lesotho, South Africa, Togo	Moderate (0.25-2.9per cent)
22	Burkina Faso, Central African Republic, Cameroon, Chad, Congo, Côte d’Ivoire, Democratic Republic of the Congo, Equatorial Guinea, Eritrea, Ethiopia, Gambia, Guinea, Liberia, Mali, Mozambique, Niger, Nigeria, Rwanda, Senegal, Uganda, United Republic of Tanzania, Zambia	Severe (3 -20.0per cent)

Source UIS (2010) Information Sheet No 6.

Nigeria contributes 13 per cent to the global teacher shortages and 94 per cent of SSA total needs which translates into 212,000 additional primary school teachers needed annually - by far the largest gap to fill. Following the decreasing order of the teacher needs magnitude, Ethiopia, Tanzania, pre-secession Sudan, DR Congo, Uganda, Burkina Faso, Mozambique and Malawi complete the list of SSA countries needing the most additional primary school teachers. The Central African Republic would have to increase its primary teaching force by 19.4 per cent each year to achieve UPE by 2015. A similar situation is found in Eritrea (17.8 per cent), Chad (13.9 per cent), Niger (13.8 per cent) and Burkina Faso (12.5 per cent). These countries would require a tremendous surge in financial and human resource to sustain this rate of growth over time. In Mauritania, for example, 7 per cent of primary schools were without any teacher in 2007-2008⁴. In addition, as a result of deployment patterns and inter-school transfers, the impact of teacher shortages tends to fall disproportionately in schools in the least desired locations. Remote rural schools and schools serving the

¹ UIS projections 2011.

² The disaggregation of global teacher shortage figures does not include the Maghreb in the Africa region. Hence, the regional figures are only available for Sub-Saharan Africa, excluding 8 countries counted under Arab States.

³ GMR 2013/2014 pp. 222-229

⁴ RESEN, (2010)

poorest children suffer greater teacher shortages, longer delays in replacing teachers, and a greater proportion of unqualified teachers and inexperienced teachers.

The pace of growth in enrolment has surpassed growth in the number of teachers, especially at the primary level. The average pupil-teacher ratio (PTR) has risen from around 37 in 1990 to 39.2 in 2011⁵. The sheer number of teachers needed to achieve UPE makes the challenge a formidable one, not only from the perspective of the financial resources that this will require but also from the perspective of human resource availability; for even if financial resources abound, how to attract and retain talented individuals in the teaching profession remains an issue. This is especially true in a context where the profession's image has been adversely affected by a set of interconnected factors: deteriorating working (overcrowded classrooms, lack of professional development) and living conditions due to two decades of economic hardships and structural adjustment, widespread dissatisfaction with the current situation of schooling, the creation of a second class of teachers in several African countries (some of them untrained or non-qualified teachers), HIV and AIDS-related morbidity, unequal teacher deployment and mobility among others.

For African countries still striving to meet the international goal of UPE, additional demands to develop secondary education represent significant challenges, particularly where human and financial resources are tightly constrained. In addition, the demand for secondary education-especially for upper secondary education-has increased with the need for more sophisticated workers with relevant competencies, knowledge and skills, acquired after the primary level of education. Consequently, the greater number and specialised nature of subjects in secondary curricula typically will require more teachers. Regarding secondary education, Sub-Saharan Africa accounts for half of the additional lower secondary school teachers needed to achieve universal lower secondary education by 2030 or else 134,000 lower secondary teachers per year.

Recruitment

COMEDAF V reported primary school teacher numbers grew by 8 per cent and secondary teachers by 23 per cent between 2006 and 2009⁶. Latest evidence⁷ from the 14 countries for which data on this indicator are available indicate that from 2010 to 2012 the average recruitment of teachers was close to 10 per cent, ranging from the no growth scenarios for Mauritius and 2 per cent for Cape Verde and Morocco, to a high of 14.2 per cent in Mali and Niger, 16.9 per cent reached by Malawi and Namibia to the peaks of 21.1 and 21.5 per cent reached by Angola and Congo respectively. Cameroon and Congo experienced a 7 and 9.4 per cent drop in teacher numbers, the worst teacher recruitment decline continentally. Niger, a country with a severe teacher shortage, reports a downward trend of 2.9 per cent in 2012. Namibia, on the other hand, more than doubled its teacher recruitment from 8 per cent in 2010 to 16.8 in 2012; the best recruitment growth rate continentally.

Furthermore, and as of May 2013⁸, a comparison of data on new recruitments with those of the countries' attrition rates suggests that the effective growth rate of the teaching force is being halted by attrition rate in three countries. To compensate for their attrition rates, Cape Verde would need 1 per cent more teachers while Eritrea and Ghana would need 3 percent more. The majority of countries are on the whole are able to compensate for attrition and even expand their teacher work force. Malawi faced with a 10 per cent teacher loss in 2010 grew its teacher numbers by 17 per cent in the same year. Similarly, Angola where in 2011 the teaching force grew by 21 per cent, compensated for a 16.7 per cent attrition rate for the same year. Data for 2012 reveals the same pattern for Congo, which reports a 9.4 per cent attrition of its teachers against a 12.1 per cent rate in its new recruitments.

To give a measure of efforts required to respond to the challenge of hiring additional, filling the teacher gap in Africa would mean at the least to double or triple or even quadruple the current recruitment efforts for many countries. As far as primary education, Rwanda and Uganda for example would need to double their current 3 per cent average increase in the number of new teachers per year. Mali would need to quadruple its recruitment effort to meet its target by 2015. However the challenge is even greater for some other countries not expected to be able to fill their teacher gap by 2020.

5 AU Outlook on Education database, 2014

6 AU Education Outlook for COMEDAF V, teacher chapter

7 All data reported here are taken from the Africa Regional Module of the UIS 2013 data center

8 Presentation of the Africa Regional Module during the UIS May 2013 Francophone Africa Workshop held in UNESCO BREDA, Dakar



Gender

Countries which are experiencing high shortages in primary teachers are more likely to have more male teachers than females. There is a tendency that feminisation of the teaching profession increases as access to primary education increases.

In 20 of the 36 countries for which data are available, male primary teachers outnumber their female counterparts. A detailed look at the statistics reveals some striking disparities. In 2012, there are three times as many male teachers as female teachers in Benin, Côte d'Ivoire, the DR Congo and Sierra Leone. In the Central African Republic there are four times as many male teachers as female teachers. In Chad and Togo, there are six male teachers for every female teacher. Liberia recently reported that it was unable to find sufficient female teachers to staff its only public all-girls school. Some countries with major overall teacher shortages, however, have more than doubled their female teachers numbers - Burkina Faso, Chad, Mozambique, Niger, Djibouti, Eritrea and finally Rwanda which has increased its female teachers five times.

There are 16 countries where female primary school teachers outnumber their male counterparts. There are more than twice as many female primary teachers in Cape Verde and Mauritius, three times as many in Lesotho as their male primary teachers. In South Africa females teachers outnumber male teachers 3.5 times to one.

At the secondary level most teachers are male, except Lesotho and Mauritius which have more female secondary teachers than male. Some 15 of the 17 countries with data available, have significantly more male teachers than female. The proportion of male to female teachers in secondary schools range from four to five male teachers to every female in Burundi, Mozambique and Burkina Faso, 14 in Chad and 17 in Guinea.

Teacher Qualifications

The challenge of expanding access for all to education is to maintain the quality of teaching and learning. Recent research⁹ indicates that 60 per cent of African children with four years of primary school have not mastered the basics in literacy and numeracy. The cases of Mauritania, Niger, Madagascar, Chad, Benin, Mali and Côte d'Ivoire where even less than 20 per cent of the primary school age children were found to be learning the basics at Grade 4 were notable. However, some countries simultaneously expanded access and maintained quality, such as Swaziland, Tanzania, Mauritius, Seychelles and Botswana where more than 80 per cent of primary school aged children reaching grade 4 are learn the basic literacy and numeracy skills. One of the explanations for these poor learning outcomes lies in the quality of the teachers in the classroom.

In a majority of countries for which data are available for 2012, all new teacher recruits have been trained in their profession. Three noticeable exceptions are Malawi, Angola and Mali where less than half of their newly recruited teachers were properly trained. The challenge of training existing teachers is greater in some countries than that of training newly recruited teachers. This is especially the case for Benin, Ethiopia, Ghana, Guinea-Bissau, Lesotho, Liberia and Sierra Leone where desperate measures to hire untrained contract teachers to address the teacher gap were adopted.¹⁰ Subsequent to the 2007 ADEA Bamako Initiative, a number of countries have adopted two policy frameworks on (i) the training and professional development of contractual teachers and (ii) on the career tracks, opportunities for advancement, social protection guarantees, and rights and obligations of contractual teachers.

Another reason that explains the learning crisis in Africa relates to the worsening of the pupil's access to trained teachers. On average the pupil to trained teacher ratio¹¹ is 8 pupils higher than the average pupil teacher ratio in some 29 countries of which 20 are in SSA; a difference of 51:1 as compared to 43:1 at the primary level.

Of critical importance to learner's school readiness is access to good quality pre-primary education which places the emphasis on appropriate teaching and learning at this level. Of the 16 countries for which 2012 data are available on ECD teacher profiles, five countries report in a range of 16.5 to 35 per cent trained teachers, another six are in a range between 45 to 62 per cent and a further eight have teacher qualification profiles which range from 90 to 100 per cent

⁹ GMR (2013)

¹⁰ Other reasons do also account for this situation which will be studied in the teacher policy section, amongst which the capacity of teacher education colleges to train teachers, questions around language proficiency and subject knowledge, issues of in-serve training, working conditions, language policy, etc.

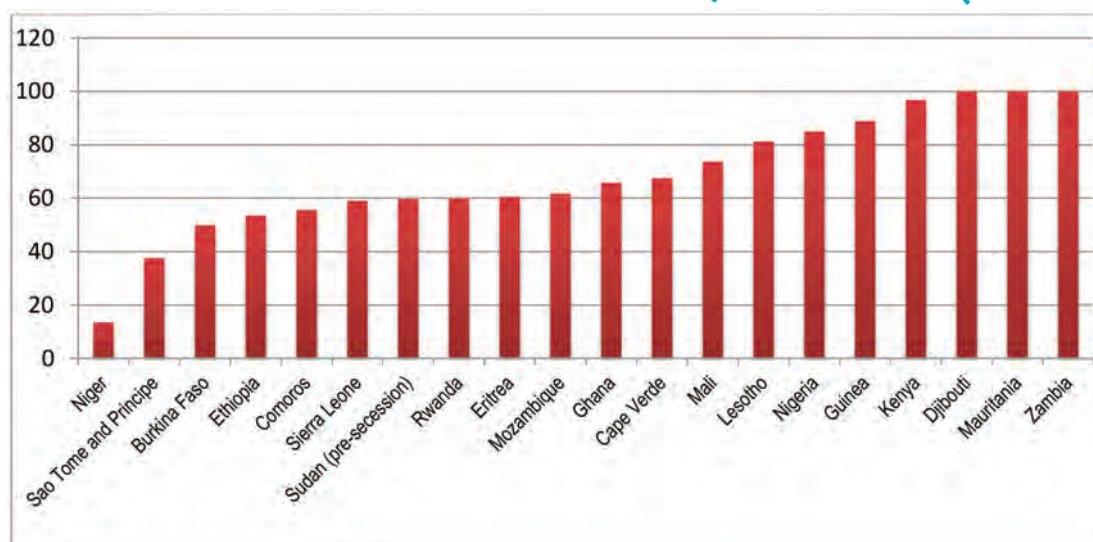
¹¹ According to national standards

of them being trained. Notably, Cape Verde increased its rate of trained pre-primary school teachers by 34 per cent between 2006 and 2012. Eritrea on the other hand, reported a decline of 9 per cent and its qualification profile of pre-primary teacher is now 56 per cent of its ECD teaching stock.

The data on trained teachers reveals that the proportion of trained primary school teachers in 2012 ranges from 40 per cent among Guinea, Liberia, Ghana to 100 per cent in Mauritania, Mauritius, Morocco and Tunisia. Most countries were able to train more teachers between 2006 and 2012. Of the 17 countries for which a comparison is possible, 10 experienced a positive percentage change ranging from 0.8 per cent in Lesotho, which reports 67.5 per cent of trained teachers, to 19 per cent in Mozambique with reportedly 84 per cent trained teachers. Four countries noted a decline in teacher qualifications among their teachers, in particular Rwanda, Tanzania, Congo, and Malawi.

As usual, the data on trained secondary teachers is scarce with only 20 countries having reported on this indicator in 2011. The range goes from less than 15 per cent in Niger to 100 per cent in countries like Djibouti, Mauritania and Zambia. Here teacher knowledge becomes particularly critical.

Rate of Trained Teachers at the Lower Secondary Level in Africa (2011 or latest)



Source: UIS 2012

Research over the last decade has indicated the strong relationship between teacher quality and student learning. One of the most important factors in raising student achievement is a highly qualified teacher. Research shows that teacher subject-matter knowledge is greatly associated with student learning. In this era of high standards and expectations, having a highly qualified teacher has never been more important. Teachers' proficiency in both pedagogic and subject knowledge is a challenge in many countries. In Kano State, Nigeria, 78 per cent of 1200 tested teachers had limited knowledge in the language of instruction as they had a partial capacity to understand and correct a sentence written by a 10 year old. In the Gambia, an Early Grade Reading Assessment revealed teachers' poor performance on basic English language tests. A 2010 survey in 2010 in Kenya reported that grade 6 teachers scored only 61 per cent on mathematics tests for that level and none of them had a complete mastery of the subject.

In sum there is not always a direct correlation between nationally acquired teacher qualifications and learner outcomes as a number of countries attest - such as Niger and Cote d'Ivoire which have nearly all their primary teachers with high qualification profiles but report poor learning outcomes among their students at grade 4. This raises the issue of creating the development of professional standards for teachers and school leaders aimed at identifying the professional attributes (knowledge, skills, leadership capabilities and values) that teachers and school leaders must possess in order to accomplish effectively their professional duties. Currently, many African countries have implemented or are developing policies that are standards driven due to its focus on quality teaching and its performance review capabilities. The promotion and recognition of standards would also acknowledge the professionalism of the teaching profession and strengthen the need for benchmarks for improved professional practice.



Teacher Development

In the past few years, key policy forums have focused on the need to develop critical skills and knowledge for sustainable development¹². This approach implies a paradigm shift in approaches to teacher development. The first level of the paradigm shift is required at the level of curriculum content and teacher training policies and approaches. School curricula from ECE throughout all levels of formal and non-formal education and training must reflect agreed common core skills on sustainable education. It follows that teachers must be trained and developed along these lines.

The second and complementary, level of paradigm shift covers the necessary structural adjustments in the pedagogy - the interaction between teacher and learners in the classroom; making children active and critical learners; preparing them to be self-learners; adopting new assessment methods; and developing teaching and learning material (manuals and textbooks) in line with the curriculum. Implementing active pedagogy requires significant structural change of the classroom practices and dynamics. In this regard, teachers need to be prepared to become effective instructors, the ones that empower students to be effective learners. This leads to another significant paradigm shift which is the understanding of how do learners learn, as opposed to the traditional focus on how do teachers teach.

Another important initiative led by the Commonwealth Secretariat is a Pan-Commonwealth Framework for Professional Standards for Teachers and School Leaders which has been rolled out in Botswana, Lesotho, Swaziland, Namibia, Mauritius, Seychelles, Sierra Leone, The Gambia and Rwanda. The purpose of the standard framework is to guide countries in defining the basic requirements related to knowledge, pedagogical skills and personal attributes that teachers and school leaders must demonstrate in order to achieve the objectives of education. The Standards have been finalised and are being printed for piloting before they are widely disseminated to Ministries of Education and Teacher Training institutions in Africa.

To make teacher education institutions more relevant to needs requires upgrading the managerial knowledge, skills, and attitude of the management staff of teacher education institutions in Africa; an issue which IICBA tackles with its capacity building initiative that aims at equipping heads, deputy heads, registrars, finance officers and other management staff of TEIs and colleges of education with skills to facilitate growth and expansion, improve life of staff/workers and institutional image, motivate employees, bring optimum use of resources, and increase efficiency and team work within teacher education institutions.


Challenges to the Supply of Qualified and Competent Teachers

The emphasis here will be on the countries' capacity to educate their teachers, teacher education organization itself and also on entry requirements for education and training systems to respond to new challenges of which the preparation of African children to 21st century citizenship for sustainable development is paramount.

Given that many countries face a challenge in training sufficient number of new teachers and addressing the new global challenges facing quality education and training, it is widely acknowledged in many international forums that teacher education needs to be reformed in terms of its organization, entry requirements and its pedagogic approach. In addition to conventional training, alternative and innovative routes should be explored and adopted where contextually relevant. Here, the most promising approaches are those relative to using ICT for education (ICT4E), using open educational resources (OER) and mobile learning platforms to enhance the outreach and efficacy of teacher education programmes.

Making the best use of ICT4E would require that e-literacy be integrated into all teacher education curricula. Such a strategic move towards more adaptability would shift part of the responsibility for continuous professional development on to the teachers themselves with the effect of relieving the government that could then concentrate on other, equally strategic questions.

This would facilitate the reactivity of teacher education programmes that would consequently be able to A number of partners are looking at the construction of human resource development systems in Africa that can meet today's challenges and support sustainable development policies which improve the accessibility and quality of African education and training systems.



The first African Ministerial Forum on ICT Integration in Education and Training held in 2013 reflected among other things on ICT applied to teacher development and improvement in teaching practices. A central recommendation from the forum was that all African countries should have a national policy on how to introduce ICT at all levels of education, the effect of which will need to be monitored in the upcoming years. A Global e-Schools and Communities Initiative was set up an African Leadership in ICT program to help African education and training systems develop their capacity to integrate ICTs and serve the continent's sustainable development. A number of initiatives on mapping and planning for implementation of national ICT in education include ICT-enhanced Teacher Standards for Africa and the ICT-enhanced teacher development model advocated by IICBA. E-learning teacher development modules on Biology, Chemistry, Physics, Mathematics, African Geography and African History teachers are now available continentally. The policy implication of such initiatives is that these e-standards and models promote at least regional integration of educational systems, which in turn will facilitate teacher mobility with acceptable (minimum) standards to work anywhere in a region.

Two additional initiatives worth mentioning are the Association for the Promotion of African Open Educational Resources and the Teacher Education in Sub-Saharan Africa (TESSA) research and development network. The focus of the former is the issue of African Open Educational Resources which was created to raise all stakeholders' awareness of the importance of producing African open education related pedagogical innovations, in line with the priorities and issues identified in order to improve educational access and quality.

The aim of TESSA is to improve the quality of, and extend access to teacher education in Sub-Saharan Africa. Some 12 African countries participate in the TESSA network and more than 700 African academic teacher educators have produced core open source study units which are freely offered. The TESSA study units for primary teachers have been adapted to ten country contexts and are available in four different languages; Arabic, English, French and Kiswahili. To date, more than 400,000 teachers on 19 teacher education programmes have benefitted from their engagement with the TESSA resources and lessons. The development of TESSA open education resources for secondary science teacher training is underway in Ghana, Zambia, Kenya, Tanzania and Uganda. TESSA resources are being used in primary teacher education programmes in colleges in Uganda and Zambia.

Other considerations for redressing the orientation of teacher education programmes could include looking at programmes that address out of school learner learning needs. Reforms such as the experience of the *"écoles communautaires de bases"* from the Non-Formal Education programmes in West Africa or the accelerated learning program for over-aged pupils that covers more than a grade's program in one year, such as adopted in Liberia could be experimented in teacher training. Applying these reforms that were developed for pupils to teacher education might yield promising results, not only in terms of equipping them with new competencies but using these very techniques as pedagogical tools to train them.

Finally teacher education programmes need to equip teacher trainees with skills in multigrade and double shift classes teaching as these are still quite common delivery modes in several countries. In this regard, the ADEA Working Group on the Teaching Profession has collaborated with African educators to develop a set of multi-grade teaching modules to equip teachers with techniques and pedagogy to handle multi-grade classes. These modules have been adopted not only in African countries but also in the Commonwealth countries in the Caribbean and Pacific.

Among the reforms that need be considered in reorganizing teacher education programmes, new areas need to address the Early Childhood Development expansion with the addition of one year of ECD to each primary school, the emphasis on core skills in basic education, the integration of multiple languages as medium of instructions and the development of technical and vocational competencies. An analysis of six sub-Saharan African countries found that teacher educators helping train teachers how to teach reading skills were rarely experts in approaches used in this field¹³ hence the proposal that teacher training institutions develop close cooperation with schools and practising teachers.

All these initiatives have in common that they try to tackle both the capacity issue relative to the adequate training of teachers in such numbers and to that of reaching as many teachers as possible with minimum cost. Reflecting on and

13 (GMR 2013/4 P. 27),



reorganizing the current teacher education programmes' as well as exploring new paths have the double advantage of responding to the imperatives of effective and efficient teacher qualification. Indeed, it is expected that such a teacher education reform is the quickest way to achieve the daunting task at hand by improving the countries' capacity to respond to the urgency of providing enough teachers that are adequately trained and qualified on the one hand and that such an undertaking will be cost-effective on the other hand. Careful monitoring of results will help appraise their usefulness.

Continental Strategies on Teacher Policy

To be able to respond to the challenge of teacher supply, development and utilisation, policy makers need comprehensive and well-designed teacher policies which are properly planned, costed and managed. This will require to base policy decisions on evidence from research and practice and also a culture of elaborating and weighting policy options to make the best possible decision that factors in needs and education technology gauged against resources and hence budgetary implications. This is all the more necessary as education is a labour intensive sector where teacher salary payroll, under current circumstances, can make up to 70-90 per cent of the budget; leaving policy-makers with very little room for manoeuvre to balance other quality input needs and the necessity to recruit and train new teachers as well as pay the additional salaries incurred.

In all countries of the world, teachers belong to the most vocal social groups, if not the most vocal, owing their sheer numbers. In a majority of African countries, teacher unions have a high level of bargaining power; which lends itself education systems prone to recurrent labour crises that can last for months in certain cases and mostly revolve around salary issues. As a consequence, governments might not have sufficient leeway and may be induced to buy social peace in the system on a very short term basis, from one year to the other; a situation that may prompt to promises which are not realistic in regards to their fiscal capacity. Benin is a case in point where the government had to accept to dramatically increase the average contract teacher salary by 45 per cent between 2006 and 2010 as the salaries of contract and civil service teachers converged¹⁴ without achieving the expected objective of appeasing the social dialogue and halting the teacher strikes because the country was objectively not in a condition to completely deliver on its promise. This situation resulted in constant negotiations and persistent crises and teacher strikes¹⁵. Though the legitimacy of demands for decent working conditions and salaries is not questioned, neither is the valid demand for more equity in the treatment of teacher categories, it is the method that is being interrogated that leads to an atmosphere of unceasing defiance.

Several actors are tackling the issue of comprehensive teacher policy development. UNESCO-IICBA assisted Member States in Africa in teacher policy development and implementation through: a) sharing the experiences of countries in the regional economic communities to identify common elements; b) enhancing awareness of teacher issues that need to be addressed at policy level; c) creating shared understanding of the need to work at sub-regional and regional level for increased relevance and mutual support; and d) laying down the groundwork for continued dialogue and consultation through networking.

Through its Capacity Development for Education for All program, UNESCO has been able to promote a holistic and quality approach to the teacher issue. It has used the TTISSA Methodological Guide for the Analysis of Teacher Issues in Sub-Saharan Africa to support seven countries either at teacher diagnostic phase or at post diagnostic phase in Benin, Uganda, Guinea, Burundi, Lesotho, Mali and Mozambique of which 6 have completed their studies to date. Education International, a teacher union federation with 111 affiliates in 50 African countries, is very much involved in capacity building and advocating for a stronger involvement of teacher associations and unions in the social dialogue and in policy planning as some of its strategic intervention axis.

The recognition of the driving role of teachers and teacher education in fostering learning and quality education has contributed to change the landscape of the regional and international co-operation. In recent years an increased number of regional and international partners have developed programmes and initiatives in the field of teachers. This has been testified by the support to the African Union in the context of the Pan-African Conference on Teacher Development (PACTED); the engagement in the International Task Force on Teachers for EFA activities; and the then

¹⁴ GMR 2013/14 p. 257)
¹⁵ <http://www.ei-ie.org/africa/en/news.php?page=1>

Teacher Training Initiative for Sub-Saharan Africa (TTISSA). PACTED has now become a multi-stakeholders platform to support teacher development in Africa; it has gained the endorsement of Education Ministers of the African Union and its adopted road map set six key intervention areas for regional collaboration which includes :

1. Defining standard-setting characteristics for teachers in Africa ;
2. Enhancing the use of open and distance learning (ODL) to increase access to and the quality of teacher training and promote the professional development of teachers ;
3. Improving performance in science, mathematics and technology (SMT) to reflect life skills and meet labour-market demands ;
4. Standardizing teacher recruitment and mobility ;
5. Making educational and didactic use of the General History of Africa (GHA) ; and
6. Building the capacities of education stakeholders to design and implement holistic policies for the teaching profession.

These six sub-themes are the PACTED roadmap which the Conference of Ministers of Education of the African Union (COMEDAF) adopted in its 6th meeting held in Abuja in April 2012. Clearly, PACTED carries the potential to offer a high profile dialogue space where countries can share the knowledge and lessons learned on promising policies and practices to overcome challenges and constraints.

Conclusion

The impetus to solve the continental challenge of teacher shortages - appropriately qualified and in scarce subjects of science and mathematics - facing the majority of African countries has gained momentum since 2012. New partnerships and policy dialogues on this topic are on the increase. At a national level, the distribution of teachers tends to be uneven with both teacher shortages and unemployment issues facing countries. Rural areas have more difficulty in attracting and retaining teachers, and urban districts have better learner/teacher ratios. Female teachers are under-represented in rural schools.

There is growing commitment to harmonising teacher qualifications across regions not only to allow greater portability of qualifications with teacher migration but also to address issues of the comparability of quality of teaching and learning in the classroom. Learner achievement is often not closely correlated with teacher qualification profiles in some countries raising concerns about the value of those qualifications and school management practices.

Tools, strategies and training in effective school leadership and management, particular for disadvantaged schools that are either severely under-resourced or facing multi-grade teaching or double shifts has been adopted by a number of countries. The issuing of school report cards on key indicators including teacher/pupil ratios, teacher qualification profiles, learner results among others which benchmark a school against regional averages are becoming more commonplace management tools found in countries. Harmonising official hours of instruction across schools and among countries is being discussed at regional forums. A number of countries are looking at paying teachers electronically with biometric systems in order to address ghost teachers and reduce absenteeism as teachers no longer need to travel to the bank to access their salaries.

In sum, comprehensive policies that address teacher management, supply and utilisation are needed urgently if African countries are to realise their dream of quality education and training. Despite progress in several areas, teacher development remains a crucial factor which if not properly addressed could hinder the realisation of harnessing Africa's rich human resources in order to achieve the continent's full prosperity and economic development.

Priority Area 4: Higher and Tertiary Education

Two years after the publication of the 2012 continental report of the African Union (AU) Outlook on Education, and less than two years to the expiry of the Second Decade of Education for Africa's Plan of Action, overwhelming majority of member States are off track and will attain none of the objectives of the plan. With reference to the higher-education focus area, the challenge is even more daunting. Despite the fact that renaissance initiatives continue to flourish across the continent and at all levels (continental, sub-regional and national), the progress made in revitalizing higher education is notable but still insufficient. Thus the restructuring, rebuilding and revitalization of higher education that started a decade ago is gaining impetus across Africa. Progress is slow, but steady, regarding the attainment of the goals set for the higher education priority area in the Plan of Action, as structural and institutional reforms take time. There is still a long way to go before all the objectives of the Plan can be attained and it is clear that the ten-year lifespan of the Plan of Action is too short to make such a dramatic turnaround.

Furthermore, measuring the progress made in implementing the Plan in general, and higher education in particular, is a challenging exercise as most, if not all, African countries have not fully integrated the four strategic objectives of the higher education component of the Plan into their own sector-wide plans. The issue is further compounded by the fact that education is not a priority for many countries. Finally, there are significant variations in the pace of national implementation of educational programmes. This state of affairs inhibits the presentation of a comprehensive progress report, even if several AU member States have undertaken initiatives to tackle some of the key challenges facing their higher education systems. In fact, years of mismanagement and neglect of Africa's higher education sector have resulted in dysfunctional situations related to the structure, mandate, operations, funding, student enrolments, staff mobility, relevance and quality of higher education across the continent. Higher education is in crisis in many countries in Africa as most higher education institutions are still fundamentally oriented towards teaching with little focus on research, an element that plays a critical role in the production of knowledge and the creation of innovation to support and reinforce Africa's position in the global economy.

The purpose of this chapter is to examine the progress made in the implementation of the four thematic domains of this focus area for the 2012-2013 period, bearing in mind the achievements registered during 2010-2011. The four thematic domains of the focus area are as follows:

- (a) Promotion of research and original knowledge production in higher education;
- (b) Promotion, development and assurance of quality in African higher education in all its dimensions, including the development and ratification of regional and continental qualification frameworks (such as the Arusha Convention) to facilitate the mobility of students and staff;
- (c) Increased involvement of universities in the continent's development efforts, including the development of the lower levels of education;
- (d) Ensuring appropriate levels of funding for the higher education sector.

The chapter is divided into ten major sections. The first presents the achievements made in the promotion of research and original knowledge production in higher education and specialized research institutions across the continent. This is followed by a review of the promotion, development and quality assurance in African higher education in all its dimensions, including the development and ratification of regional and continental qualification frameworks. The third section evaluates the increased involvement of universities in development issues as well as providing assistance to the lower levels of education. The fourth section explores the funding mechanisms for higher education, a critical issue that is instrumental for the development of the system. The fifth section addresses major higher education issues such as improving access and equity and underscoring relevance, while the sixth section focuses on science, technology and information and communications technology. The seventh section presents the AU's current initiatives, as well as regional integration, and the eighth section tackles the private sector and cross-border provision of higher education in Africa. The penultimate section underscores the regional economic communities' various initiatives in higher education. Finally, the tenth and last section concludes the review of higher education.



I. Promotion of Research and Knowledge Production

It is difficult to assess the progress made in promoting research and knowledge production by African universities, specialized institutions of research, centres of excellence and other higher learning institutions in the absence of quality data on the productivity of faculty members, staff and even graduate students of these institutions. A quick review of the situation currently prevailing may lead to a number of valid conclusions, as follows:

- (a) Eight years into the implementation of the Second Decade Plan of Action, the research environment in which universities, specialized institutions and centres of excellence operate remains replete with challenges. The economies of many African countries are in crisis. Conflicts, violence and civil wars in numerous parts of Africa are negatively affecting the operation of universities and centres of research by dramatically obstructing the research efforts of their students and staff.
- (b) Most African universities are predominantly teaching institutions rather than research institutions, characterized by the absence of graduate programmes; this dramatically limits the institutions' research capabilities. Basic research, which is a precondition for scientific knowledge production, is therefore not given the importance it deserves in African universities.
- (c) Private, confessional, vocational, corporate, virtual, franchise and many other kinds of higher education institutions with little or no interest in academic research are being established in growing numbers, competing for academic staff.¹
- (d) Developing appropriate mechanisms for inter-generational learning is part of the normal reproduction mechanisms of scholarly communities. It is at the level of doctoral programmes that most African universities are weakest. Yet this, precisely, is the level at which training for research takes place.² It goes without saying that there is a need to establish more doctoral programmes to ensure the training of a critical mass of scientists and researchers to guarantee basic research of a significant quality.
- (e) In terms of results, Africa produces less than 1 per cent of the total quantity of research produced worldwide, putting the continent at the very bottom of all the global regions in this activity area.³
- (f) At the institutional level, research capacity and researchers' productivity are growing but data are missing for a reliable quantification of the efforts being made in higher-education institutions.

1 CODESRIA, 2005
 2 CODESRIA, 2005
 3 Science with Africa, 2008



Examples of Thriving Research Institutions in Africa

The Council for the Development of Social Sciences Research in Africa (CODESRIA), an apex pan-African research institution in the area of social sciences, and the Education Research Network for West and Central Africa (ERNWACA) are sampled to illustrate the knowledge production efforts of African research institutions.

CODESRIA

During the 2012-2013 period, CODESRIA undertook numerous key actions in the area of knowledge production at the continental level that are worth mentioning. First, a new strategic plan (2012-2016) was developed, articulated around seven research priorities, namely higher education, regional integration, climate change and resources management, gender, policy and governance. Second, the research vehicles in the field are national working groups, transnational working groups and comparative research networks. A third action is the central location of individual and institutional capacity-building, such as research training, in the programmatic interventions of CODESRIA on the continent. Fourth, CODESRIA is also known for its South-South collaborative research programmes, such as the CODESRIA/CLACSO⁴/IDEA,⁵ an academic cooperation programme between Africa, Latin America and Asia. As a fifth action, one of the most recent initiatives is the Higher Education Leadership Program (HELP), a flagship programme initiated with the support of the Carnegie Foundation to improve the governance and management of African higher-education institutions. Finally, CODESRIA's achievements in the area of research results are commendable as it published about 20 books and articles on various topics in 2012 and 2013.

ERNWACA

The track record of the Educational Research Network of West and Central Africa's (ERNWACA) in educational research in West and Central Africa is commendable. During the 2012-2013 period, ERNWACA launched a research programme whose purpose is to strengthen young researchers' capacity in educational research and that of higher-education institutions in the network's member countries through support for doctoral programmes and close supervision of interdisciplinary teams by experienced researchers. Thus, it contributes to the achievement of the network's mission to promote African expertise and develop a culture of research with the view to reconciling educational practices and policies. It also mobilizes the network's national chapters and strengthens partnerships at the national level. The research topics cover four key education components:⁶ first, quality of basic education; second, higher education in the service of the economy and of the community; third, vocational training and apprenticeships; and fourth, traditional teaching and schooling. The beneficiaries of the programme are junior researchers (master's degree holders and doctoral students) of the 18 ERNWACA member countries of West and Central Africa.

II. Promotion, Development and Quality Assurance in African Higher Education

Quality assurance means different things to different people, depending on the historical background and nature of their higher-education systems. Thus Materu (2007) defines quality assurance as the planned and systematic process review of an institution or a programme to determine whether or not acceptable standards of education, scholarship, infrastructure, are being met, maintained and enhanced (p. 6). Bearing in mind this definition, there may be general agreement that quality assurance, in reality, refers to numerous parameters in the context of an higher-education institution that are, among others, the quality of the faculty members, their level of scholarship inextricably linked to their productivity and training, the quality and quantity of adequate educational resources (such as books, research journals and laboratory equipment), state of the art research infrastructures available at the institution and the existence of an environment that is conducive to the conduct of research.

Aware of the rapidly deteriorating quality of education in general, and of higher education in particular, over the past decade education decision-makers, development agencies, tertiary education institutions, and researchers themselves have given significant attention to the promotion of quality assurance in higher education across Africa. As highlighted in the 2012 Outlook on Education Report, numerous organizations, such as AU and the ADEA Working Group on Higher Education (WGHE), have been at the vanguard of promoting the quality assurance movement.

⁴ CLACSO is the Latin American Council of Social Sciences, the CODESRIA sister organization in Latin America
⁵ IDEA is the International Development Economics Associates, an Asian organization including many members
⁶ These topical areas are also the focus areas of its 2012-2016 strategic plan



During the 2012-2013 period, this movement intensified and diversified with the launch, or continuation, of several quality assurance initiatives at the continental, regional or local level.

- (a) At the AU level, the African Quality Rating Mechanism (AQRM) is making slow but steady progress towards improving quality in higher education.
- (b) The flagship programme of the Association of African Universities (AAU), the African Quality Assurance Network (AFRIQAN), covers a relatively wide spectrum of African higher education institutions and continues to gather strength.
- (c) Other initiatives at the continent level geared towards strengthening quality assurance capacities include the Inter-University Council of East Africa (IUCEA) initiative on quality assurance for the East African Community (EAC), a joint European-African project in close collaboration with the German Academic Exchange Service (DAAD) and the German Rectors' Conference (HRK).
- (d) The Licence, Master, Doctorate (LMD)⁷ reform is being implemented by 19 francophone countries across Africa, albeit at a slow pace, to harmonize their systems of higher education and align them with those of their anglophone counterparts in conformity with the procedures of the Bologna process in Europe. The initiative is coordinated by the African and Malagasy Council for Higher Education (CAMES) and its ultimate objective is to strengthen quality assurance in higher education.
- (e) In November 2012, the UNESCO Institute for International Education and Planning (IIEP) organized a conference on higher education governance of which quality assurance was a key component. DAAD, within the framework of its Dialogue on Innovative Higher Education Strategies (DIES), jointly organized with the UNESCO Dakar Office and UNESCO/IIEP a conference on the theme of strengthening regional cooperation in quality assurance in West and Central Africa. The purpose of the event, which brought together 110 participants (including rectors, university presidents, higher education experts and actors) from 27 countries - six European nations and the United States of America - was to support partners in developing countries in improving their capacities for effective higher education management and quality assurance.


An important vehicle for improving the quality of higher education is, undoubtedly, offered by instruments such as the Revised Arusha Convention on the harmonization of degrees, grades, diplomas and other qualifications in the Africa region. This topic will be further developed in the section below that highlights the AU's higher education initiatives.

III. Role of Universities in the Development of the Continent and their Assistance to Lower Levels Of Education

The role of universities and other tertiary education institutions in Africa's development is of paramount importance. Furthermore, the assistance that universities and other tertiary education institutions can provide to lower levels of education in various areas is also important. Thus, there is a clear link between the need to support higher education, especially through its financing, and economic growth.

First of all, one of the key missions of universities is the training of quality human capital whose contribution to the development of Africa is recognized and proven. Thus, in a conceptual framework they developed to examine the interrelatedness between these two variables, Bloom et al. (2006) posit that higher education can lead to economic growth through both private and public channels. To illustrate this one-way interaction, they employ a model that underscores the private benefits approach whereby growth is spurred by productivity that is itself contingent upon entrepreneurship, a high level of specialization and the high salaries that college and university graduates earn both in government and in the business sectors of the economy. Where the public channel is concerned, higher education through research and development, foreign direct investment, good governance, safety, literacy and health, induces social development and consequently contributes to the reduction of poverty. It is also a powerful means for upward mobility and income redistribution. All this evidence shows the economic value of public and private investments such as tuition and fees.

Secondly, higher education assistance to lower levels of education is a natural phenomenon because of the organic nature of the education system. Universities and tertiary education institutions such as teacher training colleges assist in both pre-service and in-service teacher training as well as in technical and vocational skills development (TVSD), which is a specific focus area of the Plan of Action fully laid out in chapter V.



Despite this situation, there is still a huge shortage of teachers at all levels as the universities and tertiary education institutions are unable to produce enough graduate teachers to meet the demand. It is estimated that Africa needs about 1 million teachers before the deadline set for the EFA in 2015 (GMR, 2013). Higher education and tertiary education institutions can also advise governments on educational development strategies and policies. It is unfortunate that this expertise is not fully utilized. Finally, higher education, in the area of applied research, may produce knowledge that may be used to improve educational practices at lower levels of the system.

IV. Funding

The financing model of African higher education puts the bulk of the cost of education on government as part of its constitutional responsibility. Households also bear the direct costs of their siblings attending fee-paying private institutions. Recurrent costs comprising staff salaries, material, instructional and operational costs and capital outlays (such as the cost of infrastructure) are incurred by the government (Diarra, 1997). Furthermore, in many African countries, students' direct costs such as tuition and fees, stipends and bursaries are also borne by the government. In the final analysis, this raises the issue whether students and their families should contribute to the costs of their education. This situation, known as cost recovery or cost sharing, has been very controversial in many African countries, causing disruptions and disturbances in higher education institutions that have led to the institutions' temporary closure and invalidation of academic years in many countries across the continent.

Owing to the explosion of student enrolments over the past two decades, and the fact that higher education is capital and labour-intensive, many African governments have been unable to allocate adequate resources to the subsector. According to Tefera (2010), it was estimated that Africa allocated only 0.78 per cent of its gross domestic product (GDP) to higher education, with an average of 6 per cent being allocated to the entire education sector. The portion of the national budgets allocated to higher education in Africa varies between 1 and 25 per cent. After long neglect of higher education, however, there is now general agreement that this subsector, given its strategic importance for Africa's development, requires additional funding. In this respect, the World Bank, the initiator of the Structural Adjustment Policy (SAP) of the 1980s that had such a negative impact on the promotion of higher education, has provided support to many countries through the Tertiary Education for Agriculture Mechanism (TEAM) project based in Kampala, Uganda.

V. Improving Access, Equity and Relevance

Improving access, equity and relevance are *sine qua non* conditions for revitalizing higher education in Africa. According to the 2011 data,⁸ the tertiary education gross enrolment ratio (GER) was 10.88 per cent. In the absence of quality data, it is difficult to assess the progress made since the release of this figure. One may argue, however, that as GERs in primary and secondary education continue to increase, more students want to access universities and higher education institutions across the continent. The sketchy and fragmented data available tend to prove that there are huge disparities within and between countries regarding access. Girls' enrolment in higher education institutions is very low and represents about 3 per cent of the continental average of 10. Although higher education opportunities are expanding, more middle-class urban high-school graduates enrol in higher education than graduates from poor rural areas in most African countries. This raises, in the final analysis, equity issues in the system that need to be urgently addressed.

It is also interesting to note that the relevance of higher education is increasingly becoming a hotly debated policy issue for numerous reasons. For a start, many graduates of higher education institutes are unable to find jobs in the labour market that are commensurate with their qualifications. Thus, one may argue that this is the consequence of a mismatch between training and employment, or the limited job creation ability of the economy, or both. In any case and in most African countries, unemployment among young college graduates is rampant and the economic value of a college degree is continuously falling. In fact, to alleviate this potentially explosive problem, there should be a constant interface between the training institutions and the job market.



In the first instance, measuring the progress made in implementing CAP has not been easy; lack of reliable data is a powerful explaining factor. The African Ministers' Conference of Science and Technology (AMCOST) is an effective oversight body in the implementation of CAP. Measures need to be taken to improve data quality and availability. It is also clear that bold actions have been taken to promote science and technology in member States through the formulation and implementation of national science policies and strategies as well as education sector-wide plans.

Secondly, information and communications technology is attracting growing attention because of the vital role it plays in education and development. It is for this reason that AfDB, UNESCO, ADEA and Intel, in close collaboration with African ministries of education, training and information and communications technology organized the first African ministerial forum on information and communications technology in December 2013 in Tunis. The forum recommended, among other things, the formulation of information and communications technology policies where they do not exist and the implementation of existing policies.

VII. Initiatives and Regional Integration of the AU

At the level of the AU, achievements regarding the implementation of the higher education focus area have been numerous. They have, in a way, boosted the revitalization, harmonization and quality assurance of higher education as well as continental and regional integration.

Pan-African University

Over 130 master's students from 28 member States, on full scholarships that cover return air travel, monthly stipend and tuition fees, are currently enrolled in three of the PAU institutes: that on governance, humanities and social sciences (based in Cameroon), that on basic sciences, technology and innovation (based in Kenya), and that on life and earth sciences, including climate change (based in Nigeria) that started operations in the 2012/2013 academic year.

The January 2013 Summit of Heads of State and Government approved the statute of the Pan-African University. Host agreements were also signed between AUC and the Nigerian Government and between AUC and the Cameroonian Government in January 2013, while the memorandum of understanding between AUC and the Kenyan government was signed later in May 2013. Similarly, memorandums of understanding between AUC and the lead thematic partners for the PAU institutes in Kenya, Cameroon and Nigeria, namely Japan, Sweden, and India, respectively, were signed in May 2013. The May summit also approved the initial staff structure of PAU and efforts are now under way to fill up the key substantive positions by June 2014.

Progress was made towards the operationalization of the Pan-African Institute for Water and Energy Sciences (PAUWES). Of note was a curriculum validation workshop held in February 2013 to conclude the curriculum development efforts that began in September 2012. Perhaps more significantly, however, in June 2013, an agreement on the provision of support totalling 20 million euros over five years by the German government (Federal Ministry for Economic Cooperation and Development) was sealed with the signing of the tripartite memorandum of understanding between AUC, the Algerian government and the Ministry.

In August 2013, AUC and AfDB signed a multinational grant agreement in which the latter committed USD 45 million towards supporting the three PAU institutes and strengthening the PAU Rectorate and AU HRST with staff and equipment over a five-year period.

In October 2013, the Steering Committee of PAU (precursor to the PAU Council) held a meeting in Addis Ababa, to discuss the harmonization of the 2013-14 roadmap. Representatives were drawn from:

- (a) The institutes' host countries: Cameroon, Kenya and Nigeria.
- (b) Lead thematic partners: Germany, India, Japan, and Sweden.
- (c) Host universities: University of Ibadan, Jomo Kenyatta University of Agriculture and Technology (JKUAT), University of Tlemcen, University of Yaoundé II.
- (d) Key development partners: African Development Bank, European Union mission to the African Union, the Organization for Social Science Research in Eastern and Southern Africa (OSSREA), United Nations Educational, Scientific and Cultural Organization (UNESCO), Association of African Universities (AAU) and PAU high-level panels.

The major challenge for PAU is sustainability of support. Support from partners will depend on member States demonstrating their commitment through contributions or assured annual budgetary allocation.

Mwalimu Nyerere African Union Scholarship Scheme

The Mwalimu Nyerere African Union Scholarship Scheme was launched in 2007 to contribute to the production and retention of high-level African human capital in critical development areas, while promoting regional integration and pan-Africanism through intra-African mobility of students. The scheme is an umbrella framework programme consisting of several current initiatives, including the core Nyerere Programme; the Africa-India Fellowship Programme and the expanded Nyerere Programme - also referred to as the Intra-Africa and Caribbean and Pacific (ACP) Academic Mobility Programme. The Nyerere Programme is benefiting young African students from many member States. Several of the awardees have already graduated.

1. Core Nyerere Scholarship

Sixty two students from 25 African countries have been awarded the Nyerere Scholarship to study in 34 different universities across the continent. Of these, 37 have graduated successfully. A special scholarship, for female applicants only, was launched in 2013 for studies at master's level to promote the active participation of young women. In the first call for this scholarship, 20 female students were selected.

Monitoring and evaluation missions are undertaken by a team in selected universities to assess the implementation status of the Nyerere Scholarship, including the logistics of tuition fee disbursements and academic supervision of students. As part of a monitoring framework to follow up the academic status of students, students are required to send their academic status report each semester to the team, approved by their academic supervisors.

2. Africa-India Fellowship Programme

Under the Africa-India strategic partnership, the Nyerere Programme has received support for scholarships in the field of agriculture. The Africa-India Fellowship Programme was started in 2010 to support agricultural human resource development for African universities and research institutes through masters' degree and doctoral programmes in selected Indian agricultural universities. Eligibility checks were made on submitted applications to facilitate the selection of candidates for study in India. As of December 2013, despite some dropouts and challenges in the admission process, a total of 169 African students from 27 member States have enrolled in Indian agricultural universities. So far, 41 students have graduated.

3. Expanded Nyerere or Intra-ACP Academic Mobility Programme

An expanded programme was developed in 2009 and is being implemented with support from the European Commission. The scheme involves the mobility of students and exchange of academic staff among selected networks of African universities to strengthen cooperation between higher education institutions across the continent. The networks have to include universities from different geographic regions and demonstrate the high quality of the programmes offered and availability of fully qualified staff and properly equipped facilities.

The third call for this innovative programme was launched in February 2013. Eligibility checks and technical review of proposals from participating universities were undertaken and 15 networks involving universities from 34 member States have been selected and are in the process of implementing the academic mobility. The mobility programme is jointly managed by the EC and the AUC.



Harmonization of Higher Education in Africa

To implement the AU Harmonization Strategy for Higher Education, endorsed by COMEDAF III in 2007, the Commission is working to ensure that the Revised Arusha Convention is approved through AU appropriate structures. The consultation process with the Legal Counsel to present the Convention to ministers of justice is under way. The AU Harmonization Strategy for Higher Education is instrumental in facilitating the mutual recognition of academic qualifications and in enhancing intra-African academic mobility.

The implementation of the harmonization strategy involves, among other measures, designing common curriculum development frameworks to enable the comparability and equivalence of learning outcomes in African universities. In collaboration with the European Commission, a pilot project for developing harmonized university curricula using the European Tuning Approach was finalized during 2013, involving 60 African universities. These universities developed learning outcomes and competencies for five subject areas: medicine, teacher education, mechanical engineering, agriculture, and civil engineering. A preliminary edition report was published in 2013 highlighting the African experience in tuning and harmonizing the higher education subsector. The tuning methodology is a European instrument for implementing the AU strategy for the harmonization of higher education.

African Quality Rating Mechanism (AQRM)

The undertaking by the African Union Commission to develop the African Quality Rating Mechanism (AQRM) had the aim of establishing an African system that would ensure that the performance of higher-education institutions could be measured against a set of agreed criteria, and to help the institutions carry out self-evaluation exercises to support the development of an institutional culture of quality. AQRM holds much prospect for improving the quality of higher education in Africa by fostering the development of internal quality-assurance systems in institutions and by providing a means for external validation of quality assessment. Its implementation supports the work of national, regional and continental quality-assurance bodies.

Based on the experience and feedback gained from the pilot survey conducted in 2010, a revised version of the AQRM questionnaire and rating instrument was developed. An online tool for the AQRM survey was finalized to enable African universities assess themselves online and submit the questionnaires and their self-rating electronically for efficient processing of the institutions' data.


In collaboration with AAU, an open call was made to African universities to participate in the AQRM exercise. For selected universities, self-rating of the institutions will be validated by international external reviewers through site visits to the respective universities. The outcome of the AQRM exercise will be published and disseminated to various stakeholders of the academic community. AQRM will support African higher-education institutions to take ownership of their own academic evaluation processes and use the quality rating mechanism as a means of supporting continuous quality improvement and as a tool for strategic planning in quality assurance.

Continental Quality Assurance and Accreditation Framework

The development of a continent-wide quality assurance and accreditation framework has been initiated as instructed by the January 2013 Summit's Executive Council decision EX.CL/Dec.676(XX). A workshop on the establishment of a continental accreditation agency for higher education in Africa was held in Addis Ababa. The meeting discussed possible operational modalities for developing a pan-African quality assurance framework and the creation of an African continental accreditation agency.

In October 2013, a project was launched to implement the AQRM in African universities and to develop a continental quality assurance and accreditation framework with the support of the Joint Africa-EU Strategic Partnership. An open call was issued and terms of reference prepared for qualified experts to work in a team of two consultants that would undertake the study.

The quality assurance procedures and accreditation mechanisms of several African countries representing the different geographic regions and education systems are to be analysed with a view to identifying common quality standards and practices. The framework is to be prepared in such a way that it covers the common denominators of quality assurance and accreditation systems in Africa and considers international good practices. The creation of a continent-wide accreditation body will strengthen cooperation in quality monitoring and facilitate the development of compatible methodologies, the harmonization of procedures and the mutual recognition of academic qualifications. Moreover, the establishment of a continental accreditation agency is vital to guaranteeing the high-quality provision of education in the Pan-African University and to ensuring its international recognition.



A conference of stakeholders is planned, involving national and regional accreditation agencies together with ministries of higher education, to identify areas of collaboration between quality assurance and accreditation agencies. This will be instrumental in identifying comparable practices that create the basis for regional and continental harmonization and the establishment of a continental accreditation agency.

on the sidelines of the fourth EU-Africa Summit, a workshop on the credits and portability of qualification, as part of the harmonization and tuning of African higher education was held in Brussels in March 2014 with representatives from the 60 universities participating, together with other stakeholders, resolving to expand the work in this area for 2014-2017 to support the harmonization of African higher-education programmes and the creation of a revitalized, distinctive, attractive and globally competitive African higher-education space through enhanced intra-African collaboration. Support activities will be coordinated by AUC, AAU and the European Commission. The work will be undertaken through tuning and quality assurance and accreditation. Tuning work in Africa will be expanded to involve twice as many universities - expanding the initiative base to 120 African universities, including PAU, distance education and private higher education providers - and will also involve additional subject areas. Where quality assurance and accreditation are concerned, the Joint Africa-EU Strategy will see support taking place at three levels: for institutional quality assurance; for national and regional quality assurance and accreditation; and for a pan-African framework for quality assurance.

VIII. Private Sector and Cross-Border Provision of Higher Education

As stated in the 2012 Outlook Continental Report, the expansion of private higher-education providers in the region has played an important role in ensuring access to higher education by a wide category of students. Along those lines, cross-border provision of higher education is a trend that has facilitated the re-establishment or relocation of campuses of foreign training institutions, resulting in a significant increase in the provision of higher education in Africa. Universities, States and students benefit from the provision of private and cross-border higher education in terms of costs, convenience, enhancing regional cooperation, capacity-building and exchange programmes (student and faculty mobility). Cross-border exchanges may be observed as a South-South phenomenon in the case of specific recipient universities of particular countries being the primary destination and choice of a higher education institution for students from departing countries. Ghana, Kenya, Senegal, South Africa and North African universities are perfect examples of this trend. There is also the North-South phenomenon, whereby the relocation in the South of higher education institutions from the North is becoming increasingly widespread across the entire African continent. Once again, in the absence of valid data, it will not be possible to document the phenomenon in all its manifestations in tracking the progress of the appropriate indicators in the domain.

IX. Regional Economic Communities

I. Arab Maghreb Union (AMU)

Higher education in the Arab Maghreb region continues to grow. The 2012 Education Outlook reports expanding access to tertiary education in the region as well as a steady improvement in the quality of higher education. This means that equity disparities and gaps in the region are gradually being addressed. Recent data indicate significant progress in improving access to tertiary education with total enrolment increasing in Algeria, Mauritania and Tunisia. Mauritania, for example, reported the highest increase in total tertiary enrolment in 2012, a staggering 76 per cent. The total number of tertiary students per 100,000 in Mauritania has almost doubled since 2006, making it clear the country is serious about enrolling more people into tertiary education. Surprisingly, Algeria and Tunisia have reported that more women are enrolled in tertiary education than men. Due to the lack of data it will not be possible to comprehensively track the progress made in the implementation of a number of key indicators at either the regional or the country levels, such as GER, inbound and outbound mobility rates and the number of female students in science.

2. East African Community

Within the East African Community's integration policy, which necessitates the harmonization of its education and training systems, the region has made significant investment and achievements in higher education when the trends identified in the 2012 Outlook are compared against the 2012-2013 evaluation period, although challenges remain in some key areas. Several regional policies and strategies have also been adopted over the reporting period, such as the Harmonized Quality Assurance Strategy adopted in 2006. Growth in this sector for the East African Community



has also been realized by an increase in the numbers of students, and also by the growth of private institutions which provide the majority of educational services in the region. The lack of adequate funding, on the one hand, and the incoherent policies regarding private university education, on the other, have the consequence that the provision of quality education is being compromised.

Inequities in gender appear to be common in this subsector. While considerable efforts are being made to address them through affirmative action, much remains to be done to bring them to an acceptable level. In the absence of reliable and quality data in the region, however, it remains a challenge to attempt a well-informed analysis about the higher education situation in the region as a whole.

3. Economic Community of Central African States

The most significant initiative relating to the promotion of knowledge production networks in the Economic Community of Central African States (ECCAS) region is the establishment in June 2012 of the pôles d'excellence technologique universitaires (PETU - university centres of technological excellence), supported by UNESCO and AfDB. Through PETU, selected reputable technical institutions in certain ECCAS countries will offer study programmes in agriculture, agribusiness, electrical engineering, petroleum engineering and energy, and forestry, and also the production of reliable education statistics. Other initiatives include the establishment of the Centre for Training and Development for Teachers in Science, Mathematics and Technology (CEMASTEA) by NEPAD.

ECCAS has a partnership agreement with the Inter-Agency Research Institutes for Development (AIRD) to establish the Consortium for Research, Innovation and Training in Central Africa (CRIFDAC). Despite the significant increases in enrolment rates in higher education registered in the Central African Republic (180.6 per cent) and the Democratic Republic of the Congo (122.8 percent), access remains low, with only 287 students per 100,000 inhabitants enrolled in the Central African Republic, for example. Gender inequalities also persist; with Sao Tome the only country near parity.

4. Economic Community of West African States (ECOWAS)

Several initiatives are currently taking place in the ECOWAS region. Firstly, the adoption of the ECOWAS Convention as annex to the Protocol on Education and Training in order to derive optimum benefit from education resources in the region was an important move. Specifically, the Convention was adopted to promote regional cooperation with regard to the assessment and recognition of certificates; widen cooperation among people and strengthen collaboration in the use of manpower; and facilitate the exchange of skills and the pursuit of studies. An ad hoc committee of the member States (Côte d'Ivoire, Ghana, Mali, Nigeria and Senegal) and ex officio members from partners was adopted in 2005. A study on the feasibility of the convention on equivalence of certificates was conducted in 2009. Representatives of ECOWAS higher-education institutions validated the document in 2011 in Lomé and the ministers of higher education of the regional economic communities are yet to endorse the document.

Within ECOWAS, the West African Economic and Monetary Union (WAEMU), comprising Benin, Burkina Faso, Côte d'Ivoire, Guinea-Bissau, Mali, Niger, Senegal and Togo, is in the process of harmonizing the high-school syllabus and diploma to facilitate mutual recognition of degrees as well as student mobility in the monetary area of West Africa. The West African Education Council (WAEC) countries, comprising the Gambia, Ghana, Liberia, Nigeria and Sierra Leone, have also harmonized their high-school system. WAEMU also initiated a higher education support programme and diploma. The WAECU Commission has provided support to WAEMU member States through the Programme d'Appui à l'Enseignement Supérieur (PAES) whose key objective is provide financial assistance to higher education institutions in the subregion in order to strengthen their institutional and organizational capacities.

5. Southern African Development Community (SADC)

Higher education and research are considered key dimensions for the economic, social progress and integration of the SADC region. The weight of South Africa's higher education, with some of its universities being classified among the top 500 universities in rankings compiled by the Shanghai University, is considerable in the region. Thus, it may be argued that SADC universities are among the best and most efficient of the African continent. It should be noted that the progress made by SADC in the implementation of its Education and Training Protocol is significant. Its ministers of education and training meet once a year to review the realization of educational programmes in the region. SADC has

been a pioneer regional economic community as far as the formulation and implementation of educational policies and strategies are concerned. It is one of the most advanced regional economic communities in the area of girls' education, education management information systems (EMIS) and of course, higher education.

Like the other regional economic communities of the continent, the lack of data in some areas has been a key impediment in comprehensively tracking the progress made in the implementation of the higher education indicators in the Plan of Action - as many as eight countries did not provide any data on the priority area. As a result, inbound and outbound mobility ratios, the ratio of science and mathematics students disaggregated by gender, country, socio-economic status, and majors, could not be comprehensively assessed. However, tertiary-level enrolments in the Democratic Republic of the Congo, Lesotho, Madagascar and Mauritius have witnessed impressive growth since 2006. Lesotho realised an increase of over 200 per cent. In the Democratic Republic of the Congo and the United Republic of Tanzania, the rate of male students was higher than that of females while the opposite situation prevailed in Lesotho and the Seychelles. Female students tended to be concentrated in education with minimal representation in subjects such as engineering, manufacturing, construction and science. At the policy level, the SADC region has established several frameworks, mechanisms, projects and programmes as part of efforts to improve both access to and quality of higher education. The SADC open and distance learning capacity-building project was established in 2008. In 2012, a policy framework for this capacity-building project was produced.

Conclusion

Less than two years before the deadline for the Second Decade of Education for Africa's Plan of Action (2015), it is clear that the overwhelming majority of African countries will not be able to achieve the objectives set for the higher-education focus area. A number of lessons may be drawn after eight years, however, in the implementation of the plan.

First of all, several initiatives geared toward revitalizing higher education at the levels of the AU and the regional economic communities are being launched and are bearing fruit. Tremendous efforts are also being undertaken at the country level to support the revitalization of higher education.

Secondly, progress is slow regarding the implementation of the four thematic domains: promotion of research and knowledge production, quality assurance, support to economic development and funding. Whereas some countries have made tremendous progress others are still lagging behind and may not reach the objectives set when the 2015 deadline is reached.

A third lesson is the need regularly to collect, analyse, produce and disseminate data at all levels for informed decision-making and planning, as lack of comprehensive quality data significantly impedes efforts to track the progress made in the implementation of the higher education indicators.

Finally, there is an urgent need to ensure that reliable and quality data are collected in all the five regional economic communities of the continent to regularly assess the progress made in the implementation of the Plan of Action indicators.



Priority Area 5: Technical and Vocational Education and Training



In 2012, the African Union Outlook on Education reporting on progress in technical and vocational education and training (TVET), priority 5 of the Second Decade of Education (2006-2015), acknowledged that countries on the continent were undertaking reforms to revitalize their TVET systems. The regional economic communities (RECs) and their affiliated institutions were likewise initiating collaborative efforts to reform policies, curricula, certification and access to the world of work in the sector. The revitalization trend has also been reported in many publications of continental and international institutions and agencies. Indeed, looking back to the latest developments in the field, there could be some satisfaction that TVET is high on the agenda of governments, that the discourse in TVET is about relevance and quality of training, employability, involvement of the private sector and that some countries have started to design training programmes in the priority economic sectors identified by the AU 2007 TVET strategy: agriculture; public health and water resources; energy and environmental management; information and communication technologies; construction and maintenance.

However, the many publications on TVET and, on education in general, have indicated that there is a gap between policy formulation and policy implementation in Africa. Furthermore, the measure of progress made in the TVET sector on the continent can only be linked to its main purpose which is to lead to gainful employment. And there, it should be said from the onset, that progress in the field is being hampered by the inability to reduce unemployment figures in all the countries. Therefore, it is imperative to take actions in the two important recommendations made in concluding the 2012 AU Outlook on education for COMEDAF V: countries should focus on the situation of youth transition into the labour force and tackle employment issues and challenges.

This report on progress made in TVET since 2012 will first review achievements and challenges of the sector on the continent. It will then propose that TVET be looked at with new lenses and argue for an effective change of paradigm in policy-making, implementation, monitoring and evaluation. There are reasons why countries should reflect on the need to (re) consider critically the areas covered by their technical and vocational training systems.

A Question of Terminology

On the continent, the sector is referred to as TVET, VET, TEVET or TVSD. However, in this document, the terms “technical vocational education and training (TVET)” and “technical vocational skills development (TVSD)” will be used interchangeably to describe skills development efforts taking place in countries, at different levels, in different types of formal, non-formal and informal learning environments involving both youth and adults. These include:

- Formal, school-based system
- Informal sector training system (e.g. traditional apprenticeship system)
- Enterprise-based, on-the-job training
- Non-formal, semi-structured or unstructured training, and
- Online, internet-based training

I. Member States' Participation in TVET

Access to TVET

Several countries have projected to expand access to TVET by 2015¹. But, in general, the TVET system, especially the formal one, is not expanding fast enough to absorb the high outflow of primary and lower secondary school leavers. The continent faces two challenges: accommodating youth progressing normally into TVET but also the huge numbers of school drop-outs. TVET enrolment rates on the continent vary from about 1 per cent of the school going age cohort in countries like Ghana, Niger, Ethiopia, Chad, Kenya, and Senegal to about 36 per cent in Rwanda. In Ghana, for example, only 1 in 10 students who leave the basic education system enroll in TVET institutions. The numbers of school drop-outs are alarming. Specifically, for half of the 27 countries where data is available for 2011, the transition rate from primary to lower secondary is less than 70 per cent, with 7 countries around 50 per cent².

The huge pressure of access to TVET/TVSD can only be solved by not only expanding the capacities in formal TVET but also making sure that the informal and non-formal training systems are capable of delivering quality training with full recognition of the central training authorities.

¹ Africa Economic Outlook on Technical and vocational skills (2008)
² UNESCO (2013) EFA Global Monitoring

TVET Trainers and Instructors

There is a paucity of data on TVET teachers. Even the EFA Global Monitoring Report 2013 which had a focus on teaching did not really cover the status of TVET trainers and instructors. From available data, it should be highlighted that some countries have increased the number of their teaching staff. As such, between 2006 and 2011 the number of TVET teachers in secondary schools in Ghana has increased from 1,723 to 6,574, in Ethiopia from 6,134 to 12,990 or in Mozambique from 1,002 to 2,242³. This increase is in line with these countries' recent targeted efforts to develop a skilled labour force.

In many countries, TVET teachers need to be both pedagogically and technologically better qualified. They also need to upgrade their skills regularly. However, in-service training institutions, where they do exist, lack trainers and equipment. In Uganda, about 90 per cent of the teachers in the private TVET sector have not had any pedagogical training. In Kenya, about two-thirds of TVET teachers confessed that they were more comfortable teaching theory than practice⁴. A UNESCO study (to be published soon) on TVET trainers' policies and practices⁵ in the Arab world covering 10 countries among which four are African, documents the issues and challenges facing the profession.

In the apprenticeship system, the role of master crafts persons in skills training is very significant. Yet, in spite of their demonstrated technical skills, they lack the pedagogical skills necessary for effective teaching. So, as part of the renovation of the apprenticeship systems in countries, there are current initiatives to train these master persons in pedagogy but also to upgrade their technical skills (as is proposed in Senegal, Mali, Togo and Benin).

Quality and Quality Assurance

Countries still need to formalize internal or institution-based quality audit strategies. There are no mechanisms in place to commit system managers and heads of institutions to achieving set quality standards. Efforts at developing credible and enforceable accreditation systems are undermined by the absence of standards and norms regarding learner-teacher ratios, type and adequacy of training equipment and tools, teacher qualifications and experience, laboratory and workshop space and layout. The accreditation of TVET providers is also crucial to the quality of TVET delivery in countries as the number of private providers is rising. However, very often countries do not follow the same rigorous guidelines and procedures practiced within the higher education systems of Africa. In most cases, institutional registration is considered as good as accreditation.

National Qualifications Frameworks

The understanding that national qualifications frameworks (NQFs) are necessary harmonization tools to ensure the readability of the acquired competencies within the education and training systems in countries and at regional level for workers' mobility is making progress. Following pioneers such as South Africa, Mauritius and the SADC region at large, other countries and regions have embarked on the journey leading to the design of NQFs. Mali, Rwanda, Ghana have taken a sectoral approach and have initiated the design of a TVET qualifications framework. But one should note that progress in the field is very slow especially with French-speaking countries. The informal and non-formal skills acquisition systems are now just beginning to be given some consideration in the construction of NQFs. Senegal, Mali, Burkina Faso have introduced a mechanism for the recognition of prior learning for skills acquired in the non-formal and informal systems, with the certification process being conducted in local languages. In 2013, ADEA within its Inter-Country Quality Node on TVSD (ICQN/TVSD) organized a NQF workshop in Abidjan (July 2013) for knowledge and experience sharing among some 13 countries (French, English and Lusophone speaking).

Women and Minority Groups

Female enrolment rates in formal TVET are generally very low. For the African countries where data is available for 2011, it does not exceed 54 per cent⁶. There is a need for training policies to focus more on the specificities of women in urban and rural areas. The EFA Global Monitoring Report (2012) highlighted the fact that because girls' achievements in the acquisition of foundation skills are generally lower than those of boys, they face more obstacles to find gainful employment. In Benin, Cameroon and Sierra Leone, 85 per cent of young women living in rural areas lack foundation

³ Data compiled by ADEA WGEMPS

⁴ Ferej, A., Ooko, Z., and Kitainge, K. 2011. National thematic study: Reform of TVET teacher education in Kenya: Overcoming the challenges of quality and relevance. Working Document for ADEA Triennale

⁵ UNESCO study on Constructing a profession of opportunity: policies and practices on TVET teachers and instructors in the Arab Region (Forthcoming)

⁶ UNESCO (2014). Teaching and Learning: Achieving Quality for All. EFA Global Monitoring Report.



skills and are thus disadvantaged to take up technical and more sophisticated vocational skills to move up the social ladder. In Zimbabwe, 94 per cent of women in the informal sector are considered to be unskilled⁷, compared to 88 per cent of men. Apart from dressmaking, and hairdressing, women representation in apprenticeship is still weak. In Zimbabwe, it is reported that only 14 per cent of students enrolled as apprentices are women⁸.

Although national TVET/TVSD policies mention the need for skills acquisition by the poor and vulnerable of society as a strategy for gainful employment, very few countries have provision for targeted skills development opportunities. Very few initiatives to promote access to skills development exist. In Ghana, for example, according to the Council of Technical and Vocational Education and Training (COTVET), a private indigenous ICT company is partnering with the ministry of employment and social welfare to train about 5,000 persons with disability in the maintenance and repair of mobile phones and lap tops. In Senegal and Mali, the current initiatives target the acquisition of vocational skills in sewing and shoe-making and repairs and are combined with functional literacy programmes.

The Role of Private Providers

In almost all the countries, the number of TVET/TVSD private providers is on the rise. Their role is to expand access to skills development to a huge number of school leavers. In Kenya, for instance, the last known data shows that the private providers enroll more than 45,000 students compared with about 22,000 and 30,000 for the National Polytechnics and Technical Training Institutes respectively. It is estimated that 70 per cent of training institutions are privately owned. In Senegal, enrolment in private institutions consistently account for more than half of the total enrolments over a period of four years (56 per cent in 2007; 57 per cent in 2008; 58.7 per cent in 2009; and 56 per cent in 2010). In Uganda, the exact number of private institutions, both formal and non-formal, is not known, but current estimates put the number at about 600. Some estimates put the figure at over 1000, with a learner population of about 120,000⁹.

Even though, the private provision in TVET can be seen as a solution to the existing limited access to TVET, the fact is that privately owned training institutions are mostly situated in urban areas and offer training programmes mainly in the service sector. In addition, their tuition fees being higher than those charged by government training institutions, they do not really contribute to the reduction of geographical and economic inequities.

Continental and Regional Collabouration in TVET Revitalization

The continental and regional collabourations in TVET revitalization described in the 2012 AU report on education are ongoing. Among the many new initiatives, some cover the area of policy formulation at the continental level. The African Development Bank, for instance, has developed its Long Term Strategy (2013-2022). The Bank's Higher Education Science and Technology Strategy (HEST) and the New Education Model for Africa (NEMA) have the key objective of supporting African countries to achieve growth that is more inclusive and the development of human capital imbued with specialized skills while addressing the mismatch between the supply of skills and labour market needs. NEMA in particular seeks to facilitate the linking of education and training systems with the labour market as well as promote public private partnerships. Other organizations target interventions at country-level such as UNESCO in national TVET policy formulation in Liberia, or ADEA and the West African Economic and Monetary Union (UEMOA in French) in coordinating training packages in 16 growth sectors. UEMOA with AFRISTAT are also developing indicators for the collection of data for the operation of national employment observatories which will also feed a regional employment observatory in the West African Region. ADEA in collabouration with the government of Ivory Coast and within the framework of its ICQN/TVSD is preparing for a youth employment forum to be held in Abidjan in July 2014.

7 ZIMSTAT (2012) Labour Force Survey

8 ILO (2010) Situational Analysis and Mapping Report, Michael Mambo, ILO Country Office Zimbabwe, Source: www.africayouthskills.org

9 Source: BTNET Department of the Ministry of Education and Sports

I. Challenges Faced by the TVET Sector

I. Improving Employability and Relevance of Youth and Adults

I.I Skills Mismatch

The first challenge of the TVET/TVSD sector is to match the acquired skills of its outputs or graduates with the skills needs of the job market. The employment, and more importantly, the underemployment picture is still very gloomy. Every year 8 million to 10 million poorly skilled young Africans make the difficult transition from school to the labour market, where they end up in insecure and sometimes hazardous employment with no prospect of further education or developing their skills. According to the Africa Progress Report (2012) there are 173 million Africans between the ages of 15 and 24 years, most of whom have entered the world of work from childhood with limited education and skills for decent employment and jobs. And even if the high rate of unemployment and underemployment on the continent has many economic causes, one should stress in the framework of this report on TVET, that skills mismatch is an important issue as far as skills development efforts are concerned.

The international literature predicts that Africa will experience an important economic growth in the next 50 years¹⁰. Already out of the 10 fastest growing economies in 2011, seven are in Africa. In 2013, this growth is estimated on average at 4,8per cent and at 5,3per cent for 2014 (Africa Economic Outlook, 2013). This “good” news is immediately followed by a less rejoicing fact: African markets are not able to absorb the new entrants into the labour market. Paradoxically, many countries face situations where vacant posts are not filled because of lack of suitable human resources. The situation in Zimbabwe, where skills shortage stands at about 5,000 among artisans, machine operators and technical personnel¹¹ is very common to many countries (Niger, Gabon, etc.). Likewise, South Africa is reported to have 800,000 unfilled high skilled positions¹².

It is important in contextualizing the skills development sector in Africa, to also stress that the majority of workers in micro and small enterprises learn their trade on the job in the informal sector rather than in the formal TVET sector. In some countries, the informal sector accounts for more than 80per cent of all skills training¹³. In Ghana, for example, 85per cent to 90per cent of skilled workers learnt their trade in the informal economy. In Morocco, the percentage is 80.3per cent and only 4.5per cent of skilled employees attended any formal TVET institution. In the case of Zimbabwe, the majority of young people working in the informal sector acquired their technical and entrepreneurial skills outside the formal skills training system¹⁴.

Therefore, there is a need to harness the informal and agricultural sectors in the economy and their potential in skills development for structural transformation and job creation. The informal sector is the biggest employer in the African economy with 80per cent of the labour force. This predominance is more and more acknowledged and actions are being implemented to harness the potentials of the sector so that it becomes a real lever for sustainable economic growth. Furthermore, within the informal sector, agriculture remains the main employer with an average of 60per cent. In Burkina Faso, Guinea Bissau, Mozambique, Niger, Mali, agriculture employs 80 to 90 per cent of the workforce. Its contribution to the GDP should not be neglected. It stands at 40 per cent or more in Burkina Faso, Niger, Mali, Ethiopia, Zimbabwe, Ghana and Nigeria. The striking fact, though, is that fewer and fewer institutions train in agriculture. In Tanzania out of 23 rural institutions, only 3 were training in agriculture in 2011. The same situation can be found in a lot of African countries. At the extreme end of this paradox, there are countries such as Malawi with no institution training in agriculture.

In order to improve on employability and relevance in skills development, the African Union Commission (AUC) is developing a common minimum list of labour indicators. According to the ILO and AFRISTAT (Economic and Statistics Observatory of Sub-Saharan Africa), the key indicators of the labour market in a country should include: labour force participation rate, employment to population ratio, employment by sector, unemployment rate, employment in the informal economy, educational attainment and literacy rate, manufacturing wage indices, occupational wage indices, and incidence of poverty. Some countries like the Gambia¹⁵ have embarked on the development of a labour market

¹⁰ AfDB (2011). *Africa in 50 years'time*.

¹¹ Zimbabwe Chamber of Mines (2012) cited in

¹² E.Learning Africa. *News. Perspectives on ICT Education and Development in Africa. 2nd Edition 2014*

¹³ ILO, (2007)

¹⁴ Government of Zimbabwe. 2013. *Ministry of Small, Medium Enterprises and Cooperative Development. FinScope Study*

¹⁵ Lisk, F. 2011. *The development and operation of labour market information systems (LMISs): Case study of the Gambia. Working document. ADEA Triennale 2012*



information system (LMIS). On the contrary, the Decennial Program for the Development of Vocational Training and Employment (PRODEFPE in French) of Mali is not the result of a complex mechanism such as a LMIS. The skills gaps to be filled over a period of time have been identified through a consultative process with public-private partners backed by studies on employment needs and skills development issues in the country.

I.2 Integration of ICT into TVET/TVSD

The availability and management of ICT infrastructure remains a challenge in many TVET institutions. In general, TVET providers in Africa lack the technical expertise for the development of their ICT infrastructure. Although such ICT expertise may be available in-country, TVET institutions often do not have the resources to attract such experts into the classroom. Other challenges include the capacity of staff to utilize ICT in teaching, and the comparatively high cost of internet bandwidth in many African countries.

Partnerships with the private sector in advancing the integration of ICT in education and training for effectiveness are taking place. The latest is the First African Ministerial Forum on ICT integration in education and training in Tunis (December 9-11, 2013). The initiative was co-organized by ADEA, OIF, UNESCO, AfDB and Intel.

I.3 TVET Management Information Systems

In many African countries, one hardly comes across a functional TVET Management Information System that is designed to inform decision making in such areas as policy formulation, funding strategies, curriculum changes, system management and training relevance. The skills development sector is plagued with paucity of data. It appears the lack of relevant technical expertise and resources have prevented its development. Data and information required for designing appropriate labour-responsive skills training programmes, such as graduate output and employment data, are not available.

I.4 Training for Higher Level Skills

The international literature on Africa as an emerging continent of high growth potential in the future and discussions on the post-2015 EFA agenda stress the fact that there is a need to transform African economies from just importing goods to also transforming goods and making innovations. The talk these days is about structural transformation. At present, the majority of skills development provision in Africa both at the government level in the formal TVET sector or at the level of NGOs and church-based institutions target the acquisition of lower skills. There is a need to invest in skills development for higher skills in formal institutions such as universities and polytechnics but also in the creation of progression pathways which allows the recognition of skills learnt on the job or in the informal sector.

2. Improving Coherence, Integration and Multi-Stakeholder Partnerships in TVET/TVSD System

One of the biggest challenges facing the sector is to continue working on a more coherent integrated and multi-stakeholder TVET system. Despite a wide recognition of the importance of having a coherent, integrated and coordinated management both at the central and local levels for effective TVET management and delivery, training in many countries is still a shared mission between multiple ministries on the continent. Only a few countries such as South Africa, Mauritius, Rwanda, Ghana and Nigeria have put in place a national training authority in charge of regulating and coordinating TVET management and delivery. The most used tool for integration of the different players in TVET is the creation of consultative bodies. Francophone countries have created consultative platforms to integrate other ministries or organizations in the management of TVET. These consultative bodies are reported as being not fully operational because of lack of trust and the difference in the working culture of the different entities in question.

In light of the importance of involving the private sector in the management of the sector in the search for relevance of the TVET/TVSD system, several initiatives at the national, regional and continental levels have been implemented. At country level, several fora have brought together the private sector and government on the issues of skills development and employment. At the regional level, within the RECs (SADC, ECOWAS, etc.) such initiatives have also been taken. At the continental level, several meetings have been held to discuss and plan actions to develop the private sector capacity to be an efficient partner in the creation of jobs and the identification of skills needed in the economy. Promising models of effective public private partnerships are emerging. The enterprise-driven training model in

Morocco and the management of public sector TVET institutions by industry as in Senegal, Morocco and Tunisia are among the best practices in public and private partnership.

However, it should be recognized that these efforts have not reached all their potentials yet. This is due to again the lack of trust but also to the capacity of the private sector in Africa to fully take its place and be a key player as far as TVET policy and management is concerned. The African Development Bank has developed a new strategy to help the sector to be the “engine of sustainable economic growth, generating a decent work environment that offers productive employment in Africa for the next decade and beyond”¹⁶.

3. Improving the Sustainability of Funding in TVET/TVSD

Another major challenge is finding sustainable and additional TVET funding mechanisms. Government budgetary allocation to the education sector in most countries is insufficient. It ranges from about 11 to 28 per cent of the total public recurrent expenditure. Within this allocation, TVET/TVSD receives a small proportion compared to other subsectors of the education sector such as primary and secondary education. On average, only about 2 to 6 per cent of government educational budgets are devoted to TVET/TVSD. In the ECOWAS sub-region, for example, public funding to the sector varies from as little as about 1 - 2 per cent of the national education budget (Ghana and Togo) to about 11 per cent in Mali. In many countries, the private sector contributes to TVET through national training funds, often based on payroll levies paid by enterprises. The funds are used specifically for on-the-job-training and continuing training.

In the area of funding, there are a few initiatives which aim at directing revenues from taxation into skills development. In Nigeria, funding for the newly established Vocational Enterprise Institutions (VEIs) and Innovation Enterprise Institutions (IEIs) is derived from the Nigeria Education Trust Fund, the Petroleum Development Technology Fund, and contributions from industry. The Ghana Education Trust Fund (GETFUND) is another example of this kind of initiative.

It should also be noted, though, that, in some countries, issues of transparency and accountability concerning the use and management of the funds so collected has generated tension between the government and sections of the private sector which perceive training levies as an additional tax burden. Apart from external resources mobilized through development partners and other international organizations, it appears that African countries lack the capacity to raise domestic funds to improve TVET/TVSD delivery. The reason could be an over centralized training system which does not give the necessary autonomy to the local communities and institutions to raise additional funds or to conduct income generating activities.

II. Policy Response to the Challenges Faced by the TVET Sector

I. The Need for Effectively Changing the Paradigm in TVET

The 2012 AU Outlook on education report on TVET indicated that there is debate going on at the continental level between the use of the concept of “TVET” and that of “TVSD”. As noted above, the debate is more than on just terminology. It is more on the awareness that the challenges faced by the skills development sector can only be solved by a change of paradigm. The advocacy calls for a whole new approach to the design, implementation and monitoring of skills development required on the part of policy-makers and practitioners. The effective paradigm change to a holistic approach to TVET policy formulation, management and delivery is the only way to resolve the huge skills gaps, and reduce unemployment and underemployment rates on the continent. It is worth restating that the change of paradigm advocated by ADEA and other organizations such as UNESCO in the Shanghai Declaration (May 2012), springs from challenges that have already been highlighted:

- The outputs of most training systems on the continent have acquired skills that are not relevant to the market needs.
- Access to the formal technical and vocational training systems is limited.
- Very few national technical and vocational education and training policies and strategies integrate the existing informal and non-formal training systems
- The informal and the agricultural sectors are predominant in the African context and have potentials that have been neglected so far.



It is important, therefore, that African countries look critically at their current TVET/TVSD systems to determine if their skills development systems carry the necessary levers for sustainable economic growth.

III. The Post 2015 Agenda

In the TVET/TVSD sector, the post 2015 agenda should be an intensification of the current reforms with a better implementation rate. In addition, as countries are preparing for the post-2015 agenda, the realisation that the potential of growth predicted for Africa lies in the combination of an effective skills development policy combined with daring pro-employment measures. Promising measures have been taken by countries such as South Africa with its New Growth Path or Ethiopia with its Human Development Strategy.

In conclusion, there is no doubt that there is awareness that investing in skills development and promoting measures to favor employment and job creation are the drivers of change in the African economy. Countries are not at the same level of progress on the continent. There are, as described above, promising initiatives but also challenges. Recommendations for targeted skills development initiatives for the years to come should include:

- Embracing effectively a change of paradigm in TVET/TVSD policy and management by adopting a holistic approach and decentralization measures
- Modernizing the TVET/TVSD informal sector
- Promoting and modernizing skills development in the agricultural sector
- Promoting the integration of ICT into TVET/TVSD
- Promoting new skills such as skills for the green economy and emerging jobs
- Promoting effective engagement with the private sector and local communities
- Promoting research in TVET and data management information systems



Priority Area 6:

Curriculum Development, Teaching and Learning Materials

"We cannot become what we need to be, by remaining what we are." Max De Pree, 1987

"...teachers can only shine in the right context, with well-designed curricula and assessment strategies to improve teaching and learning." Irina Bokova, Director-General of UNESCO, 2014

The theme for the 11th EFA Global Monitoring Report, *"Teaching and learning: achieving quality for all"*, recognises the critical role curriculum and assessment play in improving learning for all children by reducing disparities and facilitating the acquisition of transferable skills. Thus, the need "to ensure the development and provision of balanced, relevant, responsive and culturally sensitive curricula in all forms and levels of education in Member States, adequately supported by appropriate teaching and learning materials,"¹ cannot be overstated.

A curriculum is a learning plan that requires purposeful and proactive organization, sequencing and management of the interactions among the teacher, learners and the content knowledge learners are to acquire. It reflects the values, attitudes and aspirations of the wider society and should therefore be grounded in culture, while being open to positive global influences. The concept of curriculum is therefore as dynamic as the changes that occur in society. Curriculum development is a continuous process of translating educational goals into practical guidelines for content, materials, and methods for school and classroom-engineered activities to bring about desired learning outcomes.² The process involves selecting, organizing, executing and evaluating the learning experiences on the basis of the needs, abilities, and interest of learners, and on the basis of the nature of the society or community.

Absence of inclusive and flexible curriculum strategies has been cited as a major challenge in curriculum development, especially in Africa which is home to majority of children from disadvantaged groups. Deploying such strategies will not only allow low achievers to catch up through appropriate curriculum content and delivery methods, it has the potential of enabling early grade learners to master the much-needed anchoring skills. Although necessary, such skills are not sufficient and should be supported by transferable skills - hence the need for a curriculum that encourages interdisciplinary and participatory learning, and embraces global citizenship. The 11th EFA Global Monitoring Report has therefore identified the need to equip teachers with innovative curricula to improve learning as one of the ten essential teaching reforms for policy-makers.³

Promoting technical and vocational skills development (TVSD) and entrenching a culture of science, technology, research and innovation in Africa⁴ requires reforms in teaching and learning at post-secondary, tertiary and higher education, with ICT integration. The African Union calls for teaching methods that encourage linkages between science and technology and the learner's culture and environment, in addition to significantly increasing girls' and women's participation in the two fields.⁵ This should be infused with skills that pay special attention to African knowledge systems and also include human and child rights and good governance to shape informed and responsible young citizens.

Curriculum Reform

The central challenge for curriculum development is addressing multiple societal expectations relating to educational content and learner outcomes in well-balanced and articulated frameworks.⁶ Perennial conflicts in many African countries, coupled with concerns raised by industries on the quality of graduates from higher and tertiary education institutions, have necessitated significant curriculum reforms in the continent. Two policy shifts that have resulted in such reforms are the infusion and integration of peace education into the curricular at the different levels, and the contribution of the private sector in the development of TVET/TVSD curricula so as to better match training and skills acquisition with the needs of the labour market.

Other factors triggering curriculum reform include increased regional integration that calls for harmonized education and training systems, changes in national constitutions that progressively entrench education as a constitutional right, universal education extending to secondary education, moving early childhood education from private players and religious institutions to the formal system, increasing integration of ICTs and re-enforcing the use of mother tongue or the common local language as a medium of instruction in the first three years of primary education. Also, significant switches from one industry to another calls for a change in the type of knowledge, skills and values. Thus, whether

¹ Goal of this priority area as contained in the Plan of Action for the Second Decade of Education for Africa (2006-2015).

² African Union Plan of Action for the Second Decade of Education for Africa (2006-2015)

³ EFA Global Monitoring Report 2013/4. (2014). *Teaching and Learning: Achieving quality for all*. Summary. UNESCO. Paris.

⁴ ADEA's 2013-17 Medium Term Strategic Plan.

⁵ African Union (2006).

⁶ Kennedy, 2010



changing educational systems, embracing technologies or improving the quality of graduates coming out of such systems, the curriculum has to change in tandem.

In any education system, the level of available resources places a restriction on the degree to which any new subject can be introduced into the school curriculum, especially where only the most basic facilities have so far been provided.⁷ Thus, as much as curriculum reform is widely accepted as an ongoing process, it must be planned. It is imperative to second or employ innovative personnel to keep in touch with curriculum developments. Curriculum specialists need to have opportunities to meet frequently to exchange ideas and share innovative practices. Africa faces several challenges on this front, with few networks that can perform this function. Also, very few universities offer degree programmes focussing on curriculum innovations and materials production.

In developing countries, many higher education institutions experience a growing gap between their curricula and the demands from society, business and industry for a more flexible workforce with high skills (competencies) in problem solving, team work and project management.⁸ This could be attributed to the fact of curriculum development, revision or renewal often being limited to a revision of content - the knowledge that can be found in the standard books of the discipline. Real curriculum development, however, is seen as a delicate process involving all elements that form the 'plan for learning'.⁹ It requires a rethinking of pedagogical approaches to teaching and learning and the issue of redefining the selection and organization of curriculum content must be addressed in such a way as to avoid excessive pressure on already overloaded, and often examination-driven, curricula.¹⁰ In responding to the various concerns, needs and conditions, greater focus should also be on building synergy among curriculum development, teacher development and school organization development.¹¹

Learning Materials and Teachers

Teaching-learning seeks to bring about changes in learner behaviour through structured processes involving the use of instructional material; the strategies imply more than just technique of teaching. Within the context of curriculum development, the teaching-learning strategies include principles for structuring teacher activities, and corresponding learner activities, as well as instructional materials for use by teachers and learners - such as textbooks, worksheets and self-instructional materials.

Quality of learning depends on the quality of the teacher, and the quality and availability of learning materials strongly affect what teachers can do. The application of active learning should not be the sole responsibility of the individual teacher. Changes in teaching and learning methods are likely to mean that the institutions' resources facility will become more important to the quality of teaching. Teachers are often teaching in a situation where other factors have an influence. Being a good teacher is sometimes a matter of being allowed to be a good teacher. Creative and innovative teaching does not flourish in a vacuum. The classroom starts becoming learner-centred and takes on a different feeling when learners are provided with the appropriate resource supports.¹²

Despite competing curriculum demands, teacher education institutions need to allocate time for upgrading weak subject knowledge. Inadequate training coupled with greater emphasis on theory at the expense of practice can breed lack of confidence, in newly qualified teachers, to support learners with physical, mental and intellectual challenges. Continuous classroom support and motivation to such teachers is essential and will help them adapt quickly to changes in curriculum or language of instruction.

Overall, quality and innovation in education can only be achieved when personnel involved in curriculum development, and teaching and learning materials specialists, have continuous access to new ideas, methods and research guided by universities or institutions that specialise in curriculum development.

African Languages

It has been shown that learning outcomes are higher for children taught in their first language in the early years of school. The development of a reading culture is also enhanced by the use of a language with which the child is most familiar in the early years of formal education.

⁷ UNESCO/IFIP, 2000.

⁸ Kouwenhoven, G.W. (2003). *Designing for competence: towards a competence-based curriculum for the faculty of education of the Eduardo Mondlane university*. Doctoral dissertation. Enschede: Twente University.

⁹ Van den Akker (2003) mentions ten components that, like the spokes in a spider web are interrelated. Changing one affects the others to some extent.

¹⁰ Aglo, J. and Lethoko, M. (2001). *Curriculum Development and Education for Living Together: Conceptual and Managerial Challenges in Africa*. Final Report of the Seminar held in Nairobi, Kenya.

¹¹ Thijs and van den Akker, 2009

¹² Serbessa, DD (Ph.D) (2011). *Quality of Teaching and Learning in Ethiopian Primary Schools: Tension between Traditional and Innovative teaching-learning Approaches*. Retrieved 10 April 2012 from: <http://home.hiroshima-u.ac.jp/cice/paper68.pdf>

The use of African languages as media of instruction is sometimes hindered by the sheer number of languages spoken in a given environment, the lack of published material in many languages, urbanisation leading to the use of European languages as a necessity for communication, the lack of support from parents who view African languages as inferior and the apparent economic advantages of European languages. As language is the major vehicle of a people's culture, it is imperative that African languages are developed and promoted through their use in education, as media of instruction and as subjects. Efforts to develop trans-border languages will have to be intensified, as support to regional integration through language education. The development of sign languages should also be an area of serious attention.¹³ This is a highly specialised area and hence the need for more universities offering courses with instructional methods for writing learning materials for second language speakers. In having educational goals that would ensure education for living together, a fundamental question revolves around the tension between language policies based on concerns for national unity and nation-building, as opposed to the promotion of respect for cultural diversity through the use of minority languages as media of instruction.¹⁴

Science and Technology

Science and technology (S&T) are leading drivers in today's world knowledge economy. The labour market requires knowledge in both fields and thus S&T are fundamental subjects in every child's education. The foundations of these skills and knowledge must be laid early on in the educational process. The S&T education will aid in fighting poverty, achieving sustainable development and ensuring global competitiveness, to name just a few. It must be stressed that increasingly knowledge and skills in this field is imperative for employability. Science and technology should form part of the core curriculum at all levels education, including non-formal education and TVET. Currently, enrolment in science and technology subjects at all levels of education is falling and this issue needs to be addressed.

The need to improve innovations in S&T through higher level research is at the core of ADEA's medium term strategy. In line with this, the Association is supporting various country-level activities. This is, partly, to also address challenges relating to the current insufficiency in the curriculum and pedagogy for the proper education of students in S&T. The curriculum needs to be reformed to relate to the students' everyday lives and a new inquiry-based pedagogy should be put into action. Teachers must be trained in this new method of teaching and incentives should be given to teachers in order to increase the supply of trained teachers in the fields of mathematics and science.

Science and technology subjects are perceived to be difficult as they require a good foundational knowledge of mathematics and critical thinking. Students are most interested in aspects of science that interest them and that relate to their everyday lives. It is therefore important that S&T education is related to fields that interest the students. UNESCO believes that the best way to increase students' interest in S&T subjects is by using teaching methods that appeal to the curiosity and creativity that characterize all children. Hands-on and inquiry-based activities are the best way in which to teach students. Such teaching methods develop team-working, critical thinking and problem-solving skills. Innovative teaching methods and materials should be developed in order to make learning active and meaningful.¹⁵

Information and communication technology continues to be a central element in any country's economic growth and investing in the equipment, teacher training and support services necessary for the effective delivery of an ICT-curriculum should rank high as one of the priorities of the education sector. And the curriculum should be designed for both teachers and learners to improve their knowledge and skills in ICT. Such a design should cover four curriculum areas tied with the four stages of teaching and learning: ICT literacy, application of ICT in subject areas, integration of ICT across the curriculum and ICT specialisation.¹⁶ Among the challenges confronting the introduction of ICT into the curriculum in many African countries are human resources, lack of or weak policies, poor information management, language, information filtering and reliability and plagiarism.¹⁷

¹³ African Union (2006)

¹⁴ Aglo, J. and Lethoko, M. (2001). *Curriculum Development and Education for Living Together: Conceptual and Managerial Challenges in Africa. Final Report of the Seminar held in Nairobi, Kenya.*

¹⁵ UNESCO (2011) *Hands-on Science*. Retrieved from: <http://www.unesco.org/new/en/education/themes/strengthening-education-systems/science-and-technology/hands-on-science/>.

¹⁶ UNESCO/IFIP, 2000.

¹⁷ Tella, A and Olusola, E. A. (2009). *Information communication technology (ICT) and curriculum development: the challenges for education for sustainable development. Indian Journal of Science and Technology. Vol.2 No 3.*



Continental Initiatives in Curricula

An innovation and reform summit in Johannesburg in 2013 for curriculum development professionals, lecturers, researchers, institutional designers, learning developers, education planners, policy makers and educational specialists discussed emerging trends in curriculum planning and development in Africa and Internationally under the themes of curriculum design, diversity and innovation, quality assurance and curriculum development as well as curriculum innovation. The aim was create an Afrocentric Curriculum through Innovation, Strategies and Literacy. The meeting explored 21st century tools needed to successfully embed digital content into the curriculum, incorporation of social media into the curriculum while recognising that there is an absence of the teacher's voice in planning the curriculum. Participants observed that curriculum development is a much debated concept where change is concerned.

A paper presented at the Commonwealth Association for Polytechnics in Africa Conference in Johannesburg, South Africa in December in 2007 on "Globalisation and TVET in Africa: Challenges and Opportunities" and which looked at the implications of globalisation for TVET curriculum design recommended that TVET Curriculum design should incorporate interdependence in today's global arena - e.g. curricula in Information Technology should include aspects of entrepreneurship, communication skills and management. It also noted that globalisation requires the development of high level skills in TVET trainees and hence curriculum should not just concentrate on traditional skills but also develop high level technical skills for global economic competitiveness. Calling for flexibility in TVET curriculum design, it notes that cross-cutting issues such as HIV & AIDS, gender, disability, the environment as well as incorporation of incorporate ICT enabled education need to be part and parcel of TVET curriculum design in an increasingly global world.

Other initiatives, as initially reported in detail in the 2012 outlook report, are the First Pan African Conference on Curricula, Literacy and Book Sector Development held in Dar es Salaam, Tanzania (2009), strengthening the Network of African Science Academies (established in 2001) through the creation of five more national African science academies in Mozambique, Sudan, Mauritius, Morocco and Tanzania (2006)¹⁸, launch of the first edition of the Africa Journal of Chemical Education by UNESCO's International Institute for Capacity Building in Africa (IICBA) (2011), and the signing of an agreement with the Commission of the West African Economic and Monetary Union (UEMOA) (2011) to boost ICTs in West African universities.

Regional Performance and National Initiatives

There is generally very little data available from the Arab Maghreb Union for this priority area, making it difficult to highlight recent initiatives. As curriculum development is a continuous process, countries in the AMU region, like their counterparts in other regions, should continue to ensure that their curriculum meets the demands of society to prepare learners with knowledge and the growing youth population with adequate skills for the world of work. As previously indicated in the 2012 outlook report, In Morocco, the technical education track offers subjects like Engineering, Economics and Agricultural Sciences, in addition to vocational training courses. English, however, is becoming popular in the country's private schools.¹⁹

Due to the integration process gathering momentum in the East African Community region, changes in curricula for all five partner countries is inevitable as their education and training systems have to be harmonised in line with the integration. A series of regional meetings have taken place on the modalities of implementing the harmonization initiatives, which will require the examination and grading systems to be re-aligned so as to achieve comparability and some commonness.²⁰ EAC countries have revised their curricula to embrace 21st century trends by integrating ICTs, HIV and AIDS education, financial management as well as peacebuilding in teaching and learning, in response to issues of learner-centred learning approach, awareness, youth self-employment and conflict prevention. The promulgation of a new constitution in 2010 in Kenya, which recognises education as a right for every citizen and free basic education for all, saw a major revision of the country's curricula, including increased involvement of the private sector in the development of the TVET curriculum. In Rwanda, a Skills in Science and Development Project was initiated in 2010 and funded by the African Development Bank.²¹ In recent years, the country has also made a major policy shift in the use of the English language as a medium of instruction in its public schools, departing from French. A more extensive language policy change occurred in 2008, when the government entrenched English as an

¹⁸ UNESCO Science Report 2010: The Current Status of Science around the World.

¹⁹ <http://www.mapsofworld.com/morocco/education/system.html>

²⁰ http://www.eac.int/education/index.php?option=com_content&id=73&Itemid=145

²¹ Ministry of Education (2010). Skills Development in Science and Technology Project Funded by African Development Bank: Equal Opportunity Program Report. Rwanda

official language of instruction in Rwanda's public schools, replacing French as the dominant second language taught.²² In terms of local languages, EAC has enthusiastically embraced African languages through the establishment of the Kiswahili Commission which promotes the development of the language for regional and international interaction for the political, economic, social, cultural, educational, scientific and technological development of East Africa. In 2014, Kenya has renewed the implementation of the policy on the use of mother tongue or dominant local language as a medium of instruction in the first three years of primary education.

The Economic Community of Central African States (ECCAS) adopted curriculum reform as a focus of its priority action plan for 2009. Various reform processes in the region's member States have experienced some challenges, the most common being related to the modalities of their implementation, their coordination and management, shortage of qualified teachers and lack of material, educational and financial resources. Only half of the countries provided data on student textbook ratios, making it difficult to identify a regional trend. However, Cameroon reported one mathematics text book for 14 students and one reading book for 12 students, in 2012. In contrast, each child in Sao Tome and Principe had a textbook in each of the two subject areas. The ECCAS plan of 2009 also includes the use of African languages as media of instruction, but countries are at different levels in the implementation. In Burundi for example, Kirundi is used during the first four years of primary education while from the fifth year, French takes over. Cameroon, on the other hand, strives to implement a balanced trilingual which is alive to the community aspirations as well as the African regional integration.

Efforts are underway in the Economic Community of West African States (ECOWAS) to ensure the curricula reflects the uniqueness of the regional environment, characterized by ethnic diversity, poverty, the HIV and AIDS pandemic and the problem of development. Various initiatives on curriculum reform have been undertaken in Nigeria, Rwanda and Sierra Leone. As reported in the 2012 outlook report, the Ministry of Education in Liberia introduced a new compulsory core curriculum and an optional/complementary one with regional variations. This revised curriculum includes HIV and AIDS education, peace education, human rights and critical thinking.²³ Nigeria is also investing in developing capacity in science teaching and seeks to use e-learning resources.²⁴ Curriculum and teaching and learning materials have been overhauled and improved in Sierra Leone to ensure relevance to the country's needs and can prepare the learners for the present world of ICT or knowledge economy.²⁵ In terms of teaching and learning materials, the availability of mathematics textbooks is varied across ECOWAS countries; while Burkina Faso and Mali had more reading textbooks than learners, with a pupil textbook ratio lower the 1. The availability of reading textbooks also approached a situation where each learner had their own textbook - in Ghana close to 2 learners shared a single reading text book. The next frontier would be to ensure sufficient numbers of books as well as ensuring the learning material is appropriate while ensuring the gender dimension permeates all the curriculum development processes in the region.

According to the Southern African Community Development (SADC) gender protocol barometer, there still exist gender stereotypes in curriculum and its approaches. More than two children shared a mathematics textbook in Malawi, Namibia, the United Republic of Tanzania and Zambia in 2012. Malawi, Mozambique, Namibia, the United Republic of Tanzania and Zambia show more than one child per available reading textbook. There was an excess of textbooks reported in Mauritius, and the government continues to strengthen the capacity of the Ministry of Education in the area of curriculum development. In South Africa, the Department of Higher Education and Training strategic plan calls for curriculum reforms led by teachers as well as attention and special provision for languages in the curriculum reform process. In respect to leadership, the plan seeks to enhance student engagement and leadership at the University and TVET level.²⁶ In response to the observation that Zimbabwe's primary school curriculum is very academic, paying little attention to practical subjects like Agriculture,²⁷ the government has put in place a review team, and the process is currently ongoing.

22 Negash, 2011

23 Ministry of Education (2007). *Liberian Primary Education Recovery Plan, prepared for the Fast Track Initiative*. Monrovia: Liberia.

24 Egwu, S Hon. Dr. (2009). *Road Map for the Nigerian Education Sector*. Federal Ministry of Education: Nigeria

25 African Union Department of Human Resources, Science and Technology (2011)

26 Republic of South Africa (2010). *Department of Higher Education Strategic Plan 2010/11-2014/15*; African Union Department of Human Resources, Science and Technology (2011)

27 Boonstoppel, E & Mudyazivi, E. (2010). *The Case of Making Teaching and Learning Materials Practical and Locally Relevant in Zimbabwe*. SNV Netherlands Development Organisation.



Conclusion

While some visible progress has been made at the regional and country level for this priority area, a lot remains to be done. Curriculum needs to be regularly reviewed so as to meet the demands of the labour market and be relevant to the learners' everyday lives. The gender dimension should permeate all the curriculum development processes in order to offer a semblance of equity in access to information. There is also the need for an institutional network that facilitates access to relevant university programmes for curriculum and teaching and learning materials developers. In this respect, Africa needs to consider creating networks of Think Tanks, or strengthening existing ones, as research has a key role within the context of curriculum and materials development. The need to provide university and other courses run by educational institutions in order to constantly upgrade the knowledge and skills of curriculum staff is imperative. Africa must devise innovative ways of developing education and training curricula and providing new teaching and learning materials that respond to the ever-changing societal needs.



Priority Area 7: Quality Management

The goal of this priority area is to support improved access, relevance, equity and efficiency of education in Africa through the development of sound quality management systems, which particularly need to take the vulnerable and marginalised groups into consideration.

As a means to develop capacity in quality management, the Plan of Action identifies 13 activities to take place by 2015. These include development and review of guidelines and tools for monitoring the quality of teaching and learning process; development of evaluation instruments; and creating networks of quality management institutions and experts at all levels. There are also other activities that require action at the continental level, such as establishing a continental or regional committee for quality management, a framework for standards and norms, standardized and regular learner assessments, and a continental protocol on measurement. Partly because of the cross-cutting nature of this priority area as well as the lack of any one organization championing the cause of quality management, progress in achieving any of the associated activities has been mixed.

Higher Education Quality Assurance Mechanisms

In many African countries tertiary qualifications are not internationally recognized or even portable across regional and language boundaries. This is in part a function of the different pedagogical approaches countries inherited from their colonial predecessors and shaped by their language legacies (Anglophone, Lusophone and Francophone) to tertiary education. There is also the issue of uneven quality of tertiary training.

Tertiary academic staffs, particularly among francophone countries, are often ill qualified to provide high quality training or cutting edge research needed for engagement in the global knowledge economy. In Madagascar and the DRC, for example, only 17 per cent of civil servant lecturers had the rank of professors in 2007¹. In Rwanda, less than 25 per cent of the tertiary lecturers had doctorates while just less than 50 per cent were qualified with a master degree. In Senegal, in the two major public universities (Cheikh Anta Diop in Dakar and Gaston Berger in Saint-Louis), hardly 10 per cent of teaching staff has the rank of professor. In Gabon, junior lecturers represent almost two-thirds of teaching staff in the public sector universities while higher ranking teaching staffs (professors or senior lecturers) only represent 12 per cent. In Benin, in the principal public university, Abomey-Calavi University, with 87 per cent of public sector students, higher ranking teaching staffs represent around 17 per cent of the teaching staff, lecturers 18 per cent, junior lecturers 49 per cent and other teaching categories 16 per cent. It must be emphasized that, complementarily, 38 per cent of teaching staff in this university did not have a doctorate in 2004.²

The academic staff profiles are considerably better in many of the Anglophone higher education institutions, particularly those higher education institutions with international recognition such as in South Africa. However, it has been documented elsewhere that the quality and the applicability of academic research by African tertiary institutions, continent wide, tends to be low. The variation of tertiary institutional autonomies and national qualification frameworks across countries hinders harmonization of tertiary standards.

Less than a third of African countries have quality assurance bodies of any kind, which illustrates the importance of increased focus on this goal.³ Continental and regional initiatives driven by some key African Union partners have, nevertheless, been particularly helpful with regard to realizing this activity, particularly at the higher education level. The process for ratification of a revised Arusha Convention, which seeks to establish continentally harmonized quality assurance mechanisms in all states however has still not been realised. Adherence to this convention will allow accreditation of studies, certificates, diplomas, degrees, and other academic qualifications.⁴ Additionally, the Association of African Universities has developed a flagship programme, the African Quality Assurance Network and obtained the cooperation among its university members, the main objective of which is to support and promote the establishment of harmonized higher education systems in Africa.⁵ Another notable achievement, initiated by the Commission of the African Union, has been the development of the Africa Quality Rating Mechanism that aims at improving the quality of delivery in higher education institutions in Africa and enabling them to compete more effectively at a global level.⁶

¹ Brossard and Foko, (2007)

² Brossard and Foko, (2007)

³ AU Mid-Term Evaluation Report, Neil Butcher and Associates (2011)

⁴ African Union Commission Department of Human Resources Science and Technology. (2011). *The Revised Arusha Convention (African Regional Convention on the Recognition of Studies, Certificates, Diplomas, Degrees and other academic qualifications. The First Extraordinary Session of the Conference of Ministers of Education of the African Union (COMEDAF IV+). 11-13 May, 2011. Nairobi, Kenya.*

⁵ Association for African Universities. (2011). Retrieved on September 20, 2011 from <http://www.aau.org/?q=qa>

⁶ Association for African Universities. (2011). Retrieved on September 20, 2011 from <http://www.aau.org/?q=qa>



At a regional level, the Inter-University Council for East Africa, a regional inter-governmental organization established by Kenya, Tanzania, and Uganda, recently developed a regional quality assurance framework for Member States. The five-volume handbook, *A Road Map to Quality: Handbook for quality assurance in higher education* (2007) includes a diagnostic model for internal quality assurance and external assessment for implementing institutions. In Kenya, which leads the way in this field, the Ministry has established a Directorate of Technical Accreditation and Quality Assurance, which seeks to achieve a number of objectives related to quality such as: establishing and strengthening admissions mechanisms to ensure quality of students; developing and strengthening flexible pathways and qualification frameworks for students; attracting and retaining quality teaching staff; increasing the quantity, quality and relevance of research and research outputs; providing teaching facilities, equipment and materials. Additionally, Member countries of the East African Community have agreed to harmonize their education systems in the region following the tabling of a Bill before the East African Legislative Assembly in 2008.

SADC, which since 2000 has a regional Protocol on Education and Training that promotes regional harmonization and integration, continues to advocate for a regional qualifications framework that ensures quality and recognition among its Member States' education institutions. The Protocol gives recognition to student and staff mobility across the region.⁷ Quality management mechanisms in the SADC region seem to be concentrated in Higher Education. Of the 21 African countries that have so far established higher education accreditation bodies, eight of these are found in SADC. These are Botswana, Lesotho, Mauritius, Mozambique, Namibia, South Africa and Zimbabwe.

Eight Member States (Benin, Burkina Faso, Cote d'Ivoire, Guinea-Bissau, Mali, Niger, Senegal and Togo) of the Commission of the West African Economic and Monetary Union (UEMOA), have planned to recognize common university syllabi by November 2011 in a bid to reverse declining standards of education in the region. When finalized, all universities in the member countries will access the syllabus via the internet and the final year examination in all of the member universities will be written at the same time.⁸ Similarly, ECOWAS Member States, gathered in August 2011 to discuss implementation of recognizing the equivalency of university qualifications in key academic fields. They sought to set criteria for accrediting institutions, and considered the possibility of adopting a uniform examination system.⁹

IGAD notes that it has been active in assisting its Member States with improving quality management in the education sector by promoting the training education staff at the different levels including that of schools.¹⁰

Given the difficulties in locating information on this issue of quality assurance mechanisms, it is difficult to ascertain progress across member states. Thus, there may be a need for the AU Observatory to rethink how to measure the accomplishment of this goal among member states.

EMIS Norms and Standards Monitoring Frameworks

A key challenge facing continental implementation of many international education and training agendas has been the lack of available, comprehensive statistics on key areas of performance at the country level. Detailed information on this is presented in an earlier chapter on EMIS in this report.

An important and relatively successful initiative led by the African Union has been the roll-out of a continent wide initiative on EMIS norms and standards, supported by the ADEA Working Group on Education Management and Policy Support. This initiative, involving approximately 43 countries, focuses on implementing regional EMIS Norms and Standards that have gone through a lengthy process of customization by country EMIS experts in Ministries and then politically endorsed by respective Ministers at annual regional meetings. This process is significantly underway in the SADC, ECOWAS and EAC regional economic communities and to a less extent ECCAS where it is on the agenda to implement in the coming year.

SADC which is furthest along in terms of implementation has facilitated the country peer reviews of two of its member states, Swaziland and Botswana in terms of their compliance with their regional assessment framework of the EMIS Norms and Standards. Other SADC countries are expected to undergo assessments in 2014. The purpose of the exercise is to obtain the agreement of senior management to address issues on appropriate EMIS policy,

7 Augustines Utlwang. (2010). *The Southern African Development Community Qualifications Framework: A Quality Assurance Mechanism*. Retrieved on December 4, 2011 from curriculum.wcape.school.za/resource_files/22153231_15.doc

8 Jean-Matthew, T. (2011). *Eight West Africa Countries Agree Single Varsity Curriculum*. Africa Review. Tuesday, 11 September 2011. Retrieved from: <http://www.africareview.com/News/Eight+West+Africa+countries+agree+single+varsity+curriculum/-/979180/1234686/-/sphxa/-/index.html>

9 ECOWAS. (2011). *Meeting of Technical group of experts to validate the report of the feasibility study on Equivalence of Certificates in the ECOWAS region Lomé, Togo, 3rd - 6th August, 2011. Draft report.*

10 Survey Feedback Received from Sudan

resource allocations, methodologies and dissemination practices. A further outcome is the strengthening south-south cooperation among states. South Africa, one of the peers, has agreed to sign a memorandum of understanding supporting Swaziland in building its EMIS capacity. ECOWAS, having developed a similar assessment framework for regional compliance with EMIS Norms and Standards, expects to begin implementation among its member states in 2015. East African community still needs to refine its definitions of standards within its regional framework but expects implementation in 2015.

Additionally, in 2008 and 2009, the UNESCO Institute of Education implemented national EMIS assessments of seven SADC countries using the IMF inspired Data Quality Assessment Framework, a diagnostic tool which provides a comprehensive evaluation of education data quality by comparing a country's data production with current international standards. The findings are that most countries although they tend to comply with international classifications of data they seldom have comprehensive EMIS policy in place.

Non-Formal Initiatives

Non formal education and training typically is seldom standardized or accredited despite its far reaching impact on disadvantaged populations.

In 2011 37 per cent of African adults were estimated to be illiterate, the majority of whom are female. More than 70 per cent of the youths and adults in Burkina Faso, Guinea-Conakry, Mali and Niger are considered illiterate¹¹. Africa's literacy rate estimates are improving, in particular in the ECOWAS region where rates increased by 7 per cent. Significantly, the literacy gain among young girls and women is doubling that of young boys and men, who on the whole tend to be more literate.

Adult (15+) Literacy Rates and Illiterate Population by Regions (2012)

Region	Adult Literacy Rate (%)				Adult Illiterate Population			
	Total	Male	Female	GPI	Total	Male	Female	% Female
Africa	62.0	70.9	53.5	0.76	214,661,930	81,753,158	132,908,772	61.9
AMU/UMA	72.1	80.7	63.4	0.79	17,305,740	5,878,950	11,426,790	66.0
CEN-SAD	58.8	68.2	49.5	0.73	122,255,801	46,931,865	75,323,936	61.6
EAC/EAC	71.4	78.4	65.0	0.83	21,118,845	7,960,113	13,158,733	62.3
ECCAS	64.5	76.4	53.2	0.70	25,387,010	8,349,562	17,037,448	67.1
ECOWAS	48.9	59.2	39.1	0.66	83,555,052	33,486,966	50,068,085	59.9
IGAD	57.9	66.9	49.0	0.73	49,973,901	19,474,567	30,499,334	61.0
SADC	71.4	79.7	63.8	0.80	44,122,943	15,527,343	28,595,600	64.8

Source: UIS April 2014 Data Release (Reference years 2005-2015*) Note using weighted regional averages.

There have been very few quality assurance initiatives in this area. However, collaboration among ADEA, the UNESCO Institute for Lifelong Learning, and the Regional Council for Education and Literacy in Africa (known by its francophone acronym CREAA), a number of measures to standardize non-formal education provision in countries have been produced. These include a literacy and non formal education training referential, training modules and recommendations on out-sourcing provision for government. The literacy supervisor training guide, finalized in 2011, acts as a reference for the development of resources for the capacity building of supervisors in literacy and non formal education centres in Africa.

Quality Assessment at School level

Focusing on quality has its costs. The necessity of putting in place quality councils, policy and quality measurement systems require resources. Countries need to reflect on whether they can afford the costs of not dealing with failures, repeaters and drop-outs from their education systems. Quality management systems at the school level rely on early



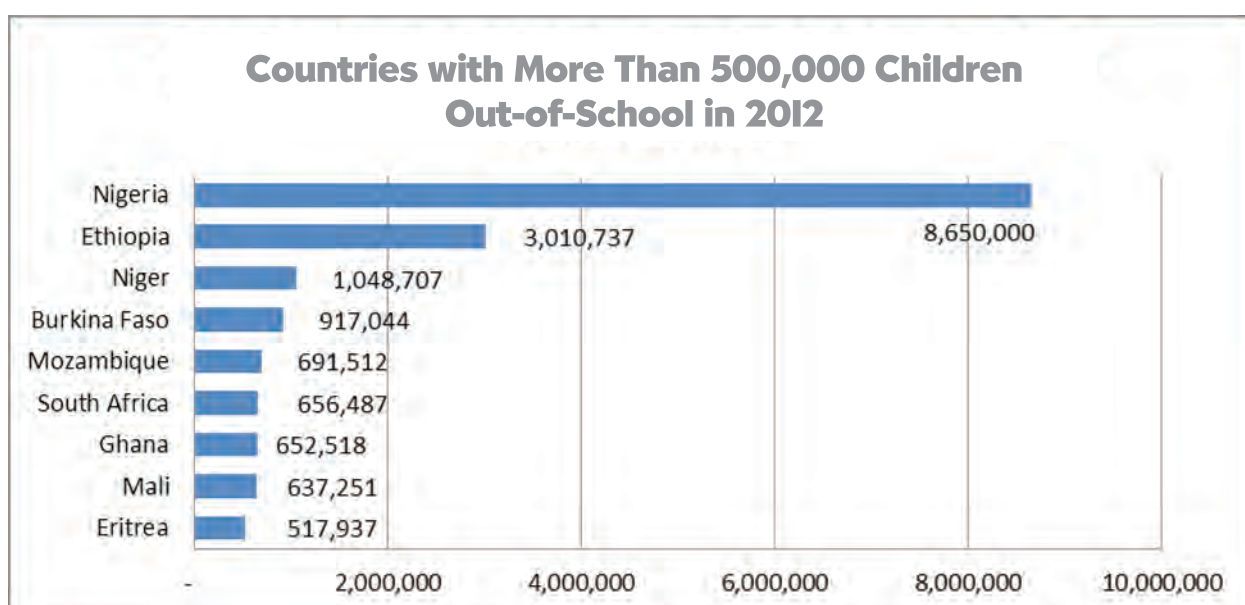
warning indicators such as wastage and efficiency rates which also include measures of access, survival rates and learner outcomes.

Reported repetition in Sub-Saharan Africa averages 15 per cent, which is the highest the world. In 11 African countries, 20 per cent or more pupils are repeaters, with a high of 37 per cent in Burundi, while a few countries - such as Kenya and Mozambique - have repetition rates of 6 per cent or lower¹². Reducing repetition does not necessarily release funds for increasing quality of education as more children would remain in school. Automatic promotion of children from one grade to the next is practiced widely in Africa. This practice has had mixed results, leading to hidden and unreported repetition, as well as higher numbers of illiterate primary school graduates.

In 2009, more than half of all primary-aged out of school children are in Africa, of which there are approximately 33.4 million¹³. This is 3 million children less than in 2006. This improvement has been largely fueled by improvements in the IGAD region, which includes Ethiopia who has made recognizable strides in improving access to education at the primary level. Of concern is the worsening access of girls to primary education in some key regions such as AMU, CEN-SAD and ECOWAS regions in 2009. Absolute numbers of learners being excluded from primary education have dropped in recent years from 36.5 million to 33.4 million, but gender disparity has widened with proportionately fewer girls gaining access to school.

Number and Percentage of Primary Out-Of-School Children by Regions

As of 2012, there are at least nine African countries with more than 500,000 children out of school in 2009. Nigeria with the most significant number has not provided up to date information. In 2007 it was estimated that it had almost 9 million out-of-school children or 37 per cent of its primary school-aged population. Nigeria argues that the figure would be significantly lower if enrolment in unregistered private schools was collected¹⁴. Currently, as of 2013 there are some 22 million learners enrolled in primary schools in Nigeria. Ethiopia has the second highest number of out-of-school children on the continent at 3 million in 2012, some one million more than in 2009. This represents 16 per cent of the country's primary school-age population. Many other countries have made notable progress during the last decade. Between 1999 and 2009, the share of out-of-school children declined by more than 30 per cent in Burundi, Madagascar, Mali, Mozambique, Niger and Tanzania, largely through the abolition of school fees¹⁵.



Source: UIS database 2014. Nigeria data refers to 2007;

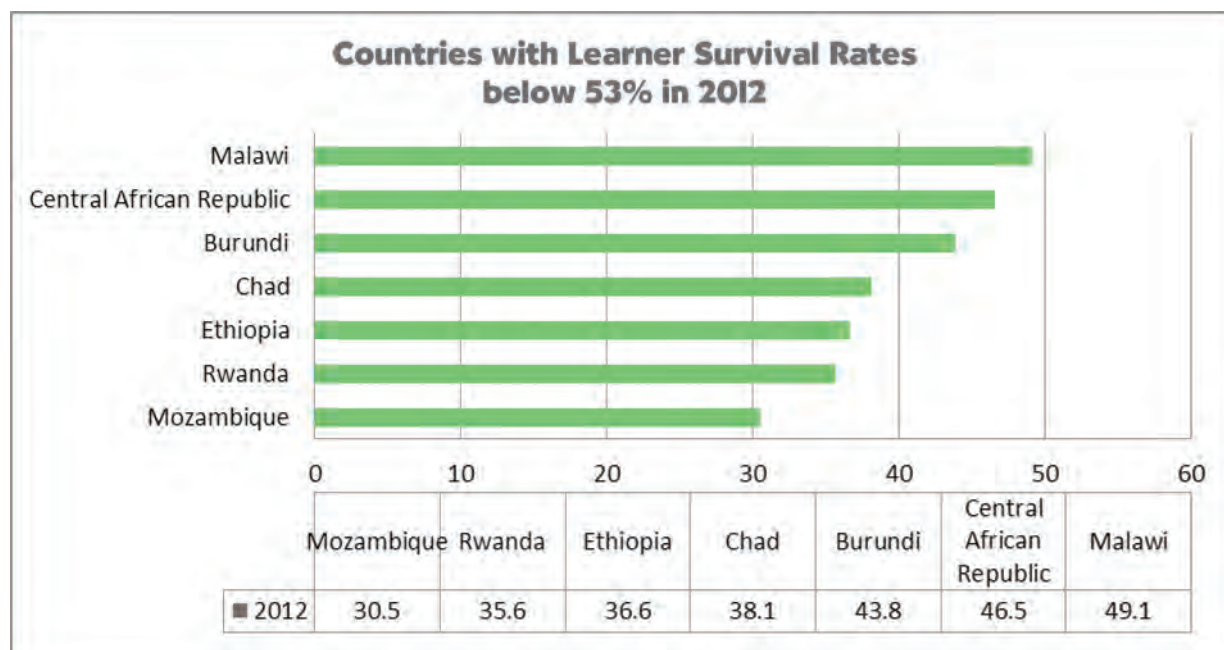
¹² Ibid, pg 81

¹³ Excludes ECCAS countries. Source: UIS Database Centre 2011.

¹⁴ Conversation with Nigeria EMIS representative at AU EMIS Restricted Technical Meeting, April 2014 Ghana.

¹⁵ EFA. Out-of-school Children: New Data Reveal Persistent Challenges. UIS (2011)

Only a few African countries are graduating 90 per cent of children in primary. The graph below illustrates some seven countries where only between 30 and 49 per cent of children remain in school to the last grade of primary. The low survival rate is attributed to various factors, including incomplete schools (i.e. Schools that do not offer the last grades), cost of schooling, and the low quality of education which results in children not understanding the subject matter and repeating grades. The Arab Maghreb Union region reported the most successful survival rates of approximately 24 per cent higher than the continent in 2009. At regional level, 85 per cent of learners complete the primary cycle compared to only 61 per cent at continental level.



Source: UIS Database 2014

In addition to the challenges of retaining learners in primary school, there is a need to address the obstacles from them to transition to secondary level. that increase the number of children that complete nine years of uninterrupted basic education. Some countries including The Gambia and Rwanda have realized significant inter-cycle transition expanding access to secondary school in a very short time. In 2009, Rwanda reported a 40 per cent increase in transition rates of primary to secondary learners.

These indicators of efficiency and wastage are important in informing strategies on improving the quality of education and the entry points into the education system. For those who expect never to enter school, more attention needs to be paid as to who they are - what is their gender, geography and socio-economic status. Research indicates that girls from rural areas and the poorest households are the least likely to be in school. Policy makers need to take note that their policies focusing on quality need to address the multiple deprivations and disparities some children face in gaining access and survival in education.

Learning Achievements

Measuring learning outcomes has become a key focus of the post-2015 discourse on the new education agenda for the coming decade. Recommendations from the Learning Metrics Task Force based on consultations of nearly 2,000 people, including more than 50 ministers of education, permanent secretaries or their representatives. were made during the 2013 U.N. General Assembly meetings as a contribution to the U.N. secretary-general's Global Education First Initiative. The vast majority of consultation participants, argued for the importance of improving learning outcomes and the role of measurement in helping to inform actors, from teachers to ministers, about the efficacy of their interventions. Debates were heated, however, about how to best assess learning to improve outcomes.

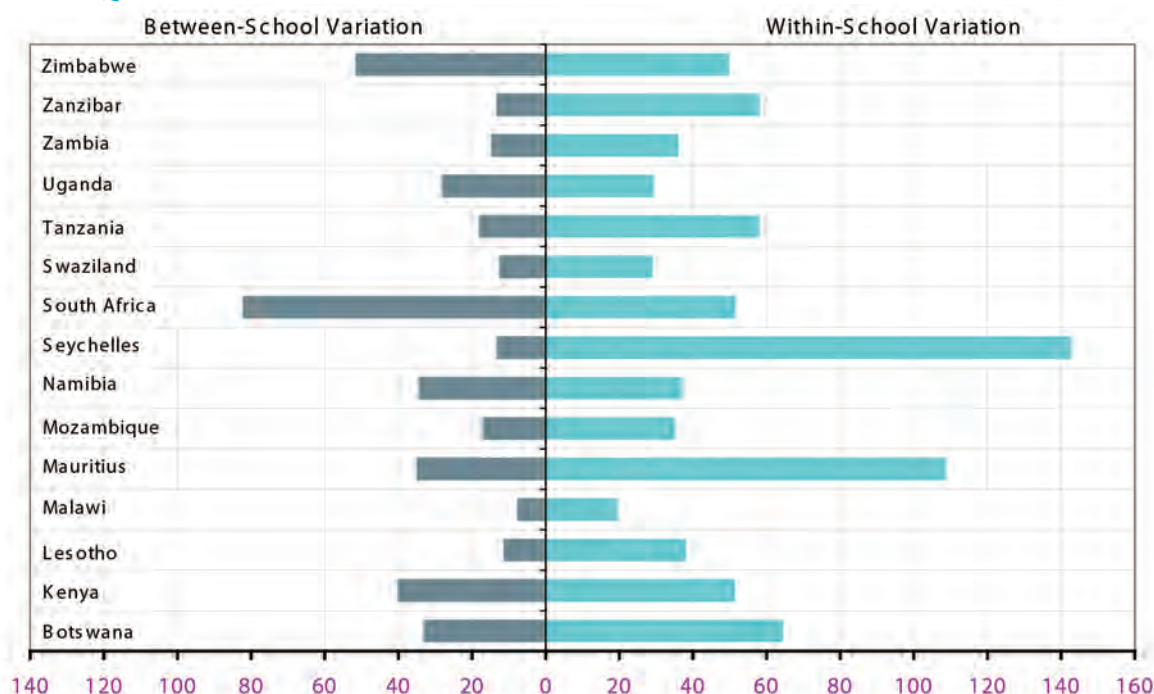
The final recommendations include a global focus on strengthening countries capacities in not only providing access to education but also in assessing learning. Learning assessment will be measured by a small set of indicators to



be tracked by all countries. These areas of measurement represent fundamental learning opportunities from early childhood through lower secondary. Measurement of learning must include an explicit focus on equity, with particular attention to rising inequality within countries. Data on child characteristics (e.g. sex, socioeconomic status, geographical location, disability) together with information on such things as school conditions and teacher quality should be used to ensure equitable learning opportunities.

Systematic monitoring and measuring learner achievement and quality of teaching and learning is a critical dimension of quality management. Public authorities increasingly need to make decisions on where to invest based on “what works”. Evolving research suggests that actual teaching time on tasks, the quality of teacher training (rather than the number of years in training), and putting textbooks and other pedagogical materials into the classroom has an impact on learning. There is also considerable interaction between learning achievement and school retention. Children are more likely to remain in school if they are learning, since both they and their parents recognize the value added resulting from the education process.

SACMEQ III Measurement of Learner Achievement



Source: SACMEQ 3.

Currently, fifteen countries participate in the Southern and Eastern Consortium for Measuring Educational Quality (SACMEQ): Botswana, Kenya, Lesotho, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, Tanzania, Uganda, Zambia, Zanzibar and Zimbabwe. Numeracy and literacy tests on grade 6 learners review achievement relative to a number of contextual indicators, including social economic status of the learner, facilities, time on task, homework, teacher profile among others. Interpretations of learner achievement are associated with these indicators both among schools and within schools indicating the levels of inequity socially and regionally.

Under the Programme on the Analysis of Education Systems (PASEC) which was launched in 1991, 17 individual country evaluations have been carried out in Francophone Africa, including panel studies following primary pupils from Grade 2 to Grade 6 in several countries. A number of countries are also developing Early Grade Assessments (EGRA) as a tool for identifying reading problems in Grade 1 and Grade 2¹⁶.

A small number of African countries (including Botswana, Ghana and South Africa) have participated in international testing programmes, such as the Progress in Reading Literacy Survey (PIRLS) and the Trends in Mathematics and

Science Survey (TIMSS) of the International Association for Educational Assessment. In both these programmes African countries scored at or near the lowest scores of the participating countries, from 1.5 to 2 standard deviations below the average.

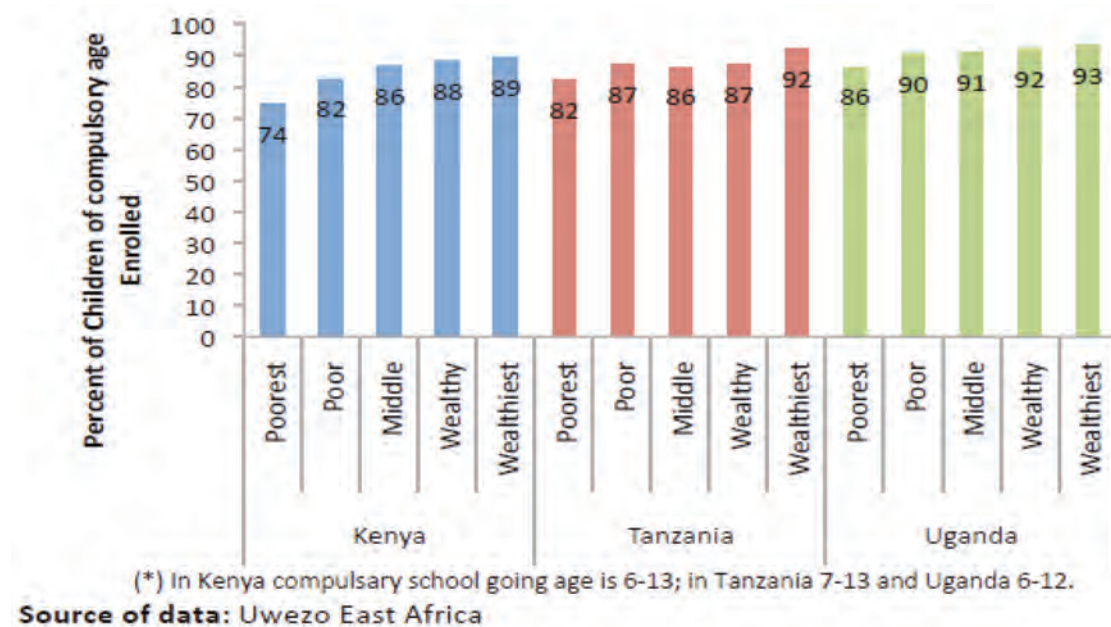
Results from these and other learner assessment surveys indicate that many primary school completers are not able to read. Namibia, for example, has a very good record in providing schooling to its children, with 86 per cent of children reaching Grade 6, but it appears that only 55 per cent of its 6th graders are able to read at the basic level.

UIS recently facilitated joint policy dialogue among Africa's learning assessment agencies, including SACMEQ and PASEC, with the purpose of harmonizing core data variables and methodologies. SACMEQ and PASEC plan to launch a pooled assessment of literacy and numeracy skills among 6th graders in ten participating countries later this year.. They have included the design of some common test items, which would permit comparison of results between PASEC and SACMEQ data. The results of this assessment will be published in the first quarter of 2016. It will be important for countries to build their own technical and analytical capacities in this regard and here both SACMEQ and PASEC are playing a critical role in training Member States and building up a network of experts. Additionally, it would be useful for these organizations to engage in dialogue with the International Association for Education Assessment on ways in which to design global learner assessment tests which would be more useful for lower-performing countries.

Conclusion

As the continent moves towards the closure of the African Union's second decade of education, it is clear that strong emphasis needs to be place on developing strong quality assurance mechanisms that allow greater accountability and harmonization of learning outcomes at all levels of the education system. National qualifications frameworks , despite their complexity , remain on the agenda of most African education systems. Regional efforts to harmonise accreditation and qualifications will remain critical issues to be addressed in the coming years. The current configurations of education and training systems will need to be reviewed if improvements in access and learning are to be achieved.

Enrolment of Children of Compulsory School-going Age(*) by Wealth Quintile



Another way to highlight the plight of children from very poor households is by considering children who never attended primary school. As the above table makes clear, children from the poorest wealth quintile are seriously disadvantaged. In Kenya 64% of children aged 6-16 years who never enrolled are from the poorest wealth quintile while in Uganda and Tanzania it stands at 45% and 38% respectively.

The main objective of the Uwezo test was to assess literacy and numeracy competence. As the tests reflect what pupils should have mastered by the end of Standard 2, all children in Standard 3 and above should be capable of achieving the highest levels of a Standard 2 test. This is not the case: Even amongst children who have advanced to Standard 7, many have not acquired Standard 2 numeracy and literacy skills.



Priority Area 8: Early Childhood Development

Early childhood is defined as the period from conception to eight years old. This early period is considered to be the most important developmental phase throughout the lifespan. Healthy early child development includes the physical, social-emotional, and language—cognitive domains of development, each equally important—strongly influences well-being, throughout life.¹

Childhood Care and Education (ECCE) can be defined as the support for children's survival, growth, development and learning from conception to the time of entry into primary school. Support during this time is provided by a range of service providers including primary caregivers and can be accessed in a range of settings including formal, informal and non-formal.²

I. Introduction

Our under six population which constitutes about 130 million children in Sub Saharan Africa (20per cent of its total population) face significant challenges of deprivation amongst them; poverty, food insecurity, stunting, malnutrition, health risks, violence, conflict including war and as a result are often seriously at-risk and ill-prepared physically and mentally for school.

Despite the growing body of evidence that the early years of the lives of these children present a time of great opportunity, will be the determinants of their life course, are decisive for human development, and that the failure to invest is costly and difficult to compensate for later in life, progress toward the achievement of early childhood care and education (ECCE) in Africa has been too slow.

In the long-term, the future of this continent will be directed by the extent to which we are able to provide access to the scale and quality of Early Childhood Care and Education services that are needed to enable universal coverage. If we get this right now, our future outlook will be good. However, our current failure to make the investment needed now in the wellbeing of our children is costly to us in the long term and difficult to compensate for in later life, we need to pay attention to ECCE in order to create a better future for Africans across the continent, especially those affected by poverty and hardship.

2. What Progress toward Early Childhood Care and Education in Africa?

2.1 Overview of Progress and Challenges

ECCE provision provides a mechanism through which to provide for children's rights. It opens the way to all the other EFA goals, the realisation of the AU Second Decade for Education³ goals and contributes powerfully to reducing poverty and building healthy societies, thus contributing also to the attainment of the overarching objectives of the Millennium Development Goals. Naming ECCE as goal number one on the international agenda seems to be a recognition that it is foundational to much of what follows in terms of the learning pathways of children through basic and higher education. However, this does not follow through in the way in which ECCE has been addressed at a number of levels. Other EFA goals enjoy priority at political, policy and budgeting level, thus taking precedence over and above ECCE, particularly universal primary education.

This is corroborated by the UNICEF, The World We Want report which claims that what underlies many of the EFA gaps "is that the current global education approach does not address education in a holistic and integrated manner, privileging the more achievable goals, relegating others in priority such as adult literacy, or targeting the near poor, thus under-serving those who are hard to reach... while the EFA goals do identify different stages of the education life cycle the agenda has largely been confined to primary education....not surprisingly then, progress on other EFA goals, besides primary education, remains uneven and out of step with progress on primary education."⁴

Some success toward framing ECCE as a priority was noted in 2012, by ANCEFA who reported that 26 countries had included ECCE in their sector or national development plans and at least 76per cent of countries in Africa were engaged in ECCE policy planning or implementation (19 countries had developed ECCE policies and 20 were engaged in planning

¹ <http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTCY/EXTCED/0,,contentMDK:20426142~hlpK:547714~menuPK:1114015~pagePK:148956~piPK:216618~theSitePK:344939,00.html>

² UNESCO Country Case Studies on ECCE in selected sub-Saharan African Countries 2007/2008: Some key Teacher Issues and Policy Recommendations, Prepared by Patience Awopegba Programme Specialist in Education Planning, UNESCO International Institute for Capacity Building in Africa (IICBA), Addis Ababa, Ethiopia,

³ In 2009 Ministers of Education in Africa adopted the inclusion of ECCE as a priority for the African Union Plan of Action for the Second Decade on Education for Africa (2006-2015)

⁴ United Nations Children's Fund (UNICEF) March 2013, The World We Want: Education in the Post-2015 Development Agenda, p14

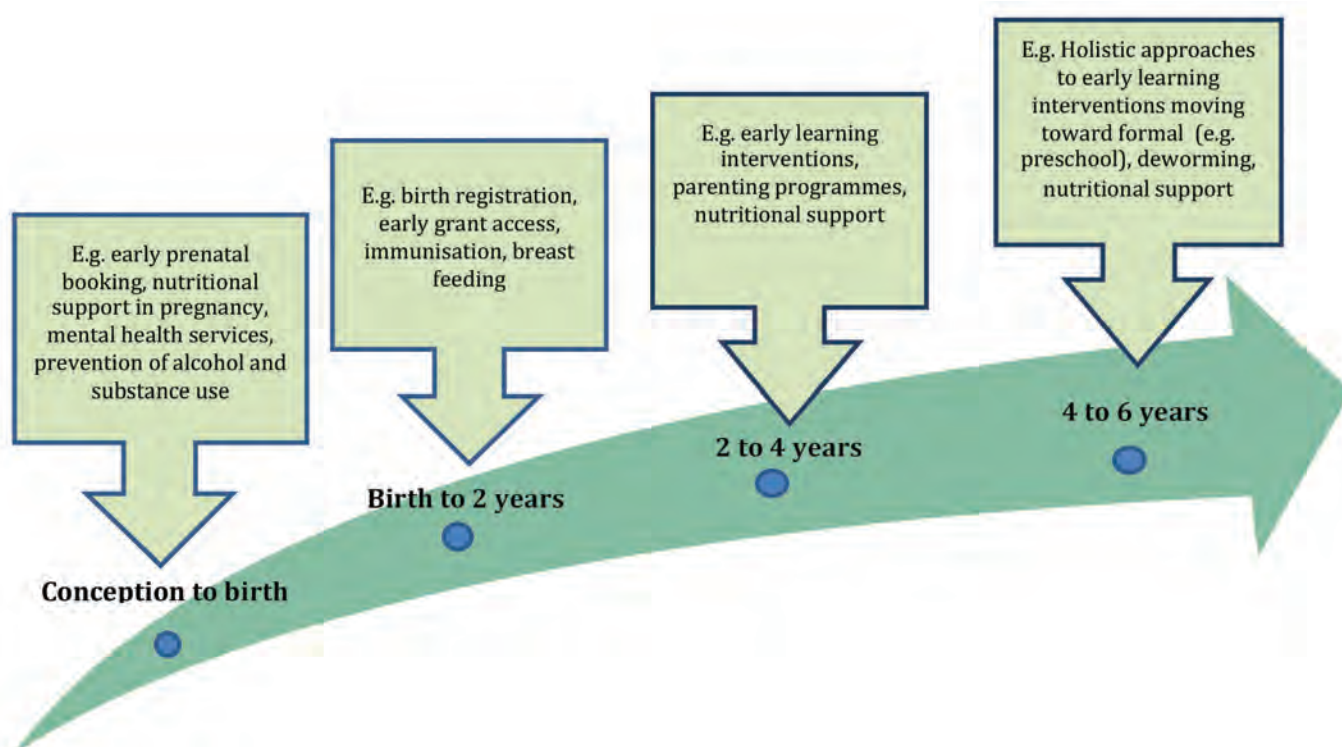


process). At that stage, no country in Sub Saharan Africa had adopted a compulsory pre-primary education policy. Despite these indications that ECCE was awarded greater prominence, in the same year, UNESCO reported that less than 12per cent of African children had access to Early Childhood Care and Education (ECCE) services.

ECCE is a cross sector issue of health, nutrition, social development and education. While prioritising ECCE in the EFA agenda is important, locating it only within the education realm may even contribute to a lack of impetus for achievement as it is only specifically reported against in relation to formal learning as preschool enrolment with its broader development and health components reported in fragmented ways in relation to other international agendas. Who is then accountable for the early development of young children on this continent? Furthermore, if learning begins at birth, consideration must be given to early stimulation across the development continuum until it is appropriate for entry into formal learning environments. This would imply measuring and tracking access for children from birth to early stimulation programmes which may well be delivered by informal and non-formal provision, (e.g. home visiting and early learning playgroups). Reporting on early learning against the EFA and AU agendas must therefore be taken beyond this narrow focus and include the tracking of learning opportunities for children from birth to six years old

This position is corroborated by the 2008 Global Monitoring Report which indicated that ECCE programmes for young children under the age of 3 were largely neglected. The Report revealed that programmes for children in this age cohort were found in only 53per cent of the world's countries, mostly in North America and Western Europe, Central Asia, Latin America and the Caribbean. Furthermore, the report indicated that in some of these countries, the provision of ECCE activities was seen to be the sole responsibility of families and/or private providers thus further compounding the notion of universal coverage and hindering the equalising capacity of ECCE when it is provided to poverty affected and marginalised communities.

It is important to note that there is a strong correlation between poverty, health and wellbeing. As we seek to support and report against early learning outcomes for children, this should be done within the range of needs that children have that are enabling of education outcomes, focusing on poverty, nutrition, and health (a package of essential or comprehensive services). It will also enable more integrated and targeted interventions to achieve a better holistic outlook for young children. The diagram below highlights a development continuum for provision making it clear that ECCE if it is to be implemented effectively is an inter-sectoral endeavour which requires high levels of collaboration between those responsible for health, nutrition, social protection and early stimulation.



The table below highlights some key achievements toward ECCE on the continent in relation to the preceding discussion with some global comparative data.

Notes on progress⁵: Expanding and improving comprehensive early childhood care and education, especially for the most vulnerable and disadvantaged children

1. Early childhood well-being is improving, and child mortality and malnutrition rates have declined in many countries in all regions of the world. The MDG target for child mortality, on the other hand, is unlikely to be met. Under-5 mortality remains high, at 123 per 1,000 in sub-Saharan Africa
2. Enrolment in preschool programmes has expanded over the past decade. Many countries, in sub-Saharan Africa, have developed ECCE policies, and more and more of these, understand that such policies must be multi-sectoral and comprehensive. Progress with regard to gross enrolment ratios in pre-primary education has been slowest in low-income countries, with low rates and little improvement seen in sub-Saharan Africa (from 12 per cent to 17 per cent)
3. The ECCE index measures overall progress by averaging the percentage of children who survive beyond their fifth birthday, the percentage who do not suffer from moderate or severe stunting, and the percentage of children aged 3-7 enrolled in school. Of the 68 countries for which data are available for 2010, only Belarus achieved a score over 0.95. The 25 countries with an ECCE index score between 0.80 and 0.95, viewed as achieving a middle ranking, are mostly middle-income countries in Central Asia, Central and Eastern Europe, and Latin America and the Caribbean. The remaining 42 countries, with an index score below 0.80, are mostly low- and lower-middle income countries, with the majority in sub-Saharan Africa⁶.

2.2 Child Mortality Rates

Given the discussion thus far on ECCE as an inter-sectoral issue, this report will pick up on some of the key factors that impact on the wellbeing of children and their capacity to make the most of the opportunities presented by formal education. Apart from health being the right of every child, early intervention reduces the risk of morbidity and mortality in childhood, as well as leads to reductions in the burden of disease in later life. It is crucial that basic, preventable risks to child health are eliminated.

In addition, HIV and severe or repeated attacks of malaria affect the cognitive development of millions of young children globally. Protecting children from these and other infectious diseases and ensuring early treatment are effective strategies to prevent or lessen the negative effects of infectious diseases. Support for families affected by HIV can reduce the impact of associated risks such as disrupted caregiving and mental health problems.

Under-five Mortality Rate (per 1,000 live births)

Regions	1970	1975	1980	1985	1990	1995	2000	2005	2010	2012
Sub-Saharan Africa	242	216	199	185	177	170	155	130	106	98
Eastern and Southern Africa	209	190	186	172	163	155	139	85	85	77
West and Central Africa	274	245	217	203	195	189	174	127	127	118
Middle East and North Africa	202	165	126	90	71	61	50	32	32	30

Despite determined global progress in reducing child deaths, an increasing proportion of child deaths are in sub-Saharan Africa where one in ten children die before the age of five.⁷ According to the UNESCO 2012 Info sheet, approximately 12,000 African children die every day under conditions that could have been avoided - the equivalent of a

⁵ Data in this report is extrapolated from the UNESCO/UNICEF, May 2013, *The World We Want: Education in the Post-2015 Development Agenda*, DRAFT Synthesis Report of the Global Thematic Consultation on Education
⁶ Low income (36 countries): Afghanistan, Bangladesh, Benin, Burkina Faso, Burundi, Cambodia, Central African Republic, Chad, Comoros, Democratic People's Republic of Korea, Democratic Republic of the Congo, Eritrea, Ethiopia, Federal Democratic Republic of Nepal, Gambia, Guinea, Guinea-Bissau, Haiti, Kenya, Kyrgyzstan, Liberia, Madagascar, Malawi, Mali, Mozambique, Myanmar, Niger, Rwanda, Sierra Leone, Somalia, Tajikistan, Togo, Tokelau, Uganda, United Republic of Tanzania and Zimbabwe.
⁷ <http://www.un.org/millenniumgoals/childhealth.shtml>



Boeing 747 crashing every hour.⁸ While we see a mostly downward trend in child mortality rates for under-fives across the continent, with West and Central Africa still over 100 per 1000 live births, it is unlikely we will achieve the MDG target of 29 per 1000 by 2015.

Furthermore, the child mortality figures released in 2012 by UNICEF showed that some 2,000 children under five die each day from diarrheal diseases; of which a majority, about 1,800 children per day, die from diseases due to a lack of safe water, sanitation and basic hygiene.⁹

NOTE: *The Cause of death in the under-fives: Neonatal conditions 26per cent, ARI 21per cent, malaria 18per cent, diarrhoea 16per cent HIV and AIDS 6per cent, measles 5per cent, injury 2per cent and other 5per cent. Neonatal causes (accounting for 26per cent of under-five deaths in Africa) include: Sepsis/ pneumonia 27per cent, asphyxia 24per cent, preterm birth 23per cent, tetanus 9per cent, congenital abnormalities 6per cent, diarrhoea 3per cent, other causes 7per cent. These conditions are preventable.*

2.3 Stunting, Wasting and Malnutrition

The fundamental causes of stunting, wasting and malnutrition in children is household food insecurity linked to poverty. Poor nutrition causes major damage during pregnancy and the first two years of life. Often this damage is irreversible leading to increased risk of degenerative diseases later in life but negatively impacts on the learning capacity and physical development of the child with later consequences for adult productivity and economic development.

Incidence of Under-weight Among Under-five year old Children in Africa		
No of Countries	Countries	% Range
5	Chad, Sudan, Somalia, Eritrea, Niger	30-36
11	Burundi, Ethiopia, South Sudan, Burkina Faso, Central African Republic, DRC, Nigeria, Djibouti, Sierra Leone, Benin, Mauritania	20-29
10	Mali, Guinea Bissau, Senegal, Gambia, Namibia, Togo, Angola, Guinea, Kenya, Tanzania	16-19
17	Cameroon, Comoros, Cote d'Ivoire, Liberia, Mozambique, Zambia, Uganda, Ghana, Lesotho, Malawi, Sao Tome and Principe, Botswana, Congo, Equatorial Guinea, Rwanda, Zimbabwe, South Africa	9 - 15
7	Egypt, Gabon, Swaziland, Libya, Algeria, Morocco, Tunisia	2 - 6

Source: WHO (2012)

Some 16 African countries have at least 20 per cent of their under- five year old children suffering from malnutrition. In five of these countries - the prevalence is between 30 and 36 percent. Wasting is severe malnutrition and here seven countries face a challenge with 15 per cent or more of their under-fives showing signs of severe under-nourishment.

Incidence of Wasting Among Under-five year old Children in Africa		
No of Countries	Countries	% Range
1	South Sudan	23
6	Niger, Benin, Chad, Sudan, Madagascar, Eritrea	15-18
5	Somalia, Mauritania, Burkina Faso, Comoros, Sao Tome and Principe,	11-13
11	Ethiopia, Nigeria, Djibouti, Senegal, Gambia, DRC, Mali, Congo, Cote d'Ivoire, Angola, Namibia	8 - 10
19	Central African Republic, Kenya, Botswana, Egypt, Burundi, Mozambique, Cameroon, South Africa, Guinea Bissau, Ghana, Zambia, Tanzania, Guinea, Uganda, Togo, Malawi, Libya, Lesotho, Algeria	4-6
8	Rwanda, Liberia, Equatorial Guinea, Zimbabwe, Gabon, Tunisia, Morocco, Swaziland	1-3

Source: WHO (2012)

⁸ UNICEF, <http://www.unesco.org/new/en/dakar/education/early-childhood-care-and-education/>

⁹ These indicators also provide us with some insight into issues that should be addressed via on basic hygiene and care at home for young children. Children of educated mothers—even mothers with only primary schooling—are more likely to survive than children of mothers with no education.

NOTE: Unlike underweight and wasting, stunting is largely irreversible. Poor nutrition in the first 1,000 days of children's lives can have irreversible consequences. For millions of children, it means they are, forever, stunted. Smaller than their non-stunted peers, stunted children are more susceptible to sickness. In school, they often fall behind in class. They enter adulthood more likely to become overweight and more prone to non-communicable disease. And when they start work, they often earn less than their non-stunted co-workers. It is a violation of their rights. It is also a huge burden for nations whose future citizens will be neither as healthy nor as productive as they could have been.

Sub-Saharan Africa and South Asia are home to three fourths of the world's stunted children. In sub-Saharan Africa, 40 per cent of children under 5 years of age are stunted; in South Asia, 39 per cent are stunted. Of the fourteen countries in the world who are home to 80 per cent of the world's stunted children, eight are African

The table below provides an overview of the percentage of children under age five who are moderately or severely stunted. There are 16 African countries where prevalence of stunting among this age group is 40 per cent or more. Up to 58 per cent of under-fives in Burundi show signs of stunting.

Incidence of Stunting Among Under-five year old Children in Africa		
No of Countries	Countries	% Range
1	Burundi	58
15	Madagascar, Malawi, Benin, Zambia, Eritrea, Ethiopia, Niger, Rwanda, Sierra Leone, DRC, Mozambique, Liberia, Somalia, Tanzania, Central African Republic	40-50
20	Chad, Lesotho, Nigeria, Equatorial Guinea, Kenya, Sudan, Burkina Faso, Cameroon, South Africa, Uganda, Guinea Bissau, Zimbabwe, Botswana, Djibouti, South Sudan, Swaziland, Comoros, Congo, Cote d'Ivoire, Togo	30-39
10	Angola, Egypt, Namibia, Sao Tome and Principe, Mali, Senegal, Gambia, Ghana, Mauritania, Libya	20-29
4	Gabon, Algeria, Morocco, Tunisia	10-17

Source: WHO (2012)

FIGURE 6

Data suggests that reducing the prevalence of malnutrition and subsequently improving stunted growth rates would improve the quality of schooling through a reduction of preventable burdens on the education system and a focus on education quality.

There are numerous cross cutting issues that impact on food security including conflict, war and illness. In poor circumstances, very young children (1 to 5 years) are increasingly left without proper attention and care, receive very little stimulation, and are left to fend for themselves even when sick. Of the 76 per cent of children on our continent who enter primary school each year, 38 per cent have experienced moderate or severe malnutrition impacting on their psychomotor and cognitive development.

A recent impact evaluation study of a community-based nutrition program in Madagascar shows that malnutrition can be improved over the short- and long-term when mothers participate in community health programs that promote behavioural change in nutrition, feeding, and hygiene practices. The study highlights important complementarities between maternal education, knowledge, and community infrastructure to achieve improvements in children's nutritional status.¹⁰

2.4 Opportunities for Early Stimulation

Regionally, there have been a number of initiatives to encourage young children to enrol in pre-primary classes. In SADC, early childhood enrolment stands at 45 per cent on average and is clearly progressing. EAC levels are particularly high in Kenya and Tanzania, where they are above 30 per cent, and increasing steadily in other countries. Considerable

¹⁰ <http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTRESEARCH/0,,contentMDK:21986729~pagePK:64165401~piPK:64165026~theSitePK:469382~isCURL:Y,00.html>



progress has also been achieved by eight ECCAS member states, where pre-primary enrolment has more than doubled. In ECOWAS (with the exception of Cape Verde and Ghana) and IGAD, progress has been more timid and rates (19 per cent on average) are well below the continental average (28 per cent) in 2012.

Statistics show that pre-primary gross enrolment ratios (GER) increased by 5 per cent in nine years^{11 12}. While it is difficult to report on ECD access because of the age range of children involved, and the varied approaches used, nonetheless, the following table suggests very low ECD participation across the Eastern and Southern Africa Region¹³.

Country	Age group	Percentage who have access to ECD services	Year
Angola	5	104	2010
Botswana	3-5	19	2010
Burundi	4-6	9	2010
Comoros	3-5	22	2010
Eritrea	5-6	14	2010
Ethiopia	4-6	5	2010
Kenya	3-5	52	2010
Lesotho	3-5	33	2010
Madagascar	3-5	9	2010
Namibia	5-6	33	1999
Rwanda	4-6	11	2010
South Africa	6	65	2010
Swaziland	3-5	23	2010
Uganda	3-5	14	2010
Tanzania	5-6	33	2010

Source: AU Outlook on Education database , 2014

... No data available

In a number of countries, including Kenya, Uganda, Malawi and Zimbabwe, governments, in collaboration with UNICEF, have promoted access to ECD services by establishing innovative programmes. These include community-based child-care programmes (CBCC) in Malawi, a rapid school readiness initiative in Kenya, a child- to- child mentoring approach in Ethiopia, and expanding ECD programmes to primary schools in Lesotho and Zimbabwe. Issues related to reporting only on access to pre-school as the totality of progress toward ECCE have already been addressed in this report and must receive attention.

3. Early Childhood and Conflict

Research from biology to the social sciences continues to build strong evidence demonstrating that the conditions in which young children live and grow are determinants of their health and developmental trajectories. All too often young children are exposed to conditions that do not meet their most basic needs for health and development.

War and displacement create conditions of high risk or vulnerability for children's development and well-being through increased exposure to conditions such as economic devastation, destruction of basic infrastructure (i.e., health care, education, legal protection), reductions in hygiene and sanitation with resultant elevations in disease spread, and breakdown of social support structures that are thwarted from nurturing and protecting children].

No low-income fragile or conflict-affected country has yet achieved a single Millennium Development Goal. People in fragile and conflict-affected states are more than twice as likely to be undernourished as those in other developing countries, more than three times as likely to be unable to send their children to school, twice as likely to see their children die before age five, and more than twice as likely to lack clean water¹⁴.

¹¹ http://www.un.org/en/ecosoc/newfuncnt/pdf/11_cli_africa_concept_note_april_2011.pdf

¹² Gross enrolment ratio. Pre-primary. Total is the total enrollment in pre-primary education, regardless of age, expressed as a percentage of the total population of official pre-primary education age. GER can exceed 100% due to the inclusion of over-aged and under-aged students because of early or late school entrance and grade repetition.

¹³ Education for All Global Monitoring Report 2012: Youth and Skills, Putting Education to Work, http://www.unicef.org/esaro/5481_early_childhood_development.html

¹⁴ World Bank, World Development Report 2011, Conflict, Security and Development, page 5

On average, a country that experienced major violence over the period from 1981 to 2005 has a poverty rate 21 percentage points higher than a country that saw no violence. Health, peace, and development cannot exist without a healthy thriving human population, and a thriving human population cannot exist without healthy, peaceful, thriving children.¹⁵

4. Early Childhood and Disability

UNICEF's The State of the World's Children 2013, released on May 30, opens with the challenge that global estimates of the number of children with disabilities are out of date. Frequently drawing on a 2004 estimate, it is around 93 million children. How, then, are we able to best meet the needs of these children without knowing the magnitude of the need?

For all children, early childhood provides an important window of opportunity to prepare the foundation for life-long learning and participation in society, while preventing potential delays in development and disabilities. Many of the factors which contribute to the high levels of impairment affecting young children are potentially preventable. These include congenital defects, malnutrition, and childhood illnesses, lack of sanitation and clean water and preventable accidents. At the same time, for children who experience disability, early childhood is a vital time to ensure access to interventions which can help them reach their full potential.

Despite this recognition, children with disability who are, more vulnerable to developmental risks, are often overlooked in mainstream programmes and services designed to ensure child development. They are amongst the least provided for and most marginalised and vulnerable children in the world. They are least likely to be found in formal programmes or centres, they often struggle to access the health services they need, and are especially vulnerable to violence, abuse and exploitation.

The Convention on the Rights of the Child and the Convention on the Rights of persons with Disabilities highlight that children with disabilities have the same rights as other children. ECCE programmes can lead to improved rates of survival, growth and development; and ensure later education programmes are more effective. Approaches combining centre-based programmes and parenting interventions, including home visiting programmes, may help parents and professionals to detect developmental delays early, improve children's development, prevent abuse and neglect, and ensure readiness to learn.

5. Prioritising: What Needs to be on the Agenda for a Way Forward?

ECCD must be framed as an inter-sectoral issue with matching goals and tools for assessing achievement toward these goals. The integrated approach fundamentally seeks to build cross-sectoral co-ordination systems, promote programme innovation, overcome gaps in knowledge, services and resources, and build cost-effective programmes that are culturally appropriate. Countries find the integrated approach to ECD policy planning helps all sectors contribute to improving child survival, growth, development and success in school.

Based on this reframing of ECCE the current African Union goal must be revamped, with a view to accelerating progress. Critical requirements for facilitating accelerated progress, such as renewed political commitment, dedicated and innovative financing, an emphasis on subsidies for the poor and disadvantaged, and a wider adoption of quality standards and their implementation and monitoring must be addressed as part of this process.

15 *International Journal of Paediatrics* Volume 2012 (2012), Article ID 820290, 16 pages Research Article Risks to Early Childhood Health and Development in the Postconflict Transition of Northern Uganda Theresa A. McElroy,¹ Stella Atim,² Charles P. Larson,³ and Robert W. Armstrong⁴





We cannot afford NOT to invest. Not investing means a loss of opportunities but also contributes to the accumulation of inequalities and condemns generations to deprivation and under performance. While the private sector is a valuable partner, over-reliance on private funding leads to and perpetuates inequalities between children;

- **Government needs to lead an inter-sectoral approach to ECCE;**
- **Government is key to financing quality ECCE; and**
- **Government has a key role in regulating and supporting quality implementation of ECCE including metrics for measuring and assessing impact**
- **Government should invest in research in ECD to guide policy actions and also to lead to professionalisation of the sector**

In sum, it is important to prioritise and give prominence to the Early Childhood Care and Education indicators of the AU's Plan of Action. They need to be incorporated into the second decade plan and operationalised as part of a comprehensive package of early childhood care and education; young children need equitable access to high quality health care, nutrition, early stimulation and pre-schooling. Even in poorer countries, political commitment and adequate funding can extend access to greater numbers of children. To reduce inequality, governments need to pay particular attention to children from poor households who already face disadvantages - and who stand to benefit most.



Reporting on Progress

Despite mixed success among countries in implementing its strategic priorities, the AU's Second Decade of Education for Africa plan of action has achieved some important milestones in continental and regional development in education and training. A notable achievement is obtaining commitment from the regional economic communities in coordinating the AU's Plan among their member states. This is an ambitious step given that these institutional arrangements had to be developed from ground zero in most cases, particularly where an education desk was missing from the secretariat. At least four of these RECs regularly participate in AU specialist meetings, engage resources in promoting the key AU priorities and urging their member states to report on progress. At least two RECs – ECOWAS and SADC integrated the priorities of the AU Plan of Action into their regional strategic plans.

At a national level, the successes have been more varied although many countries have domesticated these priorities into their national planning processes. A key obstacle in monitoring the progress countries are making on implementing the plan has been the weak reporting systems to regional economic communities and the Africa Union Commission. Only SADC which has long established the protocol of annual reporting by member countries on performance of agreed objectives was able to achieve this.

A reason for this failure, aside from insufficient financial resources to address institutional and capacities issues which exist at the various governance levels, was the absence of a functional African Union Observatory. The Observatory's mandate was to manage this coordination of monitoring and evaluation by countries. Unfortunately for a variety of reasons, the earlier momentum built up by the Observatory faltered with the retirement of its director and lack of replacement of his position. By the close of 2014, the Observatory is expected to have new leadership and resume its activities.

Despite the lacunae, under the Observatory's leadership a Committee of the AU EMIS Restricted Technical Experts was established consisting of representatives of regional economic communities, countries represented in the AU Bureau, countries currently championing an AU EMIS initiative, and international experts in monitoring and evaluation. This Committee, supported by ADEA, has largely been responsible for producing the continental framework of key performance indicators, an AU Outlook on Education database covering all member countries and data from 2006 onwards, and producing the monitoring reports for the COMEDAF meetings. This Committee, which meets annually, has ensured that the implementation of the AU's EMIS priority and monitoring countries and region's performance on the AU Plan of Action continues despite the vacuum in leadership from the AU Observatory. This continental report and the other five reports on the key regional economic communities produced for COMEDAF VI reflects this commitment.

Achievements on AU Priorities.

Overall, the situation has remained unchanged since the last COMEDAF report. The implementation of the priority areas of higher education and EMIS remain the most effective in their impact. A number of higher education initiatives on quality assurance and new pan-African centres of specialization have been established which will benefit the continent as a whole. The EMIS priority has seen a significant uptake by regional economic communities and member states in adopting regional capacity building strategies and harmonisation mechanisms for EMIS. Further capacity is needed by the AU Observatory for it to become sustainable and provide the clear leadership in the future.

The establishment of PACTED and other networks of stakeholders around the goals of teacher development indicate the high level of commitment of the continent to address teacher provision and conditions. In many countries, absolute teacher numbers have risen, out of school children numbers have dropped and the profile of the numbers of qualified teachers has improved. There are also moves to address harmonisation of teacher qualifications through national and regional qualification frameworks.

The priority area of technical vocational education has benefited from the attention given it by the plan of action and AU inspired strategies. This poorly recognised sub-sector has received a new emphasis on the agenda of education decision-makers. It is promising that at least three regional economic communities have recently invested effort and resources in developing TVET assessments and programmes to upgrade the sub-sector to meet human resource development needs. An inter-country quality node on technical vocational skills development with a membership of some 21 countries is indicative of the interest of member states in identifying promising practices and policies which could be applicable to their contexts.

The impact of the Second Decade's plan of action for the priority area of gender and culture is weak indicating



that despite improvements in females gaining access to education significant work lies ahead for many regions and member states to achieve gender parity at all levels. Culture is barely measured and hence cannot be assessed. The AU's ACALAN needs to play a more visible role in engaging in this area.

Some important initiatives have been taken in addressing the priority area of quality management, in particular in the area of establishing quality assurance mechanisms in higher education, EMIS and non-formal education. However, Africa has the highest primary repetition rates and more than half of all primary school children out of school globally are African, indicating substantial work is needed by member states to address issues of education management. Although African countries continue to increase their financial investments in education, learner results are not reflecting this commitment.

The priority area of early childhood development, added as an afterthought in 2009, has yet to be elaborated as a Second Decade goal with a set of proposed activities. This hinders any assessment of progress. Nevertheless, in recent years considerable attention and effort is being made by member states and some regional economic communities to develop policy frameworks and assessments of the sub-sector.

The relative dearth of initiatives on the priority area of curriculum development, teaching, and learning materials amongst regional economic communities and most member states is of concern. It should serve as a call to action for the AU members and partner institutions to ensure that this aspect of the Second Decade is given attention so that progress towards this goal can be made

Challenges to Implementation

A number of challenges face the implementation of the Second Decade's plan of action. At a very critical level is the creation of a coordinated network of regional players, both secretariats and commissions as well as development partners, who will ensure that there is uptake of the full spectrum of activities of the plan of action. An effective communication strategy that keeps information flows on progress at various levels will improve regional and continental synergy and accountability. A further critical area of development is promoting the integration of the priority goals into regional and national education strategic plans. Finally, resource mobilisation is essential to develop the momentum and commitment to the plan of action. Resources will need to come from both external partners and internal regional and national sources.

Coordination

Although the AU Commission has been successful in establishing a network infrastructure involving AU institutions, key partners and regional economic communities, in some key priority areas, notably higher education and EMIS, this has not been in the case in other areas. Indeed, it has achieved its most significant successes where it has identified a lead agency with which to partner in implementing the activities. In instances, such as Curriculum and TVET, where there are no champion partners, implementation has faltered.

A major stumbling block in the coordination of activities associated with plan of action is the incomplete support from regional economic communities, who in many cases do not have an education function. Hence there is no focal point at the regional level to coordinate member states activities in education. Although there has been increasing interest by regional commissions in this role, with new positions being created to fulfil this function, there are still gaps which hinder the implementation of the plan.

While the importance of partnerships in executing the plan of action is acknowledged, the AUC has adopted an overly decentralized approach. Without strong central coordination, however, these partnerships run the risk of losing their coherence, with the result that the whole will not amount to anything more than the sum of its parts. Continental partners, regional economic communities, and member states are all key vehicles through which the goals of the Second Decade can be achieved, but their success depends on the extent to which their efforts are actively marshalled and channelled through ongoing interaction through a central coordinating agency that communicates regularly and facilitates ongoing dialogue and planning between the different partners.

Communication

The AU's communication strategy on advocating the plan of action and updating players on current activities in implementing the Second Decade goals has been weak with little or no engagement with the networks of education journalists on the continent. Many ministry officials are unaware of the Second Decade's goals and there is often no

explicit mention of these objectives in national and regional education and training plans. This makes it is hard for the African Union to demonstrate unequivocally the contribution that the Second Decade is making to educational development on the continent.

There is a need to build the 'brand' of the Second Decade of Education to ensure full awareness and ownership and to ensure that – like, for example, the Education for All goals – it comes to be identified by all key players as being owned by them. Responsibility for effective communication and a deepening sense of ownership across the continent resides not only at AUC and REC levels, but also at the member state level. Member states need to accept responsibility for ensuring effective communication around the plan of action, and make a greater effort to ensure its uptake.

Resource Mobilization

The mid term assessment¹ by the AU indicates that member states are expecting financial resources to implement the plan, despite the fact that the goals of the plan are defined by member state priorities and clearly align with existing national priorities. Whilst, continental partners have been generous in offering financial and human resources for targeted areas of the Second Decade, there remains an expectation that the AUC will directly assist with this, even though it is not a funding agency. This is a challenge, given that the plan of action activities is meant to be mainstreamed into national and regional levels. At the continental level, the lack of financial resources has inhibited activities and hence of the AU Commission's own functionality, including that of its observatories.

Next steps² for Ending the Decade and starting the Next African Union Commission

- i. Provide clear and unequivocal leadership role in coordinating the activities of existing partners.
- ii. Develop a clear and coherent communications strategy outlining how the AUC will continue to communicate its education priorities to international partners, RECs, and member states.
- iii. Facilitate an annual gathering of partner organizations and lead implementing agencies to ensure that all efforts contributing to implementation of the Second Decade of Education Plan are focused and supportive of Second Decade goals, duplication is minimized, and the messaging across partner initiatives is consistent.
- iv. In partnership with all other key players in implementation of the Second Decade, secure the necessary financial and human resources to enable the African Union to provide central coordination and monitoring of the Second Decade and subsequent goals to ensure their success.
- v. In partnership with relevant organizations and representatives of RECs and member states, ensure that a matrix of activities and performance indicators are developed for the ECD goals and relevant and measurable indicators are created for the 'culture' element in the Gender and Culture goal.
- vi. Consider the establishment of an AUC-administered African Education Development Fund to assist RECs and partner organizations to secure funds for specific initiatives that will advance the Second Decade of Education and subsequent goals.

Regional Economic Communities

- i. Establish properly functional educational desks, with sufficient personnel to enable them to take responsibility for coordinating activities in the Region.
- ii. Complete a full review of all current regional initiatives in order to verify that they are clearly aligned to the goals and objectives of the Second Decade of Education to the greatest extent possible.
- iii. Ensure that all REC communication and reports pertaining to education make direct and specific reference to any connections between REC activities and the Second Decade of Education, in an effort to emphasize these connections and help to position the goals of the Second Decade as agreed continental priorities.
- iv. Implement agreed roles in the Second Decade of Education Communication Strategy, once this has been defined, with particular emphasis on sustaining regular communication amongst member states within the Region about their responsibilities and about existing and planned Second Decade initiatives.
- v. Coordinate the gathering of regular, up-to-date information from countries in the REC pertaining to the POA

¹ Neil Butcher Associates (2011)

² Taken directly from mid-term evaluation by Neil Butcher and Associates (2011)



vi. indicators, in support of the work of the AU Observatory.

Partner Organizations

- i. Play a proactive role in negotiating and keeping up to date memorandums of agreement with the AUC to outline respective roles and responsibilities in agreed areas of cooperation in the POA.
- ii. Ensure that programmes of activities are clearly and explicitly aligned with the goals and objectives of the Second Decade of Education, while language used to describe these programmes of activities does not create confusion about potentially competing priorities.
- iii. Ensure that all organizational communication and reports pertaining to education make direct and specific reference to any connections between partner activities and the Second Decade of Education, in an effort to emphasize these connections and help to position the goals of the Second Decade as agreed continental priorities.
- iv. Ensure that someone is clearly identified as the Focal Point for the Second Decade of Education (ideally with an alternate also identified), and that this person's contact details are kept current in the communications database of the AUC HRST.

Member States

- i. Complete a full review of all current national educational policies and plans in order to verify that they are clearly aligned to the goals and objectives of the Second Decade of Education to the greatest extent possible.
- ii. Ensure that all relevant Ministerial and other national participants in the process are aware that the AU's priorities on Education are a common national strategy, rather than a vehicle for funding special-purpose projects.
- iii. Ensure that all Ministry of Education communication and reports make direct and specific reference to any connections between national activities and the AU 's priorities, in an effort to emphasize these connections and help to position the goals of the AU as agreed continental priorities.
- iv. Ensure that someone is clearly identified as the Focal Point for the African Union (ideally with an alternate also identified), and that this person's contact details are kept current in the communications database of the AUC HRST.
- v. Ensure that EMIS systems are improved/enhanced to enable the member state to make regular and timely submissions of data to enable the AU Observatory to compile at least annual reports on the progress in achievement of the indicators of the POA.



STILL OUTSTANDING

Priority Area I: Gender and Culture

STILL OUTSTANDING

Priority Area 2: Education Management Information Systems (EMIS)

STILL OUTSTANDING

Priority Area 3: Teacher Development

ADEA (2009) Policy Framework on the training and professional development of contractual teachers

ADEA (2009) Policy Framework on the career tracks, opportunities for advancement, social protection guarantees, and rights and obligations of contractual teachers

ADEA Triennale (2012) "Promoting critical knowledge, skills and qualifications for the sustainable development of Africa: how to design and implement an effective response by education and training systems?"

African Union Second Decade for Education in Africa (2006-2014) Plan of Action

AU Education Outlook for COMEDAF V, teacher chapter

Global Monitoring Report 2012

Global Monitoring Report 2013/2014

Mckinsey & Company (2007) How the World Best-Performing School Systems Come Out on Top

Ndoye, Mamadou & Richard Walther (2012) Des connaissances, compétences et qualifications critiques pour un développement accéléré et durable de l'Afrique. Synthèse générale de la Triennale 2012 de l'ADEA

Study Group on Measuring Learning Outcomes (2013) Schooling is not education! Using Assessment to Change the Politics of Non-Learning. A Center for Global Development Report. Washington D.C.: Center for Global Development

UIS Africa Regional Module

UIS Data Center 2013

UIS Fact Sheet, October 2013, NO. 27

UNESCO (2009) Universal Primary Education in Africa: The teacher Challenge. Dakar: BREDA

Priority Area 4: Higher Education

Bloom, D., Canning, D., & Chan, K. (2006). Higher Education and Economic Development in

Africa. Africa Region Human Development Working Paper N°102. The World Bank, Washington, DC.

Diarra, M.C. (1997). Educational Costs and Cost Recovery in Developing Countries: The Case of Mali. Unpublished Dissertation. Baton Rouge: Louisiana State University.

Council for the Development of Social Sciences Research in Africa (2005). CODESRIA. Research Policy. Dakar, Senegal.

Materu, P. (2007). Higher Education Quality Assurance in Sub Saharan Africa. Status,

Challenges, Opportunities and Promising Practices. The World Bank. Washington, DC.

Education Research Network for West and Central Africa (2014). Strategic Plan (2012-2016). Bamako, Mali.

Tefera, d. (2010). Mapping Higher Education in Arica.

UNESCO/IIEP (2012). "Final communiqué de Strengthening Regional Cooperation in

Quality Assurance in West and Central Arica, November 2012. Dakar, Senegal.

Priority Area 5: Technical and Vocational Education and Training (TVET)

STILL OUTSTANDING

Priority Area 6: Curriculum Development, Teaching and Learning Materials

ADEA. (2014). Medium Term Strategic Plan 2013-17. Tunis, Tunisia.

African Union. (2006). Second Decade of Education for Africa (2006-2015) Plan of Action. Addis Ababa, Ethiopia.

African Union Department of Human Resources, Science and Technology. (2009). First Pan African Conference on Curricula, Literacy and Book Sector Development. 24-27 March 2009. Dar es Salaam, Tanzania.

African Union Department of Human Resources, Science and Technology. (2011) Report of the Midterm Evaluation of the Second Decade of Education for

Africa, 2006-2015 Incorporating comments arising out of the AU stakeholder Validation Meeting. Mauritius, 23rd – 25th November 2011.

Aglo, J. and Lethoko, M. (2001). Curriculum Development and Education for Living Together: Conceptual and Managerial Challenges in Africa. Final Report of the Seminar held in Nairobi, Kenya.

Boonstoppel, E & Mudyazvivi, E. (2010). The Case of Making Teaching and Learning Materials Practical and Locally Relevant in Zimbabwe. SNV Netherlands Development Organisation

E. H-F. Law & N. Nieveen (Eds.), Schools as curriculum agencies: Asian and European perspectives on school-based curriculum development (pp. 3–18). Rotterdam, Netherlands: Sense Publishers.

Egwu, S Hon. Dr. (2009). Road Map for the Nigerian Education Sector. Federal Ministry of Education: Nigeria.

Kennedy, K. J. (2010). School-based curriculum development for new times: A comparative analysis.

Kouwenhoven, G.W. (2003). Designing for competence: towards a competence-based curriculum for the faculty of education of the Eduardo Mondlane

Lisk, F. 2011. The development and operation of labor market information systems (LMISs): Case study of the Gambia. Working document. ADEA Triennale 2012

UNESCO. 2014. Study on constructing a profession of opportunity: policies and practices on TVET teachers and instructors in the Arab Region (Forthcoming)

UNESCO. 2013. Teaching and Learning : Achieving Quality for All. EFA Global Monitoring Report. Paris. UNESCO

UNESCO. 2012. Youth and skills: putting education to work. EFA Global Monitoring. Paris. UNESCO

Priority Area 6: Curriculum Development, Teaching and Learning Materials

ADEA. (2014). Medium Term Strategic Plan 2013-17. Tunis, Tunisia.

African Union. (2006). Second Decade of Education for Africa (2006-2015) Plan of Action. Addis Ababa, Ethiopia.

African Union Department of Human Resources, Science and Technology. (2009). First Pan African Conference on Curricula, Literacy and Book Sector Development. 24-27 March 2009. Dar es Salaam, Tanzania.

African Union Department of Human Resources, Science and Technology. (2011) Report of the Midterm Evaluation of the Second Decade of Education for Africa, 2006-2015 Incorporating comments arising out of the AU stakeholder Validation Meeting. Mauritius, 23rd – 25th November 2011.

Aglo, J. and Lethoko, M. (2001). Curriculum Development and Education for Living Together: Conceptual and Managerial Challenges in Africa. Final Report of the Seminar held in Nairobi, Kenya.

Boonstoppel, E & Mudyazvivi, E. (2010). The Case of Making Teaching and Learning Materials Practical and Locally Relevant in Zimbabwe. SNV Netherlands Development Organisation

E. H-F. Law & N. Nieveen (Eds.), Schools as curriculum agencies: Asian and European perspectives on school-based curriculum development (pp. 3–18). Rotterdam, Netherlands: Sense Publishers.

Egwu, S Hon. Dr. (2009). Road Map for the Nigerian Education Sector. Federal Ministry of Education: Nigeria.

Kennedy, K. J. (2010). School-based curriculum development for new times: A comparative analysis.

Kouwenhoven, G.W. (2003). Designing for competence: towards a competence-based curriculum for the faculty of education of the Eduardo Mondlane university. Doctoral dissertation. Enschede: Twente University.

<http://www.mapsofworld.com/morocco/education/system.html>

Ministry of Education. (2007). Liberian Primary Education Recovery Plan, prepared for the Fast Track Initiative. Monrovia: Liberia.

Negash, N. (2011). English language in Africa: An impediment or a contributor to development? Perceptions of English.

Republic of South Africa. (2010). Department of Higher Education Strategic Plan 2010/11-2014/15

Serbessa, D. (2011). Quality of Teaching and Learning in Ethiopian Primary Schools: Tension between Traditional and Innovative teaching-learning Approaches. Retrieved 10 April 2012 from: <http://home.hiroshima-u.ac.jp/cice/paper68.pdf>

Tella, A and Olusola, E. A. (2009). Information communication technology (ICT) and curriculum development: the challenges for education for sustainable development. Indian Journal of Science and Technology. Vol.2 No 3.

UNESCO International Consultative Forum on Education for All .(2000). Education for All: Status and Trends 2000. Paris: France.

UNESCO. (2011). Hands-on Science. Retrieved from: <http://www.unesco.org/new/en/education/themes/strengthening-education-systems/science-and-technology/hands-on-science/>

UNESCO. (2014). EFA Global Monitoring Report 2013/4: Teaching and Learning - Achieving quality for all. Summary. Paris, France.

Priority Area 7: Quality Management

CONFEMEN. Programme for Analyzing Education Systems of CONFEMEN's Countries Members (PASEC). (2011) PASEC: A New Vision. Assessment for serving CONFEMEN. Programme for Analyzing Education Systems of CONFEMEN's Countries Members (PASEC). (2011) PASEC: A New Vision. Assessment for serving Education for All. Dakar.

Education For All Global Monitoring (2011). Out-of-school Children: New Data Reveal Persistent Challenges. Montreal: UIS

Reynolds, Larry (2002). Beyond Total Quality Management. Sheldon Business Books. Cambridge University Press.

UNESCO Africa (2010). Sustainable Development for Wealth Creation in Africa. No.2. October. BREDA

UNESCO Institute for Statistics (UIS) (2011). Financing Education in Sub-Saharan Africa. Meeting the Challenges of Expansion, Equity and Quality. Montreal: UIS

Priority Area 8 : Early Childhood Development (ECD)

<http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTRESEARCH/0,,contentMDK:21986729~pagePK:64165401~piPK:64165026~theSitePK:469382~isCURL:Y,00.html>

http://www.un.org/en/ecosoc/newfunct/pdf/11_cli_africa_concept_note_april_2011.pdf

Education for All Global Monitoring Report 2012: Youth and Skills, Putting Education to Work, http://www.unicef.org/esaro/5481_early_childhood_development.html

<http://www.un.org/millenniumgoals/childhealth.shtml>

UNICEF, <http://www.unesco.org/new/en/dakar/education/early-childhood-care-and-education/>

United Nations Children's Fund (UNICEF) March 2013, The World We Want: Education in the Post-2015 Development Agenda, p14

<http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTCY/EXTECD/0,,contentMDK:20426142~hiPK:547714~menuPK:1114015~pagePK:148956~piPK:216618~theSitePK:344939,00.html>

Appendices

Appendix I: Indicators for measuring progress in the 8 priority areas of the AU Plan of Action (2014)

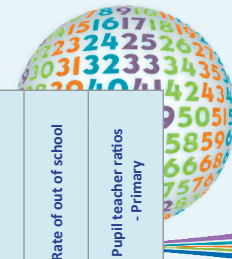
A. GENDER AND CULTURE	
A.1	Gross enrolment ratio.
A.2	Gender parity index.
A.3	Percentage of primary aged children out of school.
A.4	Percentage of female teachers.
A.5	Existence of African language policy.
A.6	Percentage of pupils being taught using an African language as a medium of instruction.
A.7	Percentage of learners learning an African language as a subject.
B. EMIS	
B.1	School Census Return Rate
B.2	Existence of Functional EMIS Systems by Sub Sectors
B.3	Reporting Rate of International Data Coverage
C. TEACHER DEVELOPMENT	
C.1	Pupil Teacher Ratio
C.2	Percentage of Teachers Qualified to Teach According to National Standards
C.3	Number of Foreign Teachers Teaching in the Country (Inbound Mobility)
C.4	Percentage of Female Head Teachers
C.5	Percentage of Teachers by Age Range
C.6	Teacher Mobility
D. HIGHER AND TERTIARY EDUCATION	
D.1	Enrolment of Students in Higher and Tertiary Education per 100,000 Inhabitants
D.2	Percentage of Female Students in Scientific Fields of Study at Tertiary Level of Education
D.3	Percentage of Female Students in Engineering, Manufacturing and Construction fields of Study at Tertiary Level of Education
D.4	Inbound Mobility Ratio
D.5	Outbound Mobility Ratio
D.6	Net Entry Rate into Higher and Tertiary Education
D.7	Percentage of Secondary Education Graduates who Qualify for Tertiary Education
D.8	Amount of Research Expenditure in Higher and Tertiary Education for Science Fields
D.9	Amount of Research Expenditure in Higher and Tertiary Education in Engineering, Manufacturing and Construction Fields
D.10	Percentage Distribution of Tertiary Graduates in Science
D.11	Percentage Distribution of Tertiary Graduates in Agriculture , Engineering, Manufacturing and Construction
D.12	Distribution of Tertiary Education Enrolment by Key Fields of Study



E. TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING	
E.1	Percentage of Total Enrolment in Technical and Vocational Education and Training
E.2	Existence of Life Skills Programmes
E.3	Percentage of TVET Graduates
E.4.	Adult Literacy Rate
E.5.	Youth Literacy Rate
F. CURRICULUM AND TEACHING AND LEARNING MATERIALS	
F.1	Primary Pupil-Textbook Ratio in Mathematics
F.2	Primary Pupil- Textbook Ratio in Reading
G.QUALITY MANAGEMENT	
G.1	Primary Survival Rate
G.2	Primary Gross Graduation Ratio (replaced with Gross Intake Ratio to the Last Grade of Primary Education)
G.3	Tertiary Gross Completion Rate, First Degree (replaced by Gross graduation ratio , ISCED 5A , first degree)
G.4	Net Enrolment Ratio
G.7	Public Expenditure on Education as a Percentage of Total Government Expenditure
G.8	Public Current Expenditure on Education as a percentage of Total Education Expenditure
G.9	Public Expenditure on Education per Learner
H. EARLY CHILDHOOD DEVELOPMENT	
H.1	Annual Population Growth Rate of 0-4 Years
H.13	Fertility Rate
H.4	Infant Mortality Rate
H.11	Under 5 Mortality Rate
H.9	Percentage of Under Five suffering from Stunting
H.3	Gross Enrolment Ratio in Pre Primary Education by Gender
H.5	Net Enrolment Ratio in Pre Primary
H.12	Grade One Repetition Rate
H.2	Gender Parity Index for Gross Enrolment Ratio
H.6	Percentage of Female Pupils in Pre-Primary Education
H.7	Percentage of Female Teachers in Pre -Primary Education
H.8	Percentage of Teachers Qualified to teach in Pre -Primary Education
H.10	Pupil Teacher Ratio in Pre Primary Education

Appendix 2: Continental Perspective for Primary Education

Country	Academic Year	Primary aged population	Education System				Enrolment in Primary Education	Primary Gross Enrolment Ratio				Gross intake ratio to the last grade of primary	Percentage of trained teachers	Number of primary out of school children	Rate of out of school	Pupil teacher ratios - primary
			Entrance Age of Pre-Primary	Duration in Pre-Primary	Entrance Age of Primary	Duration of Primary		Total	FEMALE	MALE	GPI					
Algeria	2006	3,937,480	5	1	6	6	4,196,580	106.6	102.4	110.6	0.93	83.3	99.3	226,401	5.7	24.5
	2012	2,939,830	5	1	6	5	3,451,588	117.4	114.0	120.7	0.94	100.2	...	25,337	0.9	23.2
Angola	2006	2,069,878	3	3	6	4	...	...	...	...	...	...	...	...	...	...
	2012	0	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Benin	2006	1,373,389	4	2	6	6	1,356,818	98.8	87.8	109.8	0.80	...	...	210,515	15.3	43.6
	2012	1,618,673	4	2	6	6	1,987,182	122.8	115.9	129.5	0.89	70.5	...	83,149	5.1	44.1
Botswana	2006	313,535	3	3	6	7	330,417	105.4	104.2	106.5	0.98	96.5	94.3	50,265	16.0	25.4
	2012	310,475	3	3	6	7	...	...	...	...	...	...	...	...	...	...
Burkina Faso	2006	2,240,499	4	3	7	6	1,390,571	62.1	55.8	68.2	0.82	32.8	86.9	1,128,686	50.4	45.8
	2012	2,758,821	3	3	6	6	2,344,031	85.0	82.6	87.3	0.95	57.6	94.8	917,044	33.2	48.2
Burundi	2006	1,301,720	4	3	7	6	1,324,937	101.8	96.1	107.5	0.89	0.0	...	342,265	26.3	54.2
	2012	1,441,506	5	2	7	6	1,980,846	137.4	136.9	138.0	0.99	62.2	95.0	...	...	47.1
Cameroon	2006	3,020,646	4	2	6	6	2,998,135	99.3	90.4	108.0	0.84	49.5	61.8	...	...	44.7
	2012	3,479,284	4	2	6	6	3,848,611	110.6	103.2	117.9	0.88	72.8	78.8	294,813	8.5	45.6
Cape Verde	2006	71,727	3	3	6	6	81,434	113.5	110.6	116.5	0.95	98.3	81.5	3,581	5.0	25.4
	2012	60,654	3	3	6	6	67,903	112.0	107.0	116.9	0.91	99.0	94.6	1,623	2.7	23.0
Central African Republic	2006	632,235	3	3	6	6	418,825	66.2	54.0	78.6	0.69	27.1	...	316,475	50.1	0.0
	2012	695,697	3	3	6	6	662,317	95.2	81.3	109.3	0.74	45.3	57.9	193,652	27.8	80.1
Chad	2006	1,813,990	3	3	6	6	1,296,486	71.5	57.9	84.9	0.68	29.8	...	...	...	62.7
	2012	2,191,871	3	3	6	6	2,090,758	95.4	82.4	108.2	0.76	35.3	...	...	...	61.3
Comoros	2006	91,975	3	3	6	6	...	...	...	...	...	...	...	...	...	...
	2012	113,330	3	3	6	6	133,023	117.4	111.7	122.9	0.91	0.0	...	...	...	...
Congo	2006	559,271	3	3	6	6	617,010	110.3	104.8	115.8	0.91	77.8	89.0	245,608	43.9	54.8
	2012	671,286	3	3	6	6	734,493	109.4	113.4	105.5	1.07	73.0	80.3	56,264	8.4	44.4
Côte d'Ivoire	2006	2,838,243	3	3	6	6	2,111,975	74.4	66.0	82.8	0.80	47.8	...	...	...	46.1
	2012	3,100,028	3	3	6	6	2,920,791	94.2	86.6	101.8	0.85	61.2	99.4	...	...	41.7
Democratic Republic of the Congo	2006	9,247,834	3	3	6	6	...	...	...	...	...	...	...	...	...	...
	2012	10,825,001	3	3	6	6	12,004,804	110.9	103.6	118.2	0.88	72.8	93.5	...	...	34.7
Djibouti	2006	113,401	4	2	6	6	53,745	47.4	42.6	52.0	0.82	36.8	79.1	66,770	58.9	33.6
	2012	91,477	4	2	6	5	63,612	69.5	65.9	73.1	0.90	64.9	0.0	35,104	38.4	34.9
Egypt	2006	9,138,691	4	2	6	6	9,794,591	107.2	103.9	110.3	0.94	96.3	...	198,740	2.2	26.0
	2012	9,539,388	4	2	6	6	10,819,639	...	...	...	0.96	...	...	...	...	...
Equatorial Guinea	2006	76,430	3	4	7	5	...	...	...	...	...	...	...	...	...	...
	2012	101,432	4	3	7	6	92,029	90.7	89.6	91.8	0.98	54.8	...	38,352	37.8	26.2
Eritrea	2006	635,224	5	2	7	5	364,263	57.3	51.8	62.7	0.83	44.2	87.5	357,434	56.3	47.2
	2012	787,256	5	2	7	5	334,245	42.5	38.8	46.0	0.84	31.2	89.6	517,937	65.8	40.9
Ethiopia	2006	0	4	3	7	6	10,971,581	83.6	77.8	89.3	...	47.2	...	4,451,317	33.9	...
	2012	0	4	3	7	6	14,532,477	95.4	91.8	98.9	...	50.7	56.8	3,010,737	19.8	53.7
Gabon	2006	175,712	3	3	6	5	...	...	...	...	...	...	...	...	...	...
	2012	197,311	3	3	6	5	...	...	...	...	...	...	...	...	...	...
Gambia	2006	233,642	3	4	7	6	207,474	88.8	90.8	86.8	1.05	69.6	0.0	52,811	22.6	38.5
	2012	286,388	3	4	7	6	244,033	85.2	87.0	83.4	1.04	70.3	63.5	75,180	26.3	33.9
Ghana	2006	3,283,353	4	2	6	6	3,130,575	95.3	94.5	96.2	0.98	71.2	56.3	1,082,925	33.0	35.4
	2012	3,695,531	4	2	6	6	4,062,026	109.9	106.3	113.4	0.94	98.2	52.3	652,518	17.7	33.0
Guinea	2006	1,532,624	4	3	7	6	1,258,038	82.1	74.2	89.8	0.83	59.3	67.7	496,789	32.4	44.5
	2012	1,761,313	4	3	7	6	1,599,839	90.8	82.7	98.8	0.84	61.5	74.5	431,051	24.5	43.6
Guinea-Bissau	2006	224,558	4	3	7	6	269,287	119.9	...	...	...	...	...	...	...	62.2
	2012	256,569	3	3	6	6	...	...	...	...	...	...	...	...	...	...
Kenya	2006	5,825,560	3	3	6	6	6,101,390	104.7	103.3	106.2	0.97	...	99.4	1,433,002	24.6	44.3
	2012	7,042,148	3	3	6	6	...	...	...	...	...	...	...	...	...	...
Lesotho	2006	361,859	3	3	6	7	424,855	117.4	117.7	117.2	1.00	80.4	66.7	91,857	25.4	40.8
	2012	343,863	3	3	6	7	381,690	111.0	109.6	112.4	0.97	72.5	67.5	61,289	17.8	34.1
Liberia	2006	527,901	3	3	6	6	488,438	92.5	88.8	96.1	0.92	...	39.6	342,559	64.9	28.0
	2012	680,708	3	3	6	6	...	...	...	...	...	...	...	...	...	...

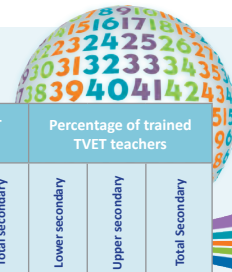


Country	Academic Year	Primary aged population	Education System				Enrolment in Primary Education	Primary Gross Enrolment Ratio				Gross Intake Ratio to the last grade of primary	Percentage of trained teachers	Number of primary out of school children	Rate of out of school	Pupil teacher ratios - Primary
			Entrance Age of Pre-Primary	Duration in Pre-Primary	Entrance Age of Primary	Duration of Primary		Total	FEMALE	MALE	GPI					
Libya	2006	660,243	4	2	6	6	755,338	114.4	112.0	116.6	0.96	...	...	...	...	...
	2012	702,460	4	2	6	6	...	...	...	...	...	...	...	...	...	...
Madagascar	2006	2,678,199	3	3	6	5	3,698,906	138.1	135.4	140.8	0.96	56.7	...	...	...	48.1
	2012	3,032,470	3	3	6	5	4,402,722	145.2	144.2	146.1	0.99	69.5	...	...	...	43.1
Malawi	2006	2,314,870	3	3	6	6	2,933,557	126.7	129.0	124.5	1.04	57.6	89.9	66,605	2.9	75.9
	2012	2,609,940	3	3	6	6	3,687,625	141.3	143.9	138.7	1.04	74.2	78.2	...	...	74.1
Mali	2006	1,938,721	3	4	7	6	1,609,979	83.0	74.6	91.2	0.82	51.4	...	722,904	37.3	52.8
	2012	2,389,100	3	4	7	6	2,113,857	88.5	82.9	93.8	0.88	58.7	...	637,251	26.7	...
Mauritania	2006	496,672	3	3	6	6	465,970	93.8	94.9	92.7	1.02	43.6	100.0	130,814	26.3	41.4
	2012	572,608	3	3	6	6	553,584	96.7	99.2	94.2	1.05	68.7	100.0	169,318	29.6	40.1
Mauritius	2006	113,860	3	2	5	6	121,387	106.6	106.2	107.0	0.99	98.1	100.0	4,245	3.7	21.7
	2012	105,052	3	2	5	6	113,634	108.2	107.4	108.9	0.99	99.3	100.0	2,167	2.1	20.9
Morocco	2006	3,772,284	4	2	6	6	3,943,831	104.5	99.3	109.6	0.91	81.6	...	481,342	12.8	27.0
	2012	3,461,270	4	2	6	6	4,016,934	116.1	113.1	118.8	0.95	99.3	100.0	87,247	2.5	25.8
Mozambique	2006	4,040,601	3	3	6	7	4,165,580	103.1	95.3	110.9	0.86	41.0	64.6	816,872	20.2	67.3
	2012	5,099,793	3	3	6	7	5,359,019	105.1	99.9	110.3	0.91	52.2	83.6	691,512	13.6	54.8
Namibia	2006	372,166	5	2	7	7	402,529	108.2	107.9	108.4	1.00	82.4	92.9	48,921	13.1	31.4
	2012	379,540	5	2	7	7	415,454	109.5	107.7	111.2	0.97	85.4	97.6	43,474	11.5	40.7
Niger	2006	2,224,224	4	3	7	6	1,126,073	50.6	42.6	58.3	0.73	33.3	91.9	1,243,999	55.9	40.0
	2012	2,882,819	4	3	7	6	2,050,656	71.1	64.9	77.1	0.84	49.3	97.1	1,048,707	36.4	38.8
Nigeria	2006	22,486,958	3	3	6	6	22,861,884	101.7	94.2	108.8	0.87	90.6	51.2	7,408,899	32.9	40.4
	2012	27,049,663	3	3	6	6	...	...	...	...	...	...	...	...	...	...
Rwanda	2006	1,707,496	4	3	7	6	2,019,991	118.3	120.0	116.6	1.03	...	98.3	...	...	65.9
	2012	1,790,808	4	3	7	6	2,394,674	133.7	135.1	132.3	1.02	57.7	95.6	23,118	1.3	59.3
Sao Tome and Principe	2006	24,057	3	3	6	6	...	...	...	...	...	...	...	...	...	...
	2012	28,660	3	3	6	6	33,893	118.3	116.3	120.1	0.97	...	...	...	...	28.7
Senegal	2006	1,827,353	4	3	7	6	1,473,464	80.6	80.0	81.3	0.98	49.4	49.7	494,564	27.1	38.5
	2012	2,128,198	4	3	7	6	1,783,178	83.8	87.0	80.6	1.08	60.5	64.7	438,556	20.6	31.7
Seychelles	2006	8,181	4	2	6	6	...	...	...	...	...	...	...	...	...	...
	2012	8,081	4	2	6	6	...	...	...	...	...	...	...	...	...	...
Sierra Leone	2006	813,006	3	3	6	6	...	...	...	...	...	...	...	...	...	...
	2012	952,392	3	3	6	6	1,252,343	131.5	130.8	132.2	0.99	72.4	54.6	...	...	33.0
Somalia	2006	1,510,964	3	3	6	6	...	...	...	...	...	...	...	...	...	...
	2012	1,747,150	3	3	6	6	...	...	...	...	...	...	...	...	...	...
South Africa	2006	6,763,402	6	1	7	7	7,256,518	107.3	104.2	110.4	0.94	...	...	318,071	4.7	31.0
	2012	6,895,128	6	1	7	7	7,004,482	101.6	98.9	104.3	0.95	...	...	656,487	9.5	29.5
South Sudan	2006	0	0	0	0	0	...	...	...	...	...	...	...	...	...	...
	2012	1,757,131	3	3	6	6	...	...	...	...	...	...	...	...	...	...
Sudan	2006	5,172,276	4	2	6	6	3,472,215	67.1	62.2	71.9	0.87	...	...	...	...	...
	2012	0	4	2	6	6	...	...	...	...	...	...	...	...	...	...
Swaziland	2006	212,341	3	3	6	7	229,686	108.2	104.5	111.8	0.93	66.3	92.2	37,745	17.8	33.3
	2012	209,352	3	3	6	7	...	...	...	...	...	...	...	...	...	...
Togo	2006	894,737	3	3	6	6	1,051,872	117.6	108.7	126.4	0.86	73.4	...	59,924	6.7	37.6
	2012	1,030,139	3	3	6	6	1,368,074	132.8	127.4	138.2	0.92	...	83.4	...	...	41.7
Tunisia	2006	1,033,760	3	3	6	6	1,134,414	109.7	107.5	111.8	0.96	...	...	14,516	1.4	19.1
	2012	954,077	3	3	6	6	1,046,671	109.7	108.4	110.9	0.98	...	100.0	510	0.1	17.1
Uganda	2006	6,227,589	3	3	6	7	7,363,721	118.2	118.4	118.1	1.00	...	...	...	...	49.0
	2012	7,628,402	3	3	6	7	...	...	...	...	...	...	...	...	...	...
United Republic of Tanzania	2006	7,356,212	5	2	7	7	7,959,884	108.2	106.8	109.6	0.97	72.4	100.0	282,148	3.8	52.4
	2012	8,867,154	5	2	7	7	8,247,172	93.0	94.5	91.5	1.03	80.8	96.6	...	...	45.6
Zambia	2006	2,270,189	3	4	7	7	2,678,610	118.0	116.1	119.9	0.97	88.3	...	127,261	5.6	57.0
	2012	2,760,142	3	4	7	7	3,135,442	113.6	113.3	113.9	0.99	91.3	...	124,814	4.5	49.2
Zimbabwe	2006	2,393,433	3	3	6	7	...	...	...	...	...	...	...	...	...	...
	2012	2,441,159	3	3	6	7	...	...	...	...	...	...	...	...	...	...

2 Low income (36 countries): Afghanistan, Bangladesh, Benin, Burkina Faso, Burundi, Cambodia, Central African Republic, Chad, Comoros, Democratic People's Republic of Korea, Democratic Republic of the Congo, Eritrea, Ethiopia, Federal Democratic Republic of Nepal, Gambia, Guinea, Guinea-Bissau, Haiti, Kenya, Kyrgyzstan, Liberia, Madagascar, Malawi, Mali, Mozambique, Myanmar, Niger, Rwanda, Sierra Leone, Somalia, Tajikistan, Togo, Tokelau, Uganda, United Republic of Tanzania and Zimbabwe.

Appendix 3: Continental Perspective for Secondary Education

Country	Academic Year	Secondary Aged Population	Education System			Gross Enrolment Ratio				Percentage of Trained Teachers	TVET enrolment in total secondary	Pupil /teacher ratio	Percentage of TVET Programmes			Percentage of trained TVET teachers		
			Entrance Age	Duration	Enrolment	Total	Male	Female	GPI				Lower secondary	Upper secondary	Total secondary	Lower secondary	Upper secondary	Total Secondary
Algeria	2006	4,690,234	12	6	3,664,852	78.1	74.9	81.5	1.09	...	349,151	...	8.4	11.8	9.5	...	...	...
	2012	4,517,137	11	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Angola	2006	2,922,251	10	7	...	...	...	...	...	...	...	...	...	79.0	...	...	...	...
	2012	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Benin	2006	1,302,133	12	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	2012	1,560,531	12	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Botswana	2006	222,871	13	5	174,843	78.5	76.3	80.6	1.06	98.8	10,642	14.0	...	19.1	6.1	...	100.0	100.0
	2012	222,537	13	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Burkina Faso	2006	2,125,885	13	7	319,749	15.0	17.4	12.6	0.72	...	23,002	29.6	2.7	25.8	7.2	...	...	...
	2012	2,609,032	12	7	676,337	25.9	28.6	23.2	0.81	47.5	27,381	26.3	1.3	17.4	4.0	...	...	41.1
Burundi	2006	1,375,470	13	7	192,296	14.0	16.3	11.7	0.72	...	11,912	28.4	2.8	19.0	6.2	...	...	...
	2012	1,474,198	13	7	420,117	28.5	33.0	24.2	0.73	74.9	17,384	29.7	0.5	17.4	4.1	81.3	85.3	84.7
Cameroon	2006	3,016,223	12	7	698,444	23.2	25.8	20.4	0.79	...	118,042	16.2	16.9	16.9	16.9	...	...	...
	2012	3,401,200	12	7	1,713,452	50.4	54.3	46.4	0.86	...	359,513	21.4	19.9	23.5	21.0	...	...	...
Cape Verde	2006	72,839	12	6	61,465	84.4	78.0	90.9	1.17	...	2,085	26.0	...	8.9	3.4	...	...	...
	2012	66,807	12	6	61,956	92.7	84.7	100.9	1.19	83.9	1,664	16.8	...	6.7	2.7	...	100.0	100.0
Central African Republic	2006	636,240	12	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	2012	707,665	12	7	125,907	17.8	23.6	12.1	0.51	...	3,850	68.1	1.4	9.2	3.1	...	...	...
Chad	2006	1,628,903	12	7	262,714	16.1	23.7	8.5	0.36	...	3,751	33.0	0.3	4.6	1.4	...	...	...
	2012	2,009,441	12	7	458,034	22.8	31.2	14.3	0.46	16.7	6,855	29.8	0.3	4.4	1.5	1.6	34.4	28.6
Comoros	2006	89,773	12	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	2012	102,275	12	7	75,158	73.5	75.0	71.9	0.96	...	387	...	...	1.4	0.5	...	...	...
Congo	2006	536,794	12	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	2012	632,184	12	7	339,250	53.7	57.5	49.8	0.87	55.5	34,336	18.7	5.3	22.4	10.1	100.0	100.0	100.0
Côte d'Ivoire	2006	2,706,729	12	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	2012	3,110,928	12	7	...	...	...	...	...	...	...	...	...	15.1	...	...	100.0	...
Democratic Republic of the Congo	2006	7,539,731	12	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	2012	8,984,870	12	6	3,894,024	43.3	54.5	32.2	0.59	...	732,683	15.3	4.0	30.7	18.8	...	...	...
Djibouti	2006	137,431	12	7	30,265	22.0	26.2	17.7	0.68	...	1,731	31.3	0.5	18.0	5.7	...	...	...
	2012	125,680	11	7	55,082	43.8	49.4	38.1	0.77	...	2,289	26.6	...	11.7	4.2	...	...	...
Egypt	2006	9,374,949	12	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	2012	9,095,829	12	6	7,849,734	...	...	...	0.98	...	1,560,440	...	...	...	...	...	...	...
Equatorial Guinea	2006	93,690	12	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	2012	90,032	13	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Eritrea	2006	839,566	12	7	227,786	27.1	33.6	20.6	0.61	47.1	2,060	54.4	...	2.6	0.9	...	44.1	44.1
	2012	891,378	12	7	265,600	29.8	33.0	26.4	0.80	...	2,520	37.9	...	2.6	0.9	...	...	...
Ethiopia	2006	0	13	6	2,992,589	29.0	35.5	22.5	0.00	...	123,557	...	...	50.0	4.1	...	...	...
	2012	0	13	6	4,849,280	37.2	38.9	35.4	0.00	78.6	314,159	39.7	...	49.2	6.5	...	79.4	79.4
Gabon	2006	220,040	11	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	2012	243,168	11	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Gambia	2006	190,328	13	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	2012	231,956	13	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ghana	2006	2,964,055	12	6	1,454,097	49.1	53.1	44.9	0.84	...	31,466	19.7	...	8.5	2.2	...	...	...
	2012	3,807,549	12	7	2,215,529	58.2	61.3	54.9	0.90	...	79,986	17.8	...	9.4	3.6	...	51.0	51.0
Guinea	2006	1,471,036	13	7	482,825	32.8	43.0	22.5	0.52	...	4,461	35.8	...	3.5	0.9	...	...	...
	2012	1,723,842	13	7	657,383	38.8	47.4	30.0	...	...	21,691	31.1	...	15.5	5.0	...	...	...
Guinea-Bissau	2006	160,129	13	5	55,176	34.5	...	...	...	...	977	37.3	...	...	1.8	...	...	...
	2012	186,036	12	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Kenya	2006	5,165,682	12	6	2,583,755	50.0	51.7	48.3	0.93	98.7	22,952	25.8	...	2.2	0.9	...	52.8	52.8
	2012	5,721,229	12	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Lesotho	2006	241,154	13	5	96,073	39.8	34.6	45.2	1.31	84.6	1,528	25.8	1.0	3.4	1.6	...	...	53.5
	2012	252,456	13	5	134,543	51.7	43.4	60.2	1.40	...	6,691	24.9	...	...	...	...	...	...
Liberia	2006	433,197	12	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	2012	547,923	12	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...



Country	Academic Year	Secondary Aged Population	Education System			Gross Enrolment Ratio				Percentage of Trained Teachers	TVET enrolment in total secondary	Pupil /teacher ratio	Percentage of TVET Programmes			Percentage of trained TVET teachers		
			Entrance Age	Duration	Enrolment	Total	Male	Female	GPI				Lower secondary	Upper secondary	Total secondary	Lower secondary	Upper secondary	Total Secondary
Libya	2006	702,403	12	6	732,614	104.3	96.0	113.0	1.18	...	...	...	...	...	...	...	...	...
	2012	651,740	12	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Madagascar	2006	3,042,886	11	7	726,998	23.9	24.5	23.3	0.95	...	28,589	23.7	1.1	16.1	3.9	...	...	...
	2012	3,694,849	11	7	1,405,063	38.0	38.9	37.1	0.95	...	27,883	27.6	0.4	8.1	2.0	...	...	...
Malawi	2006	1,931,377	12	6	565,467	29.3	31.8	26.8	0.84	...	...	37.9	...	...	...	...	...	...
	2012	2,223,377	12	6	761,366	34.2	36.1	32.4	0.90	...	...	41.5	...	...	...	...	...	...
Mali	2006	1,600,756	13	6	474,976	29.7	36.3	22.8	0.63	...	45,422	...	...	37.2	9.6	...	...	...
	2012	1,902,102	13	6	963,128	50.6	58.3	42.6	0.73	...	192,805	...	...	53.0	20.0	...	...	...
Mauritania	2006	427,353	12	6	98,946	23.2	25.1	21.2	0.84	100.0	3,174	26.2	1.6	5.4	3.2	100.0	100.0	100.0
	2012	567,471	12	7	152,011	26.8	29.0	24.5	0.85	...	...	...	...	...	...	...	...	...
Mauritius	2006	143,091	11	7	128,925	90.1	89.0	91.3	1.03	...	...	16.6	15.8	...	...	...	...	...
	2012	132,625	11	7	127,123	95.9	93.9	97.8	1.04	...	11,446	14.7	12.3	6.2	9.0	...	...	...
Morocco	2006	3,935,888	12	6	2,061,046	52.4	56.0	48.6	0.87	...	118,515	...	2.5	12.0	5.8	...	...	...
	2012	3,708,134	12	6	2,554,050	68.9	74.1	63.4	0.86	...	155,414	...	2.4	11.6	6.1	...	...	...
Mozambique	2006	2,383,764	13	5	367,962	15.4	18.0	12.9	0.71	62.7	26,269	35.8	7.2	6.6	7.1	58.2	50.4	56.5
	2012	2,809,108	13	5	727,895	25.9	27.4	24.4	0.89	83.4	32,331	33.1	3.9	6.9	4.4	...	...	62.4
Namibia	2006	238,317	14	5	151,805	63.7	59.3	68.1	1.15	...	...	25.2	...	...	...	...	...	...
	2012	263,104	14	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Niger	2006	1,878,904	13	7	216,961	11.5	14.2	8.9	0.63	21.0	6,335	29.5	0.7	14.2	2.9	24.7	60.5	40.6
	2012	2,440,483	13	7	388,641	15.9	19.1	12.8	0.67	...	22,755	...	0.7	32.7	5.9	...	...	...
Nigeria	2006	18,826,596	12	6	6,436,449	34.2	37.3	30.9	0.83	65.7	...	31.9	...	...	...	...	...	...
	2012	21,844,201	12	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Rwanda	2006	1,268,596	13	6	239,629	18.9	20.3	17.6	0.87	...	41,958	30.7	...	50.4	17.5	...	...	...
	2012	1,679,788	13	6	534,712	31.8	30.8	32.8	1.07	67.0	58,431	22.9	...	32.1	10.9	...	...	...
Sao Tome and Principe	2006	18,990	12	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	2012	19,670	12	5	14,061	71.5	67.0	76.1	1.14	...	461	...	...	23.5	3.3	...	...	...
Senegal	2006	1,839,708	13	7	447,425	24.3	27.6	21.0	0.76	...	...	...	...	...	...	...	...	...
	2012	2,074,073	13	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Seychelles	2006	7,152	12	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	2012	6,917	12	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Sierra Leone	2006	688,504	12	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	2012	792,969	12	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Somalia	2006	1,144,406	12	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	2012	1,425,982	12	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...
South Africa	2006	5,120,502	14	5	4,790,382	93.6	91.3	95.8	1.05	...	246,177	30.2	...	8.8	5.1	...	...	...
	2012	4,753,757	14	5	4,843,800	101.9	100.3	103.5	1.03	...	246,515	...	...	8.9	5.1	...	...	...
South Sudan	2006	0	0	0	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	2012	1,528,021	12	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Sudan	2006	3,643,409	12	5	1,318,122	36.2	37.0	35.4	0.96	...	...	...	...	...	...	...	...	...
	2012	0	12	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Swaziland	2006	152,926	13	5	76,979	50.3	49.7	50.9	1.02	99.3	...	19.3	...	...	...	...	...	...
	2012	149,643	13	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Togo	2006	915,777	12	7	430,064	47.0	60.8	33.2	0.55	...	27,840	38.9	1.1	24.9	6.5	...	...	70.7
	2012	1,011,339	12	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tunisia	2006	1,430,525	12	7	1,247,046	87.2	83.3	91.3	1.10	...	112,869	16.9	10.1	7.9	9.1	...	...	...
	2012	1,221,601	12	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Uganda	2006	4,160,789	13	6	857,776	20.6	22.7	18.5	0.81	...	43,689	18.8	...	21.9	5.1	...	...	...
	2012	5,113,389	13	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...
United Republic of Tanzania	2006	5,273,466	14	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	2012	6,056,111	14	6	2,118,067	35.0	37.3	32.6	0.88	...	233,795	26.4	6.3	58.0	11.0	...	...	...
Zambia	2006	1,297,242	14	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	2012	1,580,052	14	5	1,592,366	100.8	107.5	94.1	0.87	...	848,371	...	55.0	50.2	53.3	...	...	...
Zimbabwe	2006	1,981,636	13	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	2012	1,984,432	13	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...

2 Low income (36 countries): Afghanistan, Bangladesh, Benin, Burkina Faso, Burundi, Cambodia, Central African Republic, Chad, Comoros, Democratic People's Republic of Korea, Democratic Republic of the Congo, Eritrea, Ethiopia, Federal Democratic Republic of Nepal, Gambia, Guinea, Guinea-Bissau, Haiti, Kenya, Kyrgyzstan, Liberia, Madagascar, Malawi, Mali, Mozambique, Myanmar, Niger, Rwanda, Sierra Leone, Somalia, Tajikistan, Togo, Tokelau, Uganda, United Republic of Tanzania and Zimbabwe.