Working Group on Higher Education (WGHE)

TOWARDS AN
AFRICAN HIGHER EDUCATION AND
RESEARCH SPACE (AHERS)

A Summary Report

Goolam Mohamedbhai

January 2013

TABLE OF CONTENTS

ABBREVIATIONS

AAU	Association of African Universities
ACDE	African Council for Distance Education
ACTS	African Credit Accumulation and Transfer System
ACQAF	African Continental Quality Assurance Framework
ADEA	Association for the Development of Education in Africa
AfriQAN	African Quality Assurance Network
AFC	AHERS Follow-Up Committee
AHERS	African Higher Education and Research Space
AQRM	African Quality Rating Mechanism
AU	African Union
AUC	African Union Commission
AUF	Agence Universitaire de la Francophonie (Association of Francophone Universities)
BFUG	Bologna Follow-Up Group
BREDA	Regional Office for Education in Africa (of UNESCO)
CC	Creative Commons
CAMES	Conseil Africain et Malgache pour l'Enseignement Supérieur (African and Malagasy Council for Higher Education)
COMEDAF	Conference of Education Ministers of Africa (of the African Union)
CQF	Continental Qualifications Framework
DRC	Democratic Republic of Congo
EAC	East African Community
ECOWAS	Economic Community of Western African States
ECTS	European Credit Accumulation and Transfer System
EHEA	European Higher Education Area
HEI	Higher Education Institution
ICT	Information and Communication Technologies
IPR	Intellectual Property Rights
IUECA	Inter-University Council for East Africa
KNUST	Kwame Nkrumah University of Science and Technology
LMD	Licence-Master-Doctorat
LMS	Learning Management Systems
NREN	National Research and Education Network
NQF	National Qualifications Framework
ODL	Open and Distance Learning
OER	Open Educational Resources
QA	Quality Assurance
QAAA	Quality Assurance and Accreditation Agency
QF	Qualifications Framework
REC	Regional Economic Community
RQF	Regional Qualifications Framework
SADC	Southern African Development Community
TCCA	Technical Committee on Certification and Accreditation (of SADC)
UNESCO	United Nations Economic, Scientific and Cultural Organisation
WCHE	World Conference on Higher Education
WGDEOL	Working Group on Distance Education and Open Learning (of ADEA)
WGHE	Working Group on Higher Education (of ADEA)

1: INTRODUCTION

1.1 Rationale

It is widely accepted that higher education plays a key role in the economic, scientific, social and human development of any country. The economically strongest nations are those with the best performing higher education sector. Higher education, as producers of knowledge and knowledge workers, has lately assumed an even more important role: that of assisting countries to develop into knowledge economies and to be globally competitive. As a result of globalisation, countries can now recruit highly-skilled and research-strong labour force from any part of the world to support their knowledge drive. Knowledge, and not natural resources, has become the key factor that determines a country's global competitiveness.

> *It is necessary to have a strong continental space of higher education and research through which academic mobility and collaboration among African countries and their higher education systems can happen*

Africa, in particular Sub-Saharan Africa, comprises some of the poorest nations of the world. It desperately needs a strong higher education sector that can assist in its rapid development. It can ill-afford to lose the trained manpower that it produces to other regions and it needs to produce, seek and adapt knowledge to overcome its developmental challenges. At the same time, Africa must be part of the global knowledge economy. The real challenge for Africa is to be able to develop a higher education sector that can assist the continent in reconciling these seemingly contradictory missions – to be locally relevant and globally attractive and competitive. Because of the limited resources available in individual African countries, such objectives can best be achieved through academic mobility and through collaboration and cooperation among the countries and their higher education systems. It is therefore necessary to have a strong continental area or space of higher education and research through which this can happen.

1.2 Challenges and Opportunities

The higher education and research area or space in Africa at present, however, suffers from several challenges. First, it is made up of disparate higher education systems inherited from Africa's colonial past, namely Anglophone, Francophone and Lusophone, with some Arab countries in North Africa having their own specific systems. This handicaps the mobility of staff and students among the countries. The statistics clearly show that academic mobility outwards from the continent by far exceeds that within.

Second, African higher education institutions over several decades have suffered from under-funding, partly as a result of economic and political crises and partly because of implementing the misguided policy that investment in higher education does not yield sufficient economic and social returns when compared to investment in lower levels of education. As a result, in order to meet the pressing demand for higher education, the

6

institutions have had to accommodate enormous increases in student enrolment with hardly any expansion of their infrastructures or proper maintenance of the existing ones. Quality of higher education has inevitably suffered.

Third, research output from universities is extremely poor when compared to other world regions, partly because of lack of resources such as up-to-date journals and good Internet connectivity, but equally because of the absence of research-strong academics. For example, Africa is one of the continents with the lowest number of patents, and since the Nobel prizes in Chemistry, Physics and Medicine/Physiology were instituted in 1901, only four Africans have won them – three South Africans for Medicine (1951, 1979 and 2002) and one Egyptian for Chemistry (1999). Few papers by African researchers are published in internationally acclaimed premier journals. Indeed, acute shortage of high calibre academics is one of the greatest challenges facing African universities.

Fourth, there is insufficient differentiation and articulation within the higher education systems in Africa. Differentiation is the process whereby a range of generically similar but individually different institutions takes shape within the system. A differentiated higher education system offers the flexibility needed to address the changing needs of students and nations, and produces a more diversified workforce in order to respond effectively to Africa's development priorities and challenges. Articulation, on the other hand, facilitates mobility within national and regional higher education systems. It refers to the ease of movement by students, together with their academic accomplishments, among higher education institutions. It also creates opportunities for inter-institutional collaboration through resource-sharing, partnerships and affiliations. In Africa, in order to meet the increasing demand for higher education, the tendency has been to replicate existing universities or upgrade polytechnics and post-secondary colleges to the status of universities, basically creating 'more of the same' institutions. In addition to producing large numbers of graduates who find it difficult to integrate the workforce, this lack of differentiation and articulation in the higher education sector limits lifelong learning opportunities.

These challenges, however, have equally given rise to opportunities. Realising its importance not only to Africa's development, including its ability to improve lower levels of education, but also to global sustainable development, African higher education is now receiving increasing attention both by the continent's socio-economic, political and financial bodies and by international organisations. Almost every Regional Economic Community (REC) in Africa has identified higher education as a major area for reform. Pledges for supporting higher education in Africa have come from almost all the international development/funding agencies, even from newly emerging economies such as Brazil, China and India. The much-needed revitalization of African higher education, particularly in improving its infrastructure and governance, is now well under way. There is greater awareness of the potential for inter-African collaboration for sharing resources, especially for capacity building. The full potential of using Information and Communication Technologies (ICT) is now within Africa's grasp, with rapid development taking place to link higher education institutions within and outside Africa.

All these initiatives will invariably not only limit Africa's brain drain but also attract students and faculty to its higher education sector from other parts of the world. The initiatives should equally encourage the contribution of Africa's Diaspora to the continent's higher education development, either by returning to Africa as is happening in other developing countries, or by assisting from their countries of settlement.

1.3 Background to the Report

In preparation for the 2009 UNESCO World Conference on Higher Education (WCHE), the UNESCO-ADEA Task Force identified several strategic orientations for African higher education and one of these was the creation of an African higher education and research area. Subsequently, the July 2009 Communiqué of the WCHE[1], in its section on Higher Education in Africa, also placed emphasis on the need to develop an African Higher Education and Research Area through institutional, national, regional and continental collaboration.

As a follow-up to the WCHE Communiqué, ADEA's Working Group on Higher Education (WGHE) decided to explore the concept of creating an African Higher Education and Research Area through an analytical study and accordingly convened a small group of representatives of key stakeholders to a brainstorming workshop in Accra, Ghana in December 2010 to reflect on how to proceed with undertaking that study. The meeting was supported by the African Union Commission (AUC) and hosted by the Association of African Universities (AAU). One of the outcomes of that workshop was a Concept Note, available in Arabic, English, French and Portuguese, aimed at diffusing information and creating better understanding about the need to strengthen the African Higher Education and Research Space (AHERS)[2].

Both 'higher education' and 'space' need to be defined at the very outset. In the African context, higher education will be considered as all post-secondary (also referred to as tertiary) education that comprise universities, polytechnics, institutes of technology, technical colleges, professional schools in fields such as law, nursing, accountancy, business, etc., teacher training colleges and community colleges; in other words, all institutions which offer quality post-secondary courses of study leading to a degree, diploma or certificate. The higher education space that Africa should aspire to, therefore, must be all-inclusive: one where institutions with different missions and objectives within the system complement each other and allow for mobility between them.

At the Accra meeting it was agreed to commission several studies, funded by the ADEA-WGHE, in areas of direct relevance to the creation of AHERS. These studies would then be used to create a Summary Report to serve as a basis for stakeholders to take concrete actions. The studies that were commissioned and the final reports received were the following:

> ➢ *"Lifelong Learning Strategies for Strengthening the African Higher Education and Research Space"* by Moses Oketch & Peter Mabande. January 2012.

---

[1] 2009 World Conference on Higher Education: The New Dynamics of Higher Education and Research for Societal Change and Development. UNESCO, Paris, Communiqué, 8 July 2009.
[2] It was at the Accra meeting that the term AHERS was coined.

➢ *"Strengthening and Sustaining the African Higher Education and Research Space through Information and Communications Technologies, Open and Distance Learning, and Open Educational Resources"* by Sarah Hoosen, Neil Butcher, David Hornsby & Catherine Ngugi. May 2012.

➢ *"Role and Contribution of Research and Postgraduate Training to Strengthening and Sustaining AHERS"* by Kevin Urama, Mark Swilling & Ernest Acheampong. May 2012.

➢ *"Study on the Establishment of the African Quality Assurance Framework"* by Peter Okebukola & Juma Shabani. July 2012.

➢ *"Regional and Continental Qualifications Framework and Harmonization of Degree Structures"* by Olusola Oyewole. September 2012.

The following reports, not commissioned for AHERS, were also used in preparing this Summary Report:

➢ *"Differentiation and Articulation in Tertiary Education Systems: a Study on Selected African Countries"* by Njuguna Ng'ethe, George Subotzsky & George Afeti. November 2006. (Commissioned by ADEA-WGHE).

➢ African Union. *"Harmonisation of Higher Education Programmes in Africa: Opportunities and Challenges"*. June 2007. (Presented at COMEDAF III, 6-10 August 2007).

All the above reports are available from ADEA-WGHE.

2: HARMONISATION OF HIGHER EDUCATION

Harmonisation of higher education refers to the coordination of educational programmes with agreements to minimum academic standards and ensuring equivalency and comparability of qualifications between and within countries, thus facilitating the promotion of quality and mobility of both staff and students.

In implementing the African Union (AU) Plan of Action for the Second Decade of Education for Africa (2006-2015), the African Union Commission (AUC) embarked on a process of developing a strategy for harmonisation of higher education in Africa. The rationale for this is based on the belief that such an initiative will help to foster cooperation in information exchange, harmonization of procedures and policies, attainment of comparability among qualifications, and possibly the standardization of curricula, so as to facilitate academic and professional mobility. The broad developmental objective of the strategy is the production of human resources with the competencies required to drive Africa's economic and social development, and the creation of systems that facilitate economic integration, cultural relevance and mobility across various regions of Africa. The major goals of AUC's harmonisation strategy include:

• Revision and ratification of the Arusha Convention (see 3.1 below).

- Creation of a central database of African higher education institutions (HEIs) and programmes.
- Establishment of an African system to measure performance of HEIs.
- Development of a continental framework for qualifications.
- Promotion of mechanisms for Quality Assurance at national levels, operating within agreed minimum standards at regional and continental[3] levels.
- Promotion of open, distance and technology-mediated learning and the use of Open Education Resources.

The creation of AHERS is thus very much in line with the goals of AUC's harmonisation strategy. Some regional communities in Africa, such as the East African Community (EAC), the Economic Community of West African States (ECOWAS) and the Southern African Development Community (SADC), are taking their cues from the AUC's harmonisation strategy and are, for example, promoting recognition of qualifications, comparability of higher education structures and collaboration in quality assurance.

> *The creation of AHERS is very much in line with the goals of AUC's harmonisation strategy.*

3: RECOGNITION OF QUALIFICATIONS

3.1 The Arusha Convention

In 1981, a Regional Convention on the recognition of studies and academic qualifications in higher education in African states was adopted in Arusha, Tanzania (hence the Arusha Convention) as part of UNESCO's efforts towards the promotion of international academic mobility. Over the period 1974-1983 UNESCO had promoted the adoption of similar conventions in other regions of the world, including the Arab states, several of which are part of Africa. The Arusha Convention was also meant to implement the relevant provisions of the then Organisation of African Unity related to regional cooperation and training of human resources. The need to expand higher education for promoting social and economic development in Africa through greater mobility of staff, students and professionals among African countries was thus realised three decades ago.

The Arusha Convention is a legal instrument and those states that are signatories to it commit themselves to abiding by its clauses. The Convention provides guidelines for a state to recognise the academic studies, degrees and professional qualifications of the other signatory states. It also lays down the mechanisms for implementing the Convention at national, sub-regional and regional levels. At national level, each state has to identify or create a National Information Centre responsible for collecting and disseminating information as regards

---

[3] Throughout this report the term 'continental' will be used to refer to the whole of Africa, while 'regional' will refer to a geographical region of Africa.

recognition of qualifications, quality assurance mechanisms and accreditation of institutions and programmes. At regional level, a Convention Committee composed of representatives of all signatory states and operating under the responsibility of the Conference of Ministers of Education of Africa (COMEDAF) is set up to monitor progress and to promote and extend the implementation of the Convention, the secretariat being provided by the UNESCO Regional Office for Education in Africa (BREDA).

Unfortunately, the Arusha Convention has been confronted with both technical and structural challenges. Technically, the commitment to recognise a qualification does not explicitly refer to the quality of that qualification. Also, the decision by an institution to recognise a qualification or part of it is dependent on the rules and regulations of that institution, not the state, especially as programmes and admission requirements and policies vary across institutions and countries. Structurally, few African states have set up a National Information Centre for exchanging information related to recognition of qualifications. The lack of national quality assurance and accreditation mechanisms in many states has also proved to be a handicap. And the regional committee for implementing the Convention could not meet regularly and function effectively because of financial constraints.

This explains why, by 2006, only 20 out of the 53 African states had ratified the Convention, and it is not known how many of those are actually implementing the recognition clauses. In 2007 the Arusha Convention was revised to take into account the major changes that had taken place in higher education over the last three decades. However, the revised Convention has yet to go through the political process of approval by UNESCO and the African Union.

There now needs to be a concerted political approach to first get the Convention approved, then to sensitise African governments to the importance of the Convention for facilitating intra-Africa mobility in order to obtain their signatures, and finally to ensure that the Convention is properly implemented. There is also need to create awareness about the Arusha Convention among all stakeholders, especially higher education institutions, and about the important role it can play in creating AHERS.

It should be mentioned here that almost all the North African Arab states have ratified the UNESCO Convention for recognition of qualifications in Arab states. A few of these states have also ratified the Arusha Convention.

3.2 CAMES

The African and Malagasy Council for Higher Education (CAMES) was set up in 1968 by Heads of state of the Common Organisation for Africa and Madagascar (OCAM) to promote inter-African cooperation in higher education and research among Francophone African countries. Its current membership is made up of 18 Francophone countries in Sub-Saharan Africa[4].

---

[4] See the CAMES website http://www.cames.bf.refer.org/spip.php?article6 Accessed December 2012.

In 1972, nearly a decade before the adoption of the Arusha Convention, the member countries of CAMES signed a convention whereby they agreed to mutually recognise the qualifications awarded by their higher education institutions. Three commissions were set up, one for programmes in arts and humanities, a second one for sciences and medicine and the third one for law, economics and management. The evaluation and recognition of qualifications is carried out every two years. The evaluation uses solely input criteria such as the entry requirements, the curriculum content, the time allocated to the various courses and modules, the qualification of the teaching staff and the nature of qualification awarded. To date CAMES has recognised nearly 500 degrees and certificates.

The regional protocols provide a vehicle through which the implementation of the Arusha Convention can be delegated to the RECs.

The Arusha Convention makes provision for delegating implementation of the Convention to sub-regional bodies. CAMES could therefore be delegated to implement the Arusha Convention on behalf of its members. However, in the spirit of creating AHERS, it is important that CAMES considers recognition of qualifications not just of its member states but of institutions in the whole of Africa. With the implementation of the Licence-Master-Doctorat (LMD) reform in Francophone countries, it should be possible for CAMES to undertake this task.

3.3 Recognition of Qualifications at Regional Levels

Several of the Regional Economic Communities (RECs)[5] have established protocols for recognition of qualifications within their respective regions. For example, in 2009, the five member states of the East African Community (EAC) (Burundi, Kenya, Rwanda, Tanzania and Uganda) agreed on a protocol for establishing a Common Market to facilitate, *inter alia*, the free movement of goods, persons, labour and services[6]. Under Article 11(a) of the protocol, the states undertake to mutually recognise the academic and professional qualifications, licenses, certifications, etc. granted by the other states. The protocol is being implemented progressively and Article 11(a) has not yet been put into practice.

The Economic Community of West African States (ECOWAS) is made up of 15 countries: Benin, Burkina Faso, Cape Verde, Ivory Coast, Gambia, Ghana, Guinea, Guinea Bissau, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone, and Togo. In 2003, ECOWAS adopted a convention on the recognition and equivalence of qualifications. This convention basically states that if a certificate is recognized (accredited) in the home country, it will also be recognized within the other member countries.

---

[5] These include the following: Arab Maghreb Union (UMA); East African Community (EAC); Economic Community of Central African States (ECCAS); Economic Community of West African States (ECOWAS); and Southern Africa Development Community (SADC).
[6] See http://www.eac.int/commonmarket/documentation/cat_view/24-documents-a-downloads/30-common-market-protocol-a-annexes.html Accessed December 2012.

In Southern Africa, the Southern African Development Community (SADC), which covers 15 countries, namely Angola, Botswana, Democratic Republic of Congo (DRC), Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, South Africa, Seychelles, Swaziland, Tanzania, Zambia, and Zimbabwe, developed a protocol on education and training in 1997. In relation specifically to postgraduate studies, the protocol mentions that an undergraduate qualification obtained in any university in the region, if acceptable to the receiving institution, should suffice as entry requirement into a postgraduate programme of a university in the region.

These regional protocols may not all be fully operational but they do provide a vehicle through which the implementation of the Arusha Convention can be delegated to the RECs and also serve as springboards for strengthening the AHERS.

3.4 Tuning Africa

'Tuning Africa' is a project that is linked to the recognition of qualifications at national, regional and continental levels[7]. It has been initiated as part of the cooperation in higher education between the African Union and European Union and is in line with the AUC's harmonisation strategy. It uses an internationally established methodology to enhance degree comparability.

Tuning is a collaborative, consultative process involving academics at subject levels, employers and other stakeholders with the ultimate purpose of enriching the curriculum so that students will have enhanced competences to meet the emerging challenges and potentials. It promotes the development of learning outcomes for the various degree programmes while emphasising the development of generic and subject level competences. Tuning projects in higher education have been successfully completed in over sixty countries around the world.

Following a feasibility study in 2011 into its relevance for higher education in Africa, Tuning was launched in 5 subject areas, open to all degree-awarding HEIs, each led by a region as follows: Medicine - North Africa; Teacher Education – Southern Africa; Agriculture – West Africa; Mechanical Engineering – Central Africa; and Civil Engineering – East Africa. The initial project is expected to run over 18 months.

4: TOWARDS A CONTINENTAL QUALIFICATIONS FRAMEWORK

4.1 Qualifications Frameworks

Qualifications Frameworks (QFs) facilitate recognition of degrees, certificates and diplomas and are therefore important instruments in achieving comparability and transparency

---

[7] See www.tuningafrica.org Accessed January 2013.

within a higher education area. They also facilitate the mobility of learners within, as well as between, higher education systems.

QFs are complex and not always easy to understand. A QF refers to the qualifications system operating in a country, region or continent and it encompasses what a learner knows, understands and is able to apply on the basis of a given qualification. A well-articulated QF will show the expected learning outcomes for a given qualification and how the various qualifications in the education or higher education system interact. It therefore makes it easy to know how learners can move between qualifications, within the same country and across countries. QFs are not intended to create uniformity in higher education institutions; rather, they make it possible to understand the similarities and diversities among higher education programmes. In many African countries, however, a QF may be restricted to the title and contents of the qualification obtained without specifying the exact learning outcomes that lead to them.

In relation to higher education, the qualifications refer to degrees, diploma or other certificates issued by a university or polytechnic or other tertiary education institution attesting that some defined learning outcomes have been achieved, normally following the successful completion of a recognised higher education programme of study.

QFs can exist at three different levels, namely National, Regional and Continental. A National QF (NQF) usually encompasses all the education qualifications in the national educational system. A Regional or Continental QF, on the other hand, usually refers to mainly higher education as well as technical and vocational qualifications in the region or continent, respectively. It describes the various education systems that exist within the geographical area and shows how these relate to each other.

It follows that NQFs are a prerequisite for a Regional QF (RQF), and ultimately a Continental QF (CQF). As of today, the lack of NQFs and RQFs in different parts of Africa has hampered the development of a CQF. The strategy for developing a CQF, therefore, should be to encourage and facilitate the setting up of NQFs and RQFs.

4.2 Southern Africa

Latest figures[8] show there are 109 public universities in the SADC region, 10 in Lusophone countries, 42 in Francophone countries and 57 in Anglophone countries. With the exception of South Africa and DRC, most countries have only a few public universities but a large number of private HEIs. Only three countries (Mauritius, Namibia and South Africa) have fully developed their NQF and the others are at different stages of its development.

In September 2011 the SADC Ministers responsible for education and training approved the establishment of a SADC RQF which is expected to contribute towards the development of a CQF[9]. The RQF will include a SADC Qualifications Portal which will incorporate full and

---

[8] SARUA, 2012. *A Profile of Higher Education in Southern Africa, Vol. 1.*
[9] South African Qualifications Authority (SAQA). *SADC Qualifications Framework Becomes a Reality.* http://www.saqa.org.za/show.asp?id=2693 Accessed January 2013.

part-time qualifications that are formally recognised in SADC member states. The SADC RQF will be a ten-level QF and it will have broad level descriptors defined to facilitate easy referencing. The level descriptors have been agreed upon and these will be further developed. Elements of quality assurance will also be included in the RQF to ensure confidence and credibility.

The implementation of the SADC RQF will be overseen by the Technical Committee on Certification and Accreditation (TCCA) of the 1997 SADC Protocol on Education and Training.

4.3 West Africa

In West Africa there are about 775 HEIs in the 15 member states of ECOWAS. The educational programmes and curriculum vary depending on the respective country's colonial past. In Anglophone countries secondary schooling lasts 6 years, while it is 7 years in Francophone and only 5 years in the Lusophone ones. The post-secondary structure also varies, the titles, certificates and degrees being different from one country to another. In Anglophone countries a Bachelor's Degree is awarded after 4 consecutive years, while in Francophone countries a License is awarded after three years, punctuated by intermediate Diplomas of general study at the end of the 1st and 2nd year.

Due to the continuing links between the African and European countries, current developments such as the Bologna Process have found their way into West Africa. In Francophone countries, the LMD system (Licence-Master-Doctorat) is being actively promoted by CAMES. Following the British system, the Anglophone countries already had a Bachelor-Master-Doctorate model. Regarding the Lusophone countries, in Cape Verde degrees are being revised in the framework of Bologna Process, which is facilitated through the Association of Portuguese Speaking Universities.

A Committee set up by ECOWAS on the harmonization of degrees and diplomas in ECOWAS states has recommended that the Bachelor's, Master's and Doctorate degrees of the HEIs in the Community should be standardized in terms of their entry requirements, credit load, graduation requirements and grading system. Very little information is available on the development of NQFs in the West African countries.

4.4 East Africa

According to the African Union, the Eastern Africa region comprises 13 member states: Comoros, Djibouti, Eritrea, Ethiopia, Kenya, Madagascar, Mauritius, Rwanda, Seychelles, Somalia, Sudan, Tanzania, and Uganda, although some of these also belong to the SADC region. On the other hand, the effective and functional REC is the East African Community (EAC), which comprises only 5 countries: Kenya, Tanzania, Uganda, Rwanda and Burundi. The first 3 countries operate an Anglophone system of education whereas the Francophone system is operational in Rwanda and Burundi, although the former is currently changing to the Anglophone system.

The Inter-University Council of East Africa (IUCEA) is the regional inter-governmental organization within the EAC which plays an active role in higher education. The mission of the IUCEA is to encourage and develop mutual collaboration among public and private universities in East Africa and between them, the governments and other organizations, regionally and internationally. One of the strategic interventions identified by the IUCEA is the establishment of an East African QF to facilitate harmonisation of education and training systems. It has yet to develop a RQF.

Of the five countries of the EAC, Rwanda has developed a Qualifications Framework specifically for HEIs[10]. It uses a Credit Accumulation and Modular Scheme which assigns credits to the different level in higher education. It has also recently drafted a Technical and Vocational Education and Training (TVET) QF. Kenya is in the process of developing its NQF and a Bill to that effect was drafted in 2012 for enactment by Parliament. No information is available on the development of NQFs in the other EAC countries.

4.5 North Africa

The eight countries of the North Africa region are Algeria, Egypt, Libya, Mauritania, Morocco, Sudan, Tunisia, and the Western Sahara. Due to their close proximity to Europe and especially the Mediterranean and other Arab countries, the universities in North Africa have been largely influenced by developments in these regions.

All the countries share a common language – Arabic - and are members of the League of Arab States, which extends far beyond North Africa. Most of the universities are members of the Association of Arab Universities which has members in Arab countries other than in North Africa.

Four of the countries – Algeria, Mauritania, Morocco and Tunisia – are Francophone and share a common background in their higher education system. Through their membership of the Association of Francophone Universities (AUF), they are linked to other Francophone universities world-wide and are implementing the three cycle LMD structure of the Bologna Process.

Egypt, Libya, Mauritania, Morocco, Tunisia and Western Sahara are members of the 'Community of Sahel-Sahara States' (CEN-SAD), which is recognized by the AU as a REC. One of the goals of CEN-SAD is "the harmonization of educational, pedagogical and cultural systems of the various cycles of education".

The three countries in North Africa which are actively developing a NQF are Egypt, Morocco and Tunisia. The NQFs are at different stages of development and may not be fully implemented yet. No information is available on the development of NQFs in the other countries. The Arab Network for Quality Assurance in Higher Education (ANQAHE) is trying to develop a generic Arab QF for the Arab countries.

---

[10] See
http://www.hec.gov.rw/IMG/pdf/Rwanda_National_Qualifications_Framework_for_Higher_Education_Institutions.pdf Accessed January 2013.

4.6 Central Africa

The Central Africa region comprises nine countries, namely Burundi, Cameroon, Central African Republic, Chad, Congo, Democratic Republic of Congo, Equatorial Guinea, Gabon and Sao Tome & Principe. They form part of the Economic Community of Central African States (ECCAS), a REC recognised by the AU. The majority of the countries have a Francophone educational system. Almost all of the countries are at various stages of transition to the LMD system of the Bologna Process. Hardly any information is available on the development of NQFs in these countries.

4.7 The Way Forward

A Continental Qualifications Framework is vital for creating AHERS and requires that NQFs and RQFs be coherently structured into a single common framework. Achieving compatibility and comparability among the higher education qualifications of different African countries, therefore, necessitates agreeing on a general approach which should include describing learning outcomes, specifying level indicators, and having a common understanding on terms such as credits and credit transfer, learning outcomes, competences and skills, etc.

> *At national level, it is important that the NQF be developed by the competent public authorities with the participation of a broad range of stakeholders.*

At national level, it is important that the NQF be developed by the competent public authorities with the participation of a broad range of stakeholders – including higher education institutions, students, staff and employers. Once it has been developed, it should be tested and then self certified.

It is envisaged that the same process as for the NQFs will be followed for developing RQFs but the initiation of the process in these cases will come from the respective REC. The development of a CQF should be led by a continental body with an overall commitment to higher education. In both cases consultations with a wide range of stakeholders will be necessary.

It is expected that all the operational and acceptable qualifications in the regions and the continent will be catalogued and their equivalencies established based on their contents. It is desirable that there be continental agreement on a single qualifications framework, similar to the LMD adopted in Europe. Similarly, there is need for developing an African Credit Accumulation and Transfer System (ACTS), again similar to the one developed in Europe (see section 11.3).

5: DEVELOPMENT OF AN AFRICA CONTINENTAL QUALITY ASSURANCE FRAMEWORK

5.1 Background

Quality Assurance (QA) of HEIs in Africa will play a key role in the establishment of AHERS. To confront the quality challenge, stakeholders have been urging for strengthening national and regional quality assurance efforts, with harmonisation of minimum standards across the continent as a key component. The undergirding assumption is that if minimum standards across countries are varied, equivalence of degrees falters and the matter of credit transfer, mutual recognition of degrees and staff and student mobility will have a weak basis. This is what has led to the proposal, which in fact dates back to the 1990s, for the establishment of an Africa Continental Quality Assurance Framework (ACQAF)[11], a continental mechanism of cooperation among QA agencies in Africa to harmonise minimum standards for delivering quality higher education.

The study that was undertaken in connection with the setting up of ACQAF used a three-prong approach: a comprehensive literature search of relevant background information; administration to stakeholders of a 12-item questionnaire online and offline (which resulted in 138 responses) seeking views of the respondents on status of and challenges to QA in Africa and the prospects for an ACQAF; and face-to-face interviews.

5.2 Quality Assurance Agencies in Africa

The study showed that 21 African countries have legally-established agencies (typically named as "Agency", "Authority", "Board" or "Council") to quality assure their higher education systems. The countries are Botswana, Burundi, Cameroun, Egypt, Ethiopia, Ghana, Kenya, Lesotho, Liberia, Mauritius, Mozambique, Namibia, Nigeria, Rwanda, Senegal, South Africa, Sudan, Tanzania, Tunisia, Uganda and Zimbabwe. Over half of the 34 other countries are far advanced in the process of establishing such agencies.

There are two major QA agencies which operate regionally. These are the African and Malagasy Council for Higher Education (CAMES), formally constituted in 1972 and serving 19 Francophone countries; and the Inter University Council for East Africa (IUCEA) established in 2009 and which serves Kenya, Tanzania, Uganda, Rwanda and Burundi. There is no continental QA agency. However, a continental network known as the African Quality Assurance Network (AfriQAN) was launched in 2007 and formally constituted in 2009 to provide assistance to institutions concerned with QA in higher education in Africa [12]. The AAU played a catalytic role in reviving AfriQAN in 2009 and it temporarily hosts its secretariat in Accra, Ghana.

5.3 Challenges in Establishing National QA Agencies

The respondents to the questionnaire identified the following major challenges in establishing national QA agencies: resource constraints, both financial and human; difficulty with the ministry responsible for higher education to cede its QA functions to a stand-alone agency; unduly long process of legislation; and too few institutions to quality assure. Where the handicap of funding is a challenge, 73% of stakeholders surveyed

---

[11] The commissioned report refers to an Africa Regional QA Framework (ARQAF) but to be consistent with the terminology used in this report, the word 'Regional' has been replaced by 'Continental'.
[12] See http://afriqan.aau.org/ Accessed January 2013.

suggested that a special fund be set up by the African Union or any of the regional economic communities to support the establishment of new agencies. Other suggestions include the exploration of partnerships and cooperation in pooling resources to establish a cross-national QA agency. Neighbouring countries with similar policy thrusts for their systems could set up a joint QA agency and share the funding burden.

71.3% of the respondents surveyed proposed the development of a guide that would outline the process and identify the resources needed for setting up and running an effective national QA agency as an important first step in familiarising countries that are yet to establish their national QA agency. Mentoring was expressed as another pathway to spawn the development of new national QA agencies where these do not already exist. Well-established QA agencies should provide take-off and sustenance mentoring service for neighbouring countries which desire to set up or run a fledgling QA agency. Nigeria or Ghana, for instance, could mentor the newly-established QA agencies in Liberia and Sierra Leone and offer technical assistance for the setting up of the QA agency in The Gambia. The Council for Higher Education of South Africa can guide the up-and-coming QA process in Lesotho. Other strategies for overcoming the challenges offered by the sample surveyed include development of a model legislation for a national QA agency that can be adapted or adopted by new entrants to the field; and exchange of personnel among QA agencies to address the challenge of capacity deficit.

5.4 Prospects for ACQAF

Participants surveyed in the study suggested several key elements that should characterise the ACQAF. These are: (a) identification and description of quality indicators; (b) setting up of and publication of minimum standards and benchmarks; (c) self and external assessment of compliance with the minimum standards; (d) sharing of best practices - institutional, national and regional; (e) establishment of a virtual community to stimulate active conversation on the process of implementation of the ACQAF; (f) institutional and human capacity-building; (g) monitoring and evaluation mechanism for the ACQAF; (h) establishment of an Educational Management Information System (EMIS) for ACQAF; and (i) development of a guide for using ACQAF.

The following five models were proposed in the questionnaire for setting up the proposed ACQAF. In Options 1 to 4, a set of prescriptive guidelines are to be compiled in the form of a Convention and these are made available on the website of ACQAF and those of AU, ADEA, AAU, regional university associations, UNESCO and key higher education partners. The responses received are indicated against each Option.

Option 1: *Flexible, Non-binding*. The Framework has no definite structure. Favoured by 29% of participants, mainly from Southern Africa.
Option 2: *Flexible, Non-binding with Slim Secretariat*. The Framework has a small secretariat under a coordinator with one or two support staff. Favoured by 39% of participants, mainly from North Africa.

Option 3: Flexible, Non-binding with Medium-sized Secretariat. The Framework is coordinated by a medium-sized secretariat with at least three Directorates. Favoured by 24% of participants, mainly from East and Central Africa.

Option 4: Flexible, Non-binding with Medium-sized Secretariat and 4 Regional Field Offices. The Framework is coordinated by a medium-sized secretariat (preferably located at the AUC) with at least three Directorates. There are four regional field offices located within existing regional or national QA agencies e.g. CAMES for Francophone West and Central Africa; NUC of Nigeria for Anglophone West Africa; IUCEA for East Africa; and CHE of South Africa for Southern Africa. Favoured by 32% of participants, mainly from East and West Africa.

Option 5: Flexible and Binding. The Framework is modelled after CAMES. Favoured by participants from CAMES member states.

> *Strengthening and expanding the coverage of a consortium comprising CAMES, IUCEA and AfriQAN could serve as ACQAF.*

There does not appear to be a clear-cut preference for any of the options. However, the stakeholders surveyed expressed optimism that ACQAF will work and can be established using one of the first four options. The authors of the study added yet another option (which was not included in the questionnaire), that of strengthening and expanding the coverage of a consortium comprising CAMES, IUCEA and AfriQAN to serve as ACQAF.

The choice of the option for ACQAF would have to be made at the continental political level, by the AU and ADEA in consultation with other continental stakeholders such as AAU and AfriQAN. It should, however, be stressed that ACQAF is a major prop in the establishment of AHERS.

5.5 African Quality Rating Mechanism

The African Quality Rating Mechanism (AQRM) was developed by the African Union Commission (AUC) as a means to improve the quality of higher education institutions in Africa so as to make them more globally competitive and locally relevant. It forms part of AUC's strategy to harmonise and revitalise African higher education and was adopted by the Conference of Ministers of Education in Africa in 2007. It has also been presented as an alternative to the existing global ranking systems that do not take into consideration African specificities.

A 37-page questionnaire was developed by the AUC as an instrument for implementing the AQRM. The first part of the questionnaire sought detailed institutional data and the second part required an institution to undertake self-rating of a wide range of qualitative criteria grouped under 11 clusters of standards. A pilot run of AQRM was implemented in 2010. There were 32 respondents from 11 countries, covering a wide range of institutions. The AUC proposes to extend the pilot phase with another launch of the questionnaire, after revising it in the light of the pilot run.

The AQRM is expected to be a derivative of the ACQAF. The indicators in the rating mechanism could form the core of the benchmarks and standards of ACQAF.

6: HARNESSING THE POTENTIAL OF INFORMATION AND COMMUNICATION TECHNOLOGIES

6.1 ICT and Higher Education

The role of Information and Communication Technologies (ICT) in the creation and sustenance of AHERS cannot be minimised. ICT is regarded as an engine for growth and a tool for empowerment, with profound implications for education and socio-economic development. Indeed, it is valuable as a means to achieve genuine knowledge societies. The past 15 years has seen rapid development of ICT-related activity in the higher education sector, as HEIs and national systems deal with the challenge of how best to deploy the potential of ICT to the benefit of students, academics, and countries. Access to ICT across the continent is improving and the costs associated with access to ICT are reducing as telecommunication markets are liberalising and the costs of devices are declining. This has important ramifications for expanding ICT into African HEIs.

Many African countries have recognised the importance of ICT in promoting national social and economic change and the important role of HEIs in driving this change. They have accordingly focused attention on developing national ICT policies and National Information and Infrastructure Plans to support their socio-economic development efforts and ICT in education policies. There have also been several regional and continental initiatives in advancing ICT in higher education. These include assistance to African HEIs for developing strategic plans for use and integration of ICT, and the development of National Research and Education Networks (NRENs) with a view to improving connectivity among the HEIs.

At institutional level, ICT is being increasingly used in research, teaching and learning, and administration. Academic staff can have access to research journals as well as theses and dissertations or even teaching and learning materials. In relation to teaching and learning, ICT is used to support e-learning and mobile learning (m-learning), teaching, and assessment activities, in most cases to tackle teaching and learning challenges faced in large traditional teacher-led classes, multilingualism, development of literacy, and bridging the chasm between theory and practice.

Several African universities are using Learning Management Systems (LMS), which are regarded as integral to the development and facilitation of online, blended and web facilitated learning. There appears to be a growing move by universities to use open source LMS such as Moodle and Sakai. However, the use of LMSs still remains a challenge in Africa, with studies suggesting the need to promote the advantages of using an online LMS in higher education and build up the necessary skills base to make this a tenable and useful shift.

Furthermore, the use of technology in higher education has enabled transcendence of geographical boundaries, and facilitated collaboration between and among students and staff

from different universities in different countries. Collaboration between colleagues who have never met each other physically is also possible with technological tools like instant messaging, Voice-over Internet Protocol (VoIP) applications like Skype, and social interaction tools like Facebook, which can help to nurture communities of practice.

Many African universities are turning to ICT to support their human resource, finance, and student administration systems. In particular, such databases as Oracle and PeopleSoft offer HEIs a virtual platform to organize registrations systems, payroll, and to manage staff policies such as requests for leave. In addition, the use of Short-Message-Service (SMS) in administration can be valuable because it has the potential to free academics to focus on their core business.

6.2 Challenges

Despite numerous improvements and successes in recent years, there are nevertheless several challenges facing the wide use of ICT in higher education in Africa. The lack of comprehensive national policies covering the integration of ICT in education remains a major barrier in many African countries, which are at different stages in considering policies to harness ICT in support of education and development. In some instances, ICT and development policies may not be complemented by other relevant supportive policies, for example a telecommunications policy and budgetary allocations. Some may have national policies, but which do not make specific reference to ICT and education, and where reference is made, the policies may not always be accompanied by a detailed implementation plan or commitment from government for their implementation.

A major challenge facing use of ICT in higher education is that of limited infrastructure, in particular limited access to power and the lack of affordable and reliable Internet access. In most African countries, Internet access is limited and slow. Where broadband is available, it is typically very expensive - far beyond the financial means of the majority of Africans and institutions.

Equipping universities and keeping them up to date with ICT equipment is very expensive due to hardware and software purchases, as well as the recurrent costs associated with maintenance. Rapid advances in technology have continued to add potential to the use of ICT as an integral part of teaching and learning. However, changes and innovations in technology tend to be much faster than changes in the education system, and this is an area of concern, as reform may be dependent on technologies that are no longer available or supported.

Furthermore, there has been a common tendency to use technology experts to lead and implement ICT in education projects, with a resultant focus on engineering or software skills. People who are trained in and understand education play a secondary and often peripheral role. Technology-led initiatives may appear successful at the technical level, but generally do not achieve the expected outcomes and impact, and are consequently not sustainable.

Many African countries, and universities in particular, face a shortage of ICT professionals and lack of educators with ICT skills. The integration of ICT in learning requires retraining

and creates new time demands on academics. The absence of incentive schemes, especially in environments where salaries and benefits are low, is both a challenge and a major risk to success. Another challenge is the high turnover of skilled technical personnel, as institutions are unable to pay salaries that are competitive with the private sector.

Lack of financing and prioritization of ICT investments is a serious barrier to effective ICT use. Little is known about the true costs of ICT in education, and, given budgetary and resource constraints, widespread investment in ICT in education may not be possible in many African countries. Cost of ICT tools can also be prohibitive. Purchasing site licences and support services can result in significant upfront costs. Fortunately, there are several open source options available for most software applications, which can, under certain circumstances, be cheaper to maintain and tend to be well supported by their respective online communities.

ICT tends to accentuate social, cultural, and economic disparities. For instance, ICT projects tend to give preference to students in urban areas where existing infrastructure is the best. Whilst there is a real risk that ICT can further marginalize groups already excluded from educational practices and innovations, ICT also holds a promise and opportunity for facilitating greater inclusion of such groups such as special needs students, students in remote areas, students from historically marginalized linguistic, cultural or ethnic groups, and low income communities into existing educational practices. With supportive policies and careful planning and monitoring, ICT can offer the potential of facilitating greater inclusion of such groups.

6.3 Areas for Action

A number of key areas of action at national, regional and continental levels are necessary to enable ICT to play an effective and enhancing role in the creation of AHERS.

At national level, ensuring that every higher education institution is connected requires a sustained political drive to provide connectivity throughout the education system to facilitate deeper and wider access to the Internet. This may require changes in the telecommunications regulatory environment aimed at driving down the price of connectivity. This should form part of the vision of national education systems. Policy interventions will also be required to ensure that under-serviced areas receive infrastructure investment and remote education institutions also get connected to a telecommunications networks. The promotion of NRENs is one possible solution to this issue, but this often requires regional entities to negotiate access with larger networks in Europe and elsewhere. Taking a continental approach and developing a continental strategy for improving bandwidth and Internet access speed could provide a more harmonized approach and a strong bargaining position that could yield reduced costs and complexity for all HEIs on the continent.

Due recognition should be given to the role of RECs and regional higher education associations, many of which have already embarked on the process of harmonization of higher education and promoting collaboration. Such bodies may consider developing regional

ICT strategies that create an explicit link with higher education. They could also help in the creation of regional platforms for sharing information on ICT policies and exchanging experiences. They could equally focus on strategies to determine how limited resources may best be pooled to provide access to hardware, to affordable/reliable high speed Internet connections and to technical and training support.

At institutional level, there should be adequate funding and business planning for sustainable investments in ICT infrastructure in terms of acquisition, maintenance, and regular replacement of obsolete equipment. ICT should not be considered as 'add-on' but rather be integrated into university structures and university funding models to ensure its sustainability.

> *There is a need to build capacity in African leaders and administrators to ensure that leveraging ICT for a knowledge society is both a top-down and bottom-up process.*

There is a need to build capacity in African leaders and administrators to ensure that leveraging ICT for a knowledge society is both a top-down and bottom-up process. Relevant ongoing professional development activities should be made available to all educators to enable them to acquire the skills and competencies necessary to use ICT to perform their jobs effectively and productively. This requires that educators be provided the necessary resources, tools, and information for teaching to create effective learning opportunities for students. Incentives should be provided to encourage the use of ICT by relevant personnel.

7: ESCALATING THE USE OF OPEN & DISTANCE LEARNING AND OPEN EDUCATIONAL RESOURCES

7.1 Open & Distance Learning (ODL) and Higher Education

A major impact of ICT on higher education has been in widening the use of Open & Distance Learning (ODL). ODL is increasingly being seen as a strategy to tackle the challenges of access, quality, and equity in higher education in Africa. The increasing awareness and appreciation of the potential of ODL has seen calls for African countries to prioritize and support ODL, to introduce quality assurance mechanisms for ODL and to foster regional collaboration in its implementation. Many African countries and organizations have made efforts to harness the potential of ODL, as reflected by the number of initiatives across the continent. Examples of these include the African Council for Distance Education (ACDE)[13], a continental educational organization with a vision of becoming a major player in promotion and advocacy for ODL in Africa. ADEA recently transformed its Working Group on Distance Education and Open Learning (WGDEOL) into an ICT Task Force to help ministries of education, training institutions, and NGOs in Africa improve access to, quality of, and equity in education, and, in particular, to strengthen the capacity of the education

---

[13] See http://www.acde-africa.org/ Accessed January 2013

system. There are also various regional organisations dedicated to ODL, such as the SADC Centre for Distance Education. These organisations play a critical role in supporting the development and growth of high quality ODL practices in African higher education.

In Africa, ODL at the higher education level is offered by two main types of institutions: single mode dedicated ODL institutions, and dual mode universities (offering both face-to-face teaching and ODL programmes). There are several higher education institutions that are dedicated ODL universities and colleges, such as the Lesotho College of Education, University of South Africa, Open University of Tanzania, National Open University of Nigeria and Open University of Sudan. Several African countries are now planning to set up their own open university.

Several face-to-face universities in the region offer at least one ODL programme, which has resulted in an increase in higher education study places. For example, distance education students now represent at least 30% of those enrolled at Makerere University in Uganda. Many of the ODL programmes focus on the professions of teaching and nursing, but there is also growth of programmes in areas such as business studies and specialist professions. There is also a growing trend towards international cooperation in ODL in many countries. For example, the University of Mauritius offers a police studies programme in partnership with the University of Portsmouth in the United Kingdom. And the Commonwealth of Learning has worked with eight countries of the SADC to develop training materials that will allow teachers to enhance their professional skills through ODL. A more recent trend has been for face-to-face HEIs to deliver some of their traditional programmes in mixed-mode – partly face-to-face and partly through the use of ODL, including the use of audio or video conferencing and via Internet. With improved technology there is a growing trend for ODL programmes to incorporate contact and interaction between students and educators. As such, the dividing line between face-to-face education and ODL is becoming increasingly blurred.

7.2 Challenges in Implementing ODL

Since ODL depends to a large extent on the use of ICT, the challenges faced in the use of ICT in Africa have a direct influence on the implementation of ODL: limited and costly access to broadband, poor connectivity, lack of hardware, software and skills; lack of government funding; no national ICT and ODL policy; poor, non-existent or outdated infrastructure; poor teaching and learning practices; and inadequate and inappropriate courseware. In addition, ODL programmes face negative public perception and are often regarded as inferior relative to face-to-face ones, even though the institutions and programmes are accredited by national regulatory agencies. Such misunderstandings can be attributed to, among other reasons, a lack of adequate research on ODL needed to support informed decisions and policy choices. These negative perceptions have meant that many African educational policymakers and planners are sceptical about its legitimacy and quality, and therefore afford ODL initiatives limited funding and political support.

Funding the expansion of ODL programmes is still inadequate in much of Africa. In many countries, the shortage of resources is aggravated by poor inter-university cooperation. In

addition, many governments are keen on the provision of ODL being funded by students through fees. Furthermore, ODL provision often tends to be generally skewed towards the arts-based or business-related programmes, which may not be the priority of governments, and this results in funding in favour of face-to-face institutions.

In Africa and globally, many ODL programmes are offered by private and cross-border higher education providers, which are often profit-motivated and pay little attention to quality. Many African countries have no national QA agencies, and even where these exist, they are unlikely to have developed any QA frameworks or guidelines for ODL. There is little documented evidence of systems or processes being put in place for ensuring quality in the design of ODL curricula. This is what has led to the launch recently of an ODL Quality Assurance and Accreditation Agency (QAAA) by the ACDE[14]. While the Agency is very recently established, it has the potential to make a significant contribution to quality improvement in ODL on the continent.

Several African countries lack policies needed to guide the development and implementation of ODL programmes at national and institutional levels. Some of them have policies and strategies that recognize the importance of ODL, although their coordination and implementation vary from country to country. At the regional level, and some national levels, distance education practices remain uncoordinated because concrete steps have yet to be taken towards the development of regional policies on ODL. Consequently, despite some notable exceptions, this has meant that many institutions and individuals work on their curriculum design processes largely in isolation.

In many countries, there is a dire shortage of qualified staff required for guiding and influencing the development of ODL policies and for planning, developing, managing, and evaluating ODL programmes. Institutions often struggle to recruit skilled and experienced ODL specialists, which compounds the risk of ODL materials and processes being subjected to a traditional contact-based QA process.

In a bid to broaden access to higher education, many ODL institutions in Africa have established regional learning centres in geographically dispersed areas and offer e-learning programmes through such centres. However, this model of provision and expansion has tended to locate such regional learning centres mainly in urban centres, where the majority of residents are already relatively advantaged.

Thus, while ICT has created a revolution in ODL, offering new and more flexible learning opportunities, there continues to be significant challenges, especially regarding the quality of education and limited resources. And although many countries have policies and strategies for implementing ODL, it has yet to realize its full potential.

7.3 Open Educational Resources (OER) and Higher Education

---

[14] See http://www.nou.edu.ng/noun/acde-qaaa/about.html Accessed in January 2013.

The wide use of ODL has led to the emergence of Open Educational Resources (OER), which are resources that are freely available for use by educators and learners, without an accompanying need to pay royalties or licence fees.

Adopting OER in an African context can have positive impacts on the teaching and learning environment as it requires institutions to invest in programmes, course and materials development, and thereby assist in achieving quality. The challenges of growing access, combined with the ongoing rollout of ICT infrastructure in educational institutions, indicate that it is becoming increasingly important for HEIs to support the development and improvement of curricula, programme and course design, planning of contact sessions with students, development of quality teaching and learning materials, and design of effective assessment, while managing the cost of these through increased use of resource-based learning. OER can help to achieve these objectives.

OER approaches can also assist in alleviating funding constraints by integrating OER practices with any content/material development process. Sourcing existing OER as part of the process of investing in high quality learning resources that meet curriculum needs can save costs. The short-term costs of adapting OER may be high, but where institutions cannot invest heavily in content development, they can still get access to high quality materials by using what is available through open access.

The three powerful concepts behind the use of OER are: it helps to reduce the cost of accessing educational materials; it allows for the adaptation of the materials, thus enabling the learners to be active participants in the educational processes; and, through the process of developing and adapting the materials, it leads to capacity building of the educators. However, developing the content of the materials is only one aspect of education; their effective use requires good educators to facilitate the process. Thus, OER provides an opportunity to engage higher education academics in structured processes that build capacity to design and deliver high quality higher education programmes without increasing cost.

Educational resources that are shared, reviewed, and developed within a community of practice are likely to be of a higher quality than those developed solely by individuals working in isolation. Furthermore, development of these materials for re-use is likely to enhance their quality, as well as develop the capacity of those who engage in the process. Also, because OER can be adapted to suit local situations, they have a major advantage over imported textbooks that do not consider local context in their presentation of information.

There are various licensing frameworks for use of OER, some of which simply allow copying while others make provision for users to adapt the resources that they use. The most commonly used licenses are the Creative Commons (CC) licences, which give creators the ability to dictate how others may exercise their (creators) copyright rights. CC also permit creators to have a 'no rights reserved' alternative to copyright.

Perhaps one of the most promising developments related to OER is the growth of open access research journals. This allows African academics to access articles at no cost. It also enables them to disseminate their research quickly, with world-wide coverage. This is important in

view of the fact that African research output is among the lowest compared to other parts of the world.

There are several OER initiatives in Africa. Examples of these include the Teacher Education in Sub-Saharan Africa (TESSA)[15] initiative which is a research and development initiative which aims to create OER and course design guidance for teachers and teacher educators working in Sub-Saharan African countries. The South African Institute for Distance Education (SAIDE) established the OER Africa[16] initiative, which focuses on supporting and developing OER in a number of thematic areas, including Agriculture, Health and Teacher Education, in higher education institutions across Africa. Other institutional OER initiatives are the African Virtual University's ICT-integrated Teacher Education Programme for Maths and Sciences, University of Malawi's project at its Bunda College of Agriculture to develop a textbook on Communication Skills, and the production and use of OER at the College of Health Sciences of the Kwame Nkrumah University of Science and Technology (KNUST), Ghana.

The presence of OER policies at HEIs can accelerate the adoption and creation of OER and assist in ensuring their sustainability. Despite the growth of OER at institutions worldwide, this has not necessarily yet led to the development of specific policies that support the development, sharing, adaptation and use of OER. Nevertheless, a few African institutions that have embarked on OER initiatives have taken steps to develop OER amenable policies. These include the University of Cape Town in South Africa and the University of Ghana and KNUST in Ghana. One of the remarkable outcomes of KNUST's involvement in OER has been the influence it has had at national level, with the KNUST institutional repository designated as the national Open Access repository.

At a continental level, the ACDE has established a formal Policy on Collaboration, which includes a strong commitment to OER. This Policy addresses five broad areas: sharing intellectual property; maximizing human capacity; collaborating on learning and teaching; collaborating on research; and collaborating on developing and sustaining enabling systems. It provides an excellent example of an inter-institutional commitment among ACDE members to collaboration and sharing of intellectual capital.

7.4 Challenges in Using and Creating OER

There are several challenges in using and creating OER in an African context. First among these is the lack of infrastructure and a robust and fast connection to Internet in the HEIs.

There is still unfamiliarity among academics regarding the OER model and its advantages, and the staff usually have no knowledge in accessing and adapting OER. Other constraints are staff's heavy teaching load and the unavailability of OER in the subjects they teach.

Lack of funds is another challenge. Although OER are free to access, the adaptation and production costs can be heavy. At present OER projects in Africa are predominantly donor-funded. While such

---

[15] See http://www.tessafrica.net Accessed January 2013.
[16] See http://www.oerafrica.org Accessed January 2013

funding is essential in establishing the OER field, ensuring the financial sustainability of these projects once donor funds cease, as in the case of other projects in Africa, is always difficult.

There is a lack of policy in HEIs to encourage OER practices, perhaps partly because OER initiatives are largely project and donor driven, and therefore not embedded within the institution, and partly because of lack of leadership support.

7.5 Areas for Action for Promoting ODL and OER

Since the use of ODL and OER is heavily dependent on ICT, all the areas for action outlined earlier in connection with ICT (see 6.3) are equally applicable here.

Perhaps the most effective way to accelerate the use of ODL and OER would be to have these embedded within a national policy framework. With regard to OER, for example, a national open licensing policy as part of an overarching policy framework on Intellectual Property Rights (IPR) and copyright

> *Perhaps the most effective way to accelerate the use of ODL and OER would be to have these embedded within a national policy framework.*

in higher education for both teaching and research activities can help t facilitate the use of OER. Similarly, to encourage the local production of OER, there could be a policy mandating institutions to license materials developed using public funds under an open license.

To realise the potential and promise of ODL and OER, there is need to create awareness and advocacy within institutions. To ensure buy-in, a sound rationale and vision for ODL and OER should be formulated and be aligned with the institutional mission and objectives as part of the institution's strategic plan.

There is need for capacity building among staff to facilitate the use of ODL and OER. In addition, the time and effort required to develop and support ODL and e-learning courses need to be acknowledged by institutional leaders. There is also value in creating and sustaining effective communities of practice at national and regional level to foster sharing of information and collaboration.

QA guidelines for ODL offerings in most African countries appear to be predominantly undifferentiated from conventional ones. This calls for a need to focus on preparing separate QA guidelines for ODL, or ensuring that QA of ODL programmes forms part of broader QA guidelines and policies. As QA frameworks are being developed at national, regional and continental level, it should be ensured that ODL and OER are integrated within such frameworks. The QAAA of ACDE and AfriQAN can play an important role in this respect.

Academics in African HEIs should be encouraged to develop teaching and learning materials that take into account the local context and local languages. These materials could then be stored in a sustainable online repository and released using open licenses to facilitate re-use and adaptation. Similarly, an online repository of African case studies, evaluation findings, best practices and models in relation to ODL and OER could be created to support capacity building in African HEIs. This could be done as part of a coordinate regional strategy or in partnership with emerging global OER networks and repositories.

8: EMBEDDING LIFELONG LEARNING IN HIGHER EDUCATION

8.1 Lifelong Learning and Higher Education

 Lifelong learning entails learning at all ages ('from cradle to grave') through formal, non-formal and informal learning. The need to embed the principles of lifelong learning in education and broader development policies is now widely acknowledged. In Africa, a major focus of the UNESCO Institute for Lifelong Learning, under its Priority Africa programme, is to strengthen the capacities of governments and civil society in literacy, non-formal education and adult education[17].

Higher education can play an important role in promoting lifelong learning through, for example, admitting mature students in regular programmes, continuous professional programmes, adult education, in-service teacher training, research, etc. Lifelong learning should therefore form an integral part of AHERS.

8.2 Survey and Findings

A study, comprising a literature review followed by an online survey through an online questionnaire sent to twenty identified lifelong learning specialists in Africa, was undertaken as part of the AHERS study. There were seven respondents to the questionnaire.

From the literature review it was found that while there was much discourse about lifelong learning in Africa, there was limited literature directly focusing on the topic. This could be because of mix up between lifelong learning and adult education, distance education, skills-development industry short courses and such similar institutionally organised courses. However, the available literature seemed to support the policy and practice of lifelong learning among African learners to complement main-stream tertiary education provision.

The on-line responses to the questionnaire gave some insights into lifelong learning from the perspective of the respondents. The concept of lifelong learning seemed to be understood to some extent in several HEIs, although there may not be clear, official written or announced policy documents on this subject. Recognition, acknowledgement of achievement or certification of the lifelong qualifications or achievements seemed incidental, with no regular pattern or reward system in place.

Despite the limitations of the survey, and lack of adequate case studies to ascertain the suitability, viability and/or prevalence of lifelong learning in HEIs in Africa, there seems to be evident interest but uncoordinated efforts to promote the principles and practices of lifelong learning, even under different names or using mixed approaches to pursue personal studies or in learning how to learn, independently, for one's good or to benefit one's community. The least that society in general and HEIs in particular could do for lifelong aspirants is to provide a conducive learning environment and necessary resources, including ICT, library, and formal recognition of lifelong learning outputs or achievements.

---

[17] See http://uil.unesco.org/home/programme-areas/priority-africa/ Accessed January 2013.

8.3 Recommendations

There is a dearth of information on lifelong learning in higher education in Africa. Comprehensive studies should therefore be commissioned to examine its prevalence and effectiveness. This will help to coordinate existing fragmented efforts of lifelong learning and to harmonise and consolidate its beneficial practices.

Information on the use of lifelong learning, in particular its successes and benefits, should be widely popularised, targeting individuals, the family and society at large. This will help to generate genuine interest in lifelong learning among stakeholders, non-governmental organisations and local communities. This should eventually lead to the acknowledgement of the existence and viability of lifelong learning in African education in general, and its strategic importance in higher education in particular. It would also help to mobilise political will and consensus among policy-makers in support of the practices and principles of lifelong learning strategies, which is essential as successful promotion and implementation of lifelong learning, preferably in identified centres of excellence, require suitable and adequate public financial, technical and human resources.

> *Lifelong learning requires a teaching and learning approach that is different. There is therefore need for training higher education staff.*

A number of lifelong learning programmes exist in Africa, being supported by public and private sectors and donor agencies. A strategy of public-private partnerships, multi-level cooperation and creating synergies among existing and new lifelong learning programmes should be adopted as it will result in their sustainability for the mutual benefit of all parties concerned.

Lifelong learning in higher education requires a teaching and learning approach that is different. The majority of current academics in Africa are unfamiliar with such an approach. There is therefore need for training higher education staff in order to consolidate and expand lifelong learning. The training could include how to deal with mature students, effective utilisation of ICT, self-driven learning techniques, use of ODL, etc.

As African countries develop their NQF, it is essential that lifelong learning be integrated within that framework.

9: WIDENING THE HIGHER EDUCATION SPACE THROUGH DIFFERENTIATION AND ARTICULATION

9.1 Introduction

Differentiation refers to the presence of different institutions having different missions and functions within the same higher education system. Differentiation can be horizontal (that is, different types of

institutions within a system) or vertical (different programmes within the same institution). Articulation relates to the horizontal and vertical linkages between institutions, programmes and levels in a system, and to the mobility of learners between these institutions, programmes and levels.

There is wide acceptance that Africa needs a differentiated higher education system to both address the diverse educational needs of students and to meet the continent's development priorities and challenges. Articulation is important from an equity point of view as it provides opportunities to those who may be qualified but have missed the chance of accessing higher level education, or who are late developers. In order to map the extent and nature of institutional and programme differentiation in African higher education systems, and to track patterns of articulation between different types of institutions, a study was carried out in 12 selected countries, four in each of three African regions: East Africa (Kenya, Rwanda, Tanzania and Uganda); Southern Africa (Malawi, Mozambique, South Africa and Zambia); and West Africa (Cameroon, Ghana, Nigeria and Senegal). The study involved a literature review as well as the use of targeted questionnaires and telephone interviews. The study concentrated essentially on universities and polytechnic-type of institutions.

9.2 Study Findings[18]

Over the years, following independence, African countries have developed a differentiated tertiary education system consisting of universities, polytechnics, a mix of colleges, trade schools and vocational and other skills-training institutions. However, the nature and extent of differentiation vary from country to country. While significant information and data are available about universities, there is a dearth of knowledge about non-university institutions. Further, although differentiation has become a key issue and is being strongly advocated, there is still considerable lack of clarity about the precise identity and role of university and non-university institutional types and the articulation linkages and boundaries between them.

Though the systems are quite varied, the binary system, comprising mainly universities and polytechnics, appears to be dominant. Initially, there used to be a traditional division between academic education (mostly offered at universities) and technical and vocational education (mostly in non-university institutions). With the rising demand for university-type education as well as for market-oriented education, all tertiary institutions have increasingly redefined their functions and created new niche areas. This has resulted in both 'academic drift' (for example polytechnic-type institutions offering university-level programmes) and 'vocational drift' (universities offering job-specific certificate and diploma vocational qualifications). As a result, the dividing line between university and non-university institutions has become blurred.

Indeed, in recent years, in many African countries there has been an emerging tendency to upgrade polytechnics to university status, albeit into universities with a technical focus. The upgrading of the polytechnics is usually done without catering for their replacement. There is the danger here that the upgraded institution would eventually deviate from its technical focus and start running programmes similar to those in traditional universities. A skills gap might then emerge.

---

[18] The study was carried out in 2005/2006 and was not part of the AHERS commissioned studies. Since then, significant changes have occurred in higher education systems in Africa. Nevertheless, the issues related to differentiation and articulation raised in the report remain pertinent and are important to the concept of creating AHERS.

There is an overall public perception that polytechnic education is low status compared to university education. A number of factors have contributed to this situation, including misunderstanding of the orientation and philosophy of polytechnic education, lower entry requirements for polytechnics, lack of clearly defined mandate of polytechnics and inadequate human and material resources in polytechnics. In nearly all the countries studied, all those who qualify to enter university would prefer going to a university as opposed to a non-university institution such as a polytechnic.

The high demand for university education in most African countries has led to three phenomena. First, existing public universities have dramatically increased their student intake, mostly in existing programmes, which has not led to differentiation. Second, in order to decentralise university education and as a political response to access and equity issues, new public universities have been created in different parts of the country, often as offshoots of existing ones. Although some of the universities have specialised in specific areas (e.g. agriculture) and have introduced new programmes, generally their programmes have tended to be similar, often copied from the older, better established universities, resulting in limited institutional and programme differentiation. Third, there has been a proliferation of private universities, which tend to offer limited and similar programmes in direct response to market needs, thus contributing little to differentiation.

> *The upgrading of polytechnics is usually done without catering for their replacement. The upgraded institution could deviate from its technical focus and start running programmes similar to those in traditional universities, resulting in a skills gap.*

There is a fundamental conceptual tension between the purposes and intentions of differentiation and articulation. The primary rationale for differentiation is to provide a range of graduates to meet the requirements of the labour market and to accommodate the diverse needs of the student population. The principle of articulation, on the other hand, is to facilitate access to 'higher' university-type qualifications for students having acquired 'lower' polytechnic-type qualifications. Encouraging articulation can thus be seen to be inconsistent with the principle of differentiation and would result in a reduction in the number and range of graduates at the intermediate and vocational levels. Also, emphasising articulation runs the risk of widening the undesirable reputational gap between 'high status' academic and 'low status' vocational institutions. Articulation, however, tends to be selective with only limited numbers of able and motivated students engaging in the process.

There can equally be an inherent tension between differentiation and quality. Given the shortage of human resources and physical infrastructure in African HEIs, the more differentiated the system of higher education, the more likely that quality will be affected negatively. Also, the more differentiated a system is, the more competences it will require from QA agencies which, in Africa, are still in the process of being established.

The issue of articulation has really not received as much attention as differentiation in national higher education policies in African countries. Compared to differentiation there appears to be very little information on articulation. While in most countries the need for

articulation is acknowledged, there is little evidence that it is taking place, even in those few cases where formal articulation routes exist. One reason could be that articulation is far more complex because it involves multiple institutional actors and levels of education systems. Also, universities tend to jealously safeguard their legal autonomy and may feel under no obligation to articulate with non-university institutions; they may well view articulation as a managerial nuisance that is best avoided.

9.3 Recommendations

National strategies for increasing access to higher education should ensure that both institutional and programmatic differentiation occur in a targeted way to meet development goals. One option would be the creation of differentiated institutions with distinct mandates within the higher education system, for example by upgrading polytechnics into technical universities that will offer high-level degrees in practical and applied areas. This would also help traditional universities to concentrate on research and offer 'knowledge' degrees. However, any upgrading of polytechnics should be accompanied by the creation of new polytechnic-type institutions, otherwise a middle-level skills vacuum would eventually result. Also, it should be ensured that upgraded and new universities maintain their specific mandates and do not attempt to become traditional universities.

The image and reputation of non-university institutions should be enhanced by improving the quality of their training, by encouraging their collaboration with industry to facilitate employment and by mounting a rigorous campaign of sensitisation of their important role in national development. A possible means of strengthening the identity of non-university institutions is to customise their admission requirements on a distinct curriculum at secondary school level that adequately prepares potential students for non-academic pathways. Thus, secondary school students aiming for university degrees should follow a different curriculum from those who are better inclined for more practically-oriented education in non-university institutions.

In order to facilitate articulation between institutions, collaboration between university and non-university institutions should be encouraged and rewarded. At the same time formal articulation channels between the institutions should be created and actual articulation encouraged, with emphasis on differentiation retained. The creation of National Qualifications Frameworks where minimum credit requirements as well as learning outcomes and competences for the different qualifications are specified would greatly facilitate articulation.

The study has revealed a number of information gaps which require in-depth studies. The areas include a closer look at programme differentiation, the nature of academic and vocational drift in institutions, the implications of upgrading polytechnics into universities, challenges related to articulation between institutions, etc. Such studies should be undertaken by appropriate regional and continental bodies.

10: PROMOTING RESEARCH AND POSTGRADUATE TRAINING

10.1 Importance of Research for Africa

Global research indicators show that Africa performs very poorly in knowledge generation through research compared to other world areas. Sub-Saharan Africa's contribution to the world's expenditure on Research and Development (R&D) is no more than 0.6%; it has the lowest number of researchers per million of population; and it produces just 1.1% of the world's publications and 0.1% of global patents. For Africa's quest to achieve socio-economic growth and for sustainable development to become a reality, it is imperative that Africa not only produces high quality research output from highly qualified professionals, but also produces and adapts knowledge and technologies relevant to its development.

The principal base of knowledge and innovation in a country rests on the inherent research function of its academic community. Establishing a vibrant and productive national system of innovation requires the contribution of high quality research output from the HEIs. However, Africa's HEIs are increasingly being challenged that their research does not contribute effectively to the improvement of policy and practice for the continent's development.

10.2 Challenges

Funding of research remains a major challenge in Africa. Most African countries spend only a fraction of the agreed amount of 1% of their GDP on R&D. Reduced state funding to public universities over the years has crippled their capacity to deliver high quality research output. A significant portion of research (which may represent as much as 70-90% of total available research funds) is funded by development or donor agencies with the risk that the research agenda is set by them and may not necessarily tally with the development agenda of Africa.

The extreme weakness of graduate programmes in most African universities is one of the most serious institutional limitations in research capacity development and has direct implication on research output. Another disconcerting trend is the small number of graduate students in African universities, which means not only the absence of national foot soldiers of any research undertaking but also a severe shortage of potential teaching assistants who can relieve senior academics from some of their teaching commitments to enable them to devote more time to research. Part of the reason is lack of resources to maintain significant graduate programmes, but another factor is the unattractiveness of academic jobs, with better salaries offered in the private or even public sectors. The fact that most postgraduate students are not choosing an academic career means that the current stock of academics is not being replenished at a rate capable of sustaining research at optimal levels.

The severe shortage of well-qualified academics, especially those having a PhD, is another major constraint. Poor salaries and working environments make it difficult to recruit and retain such academics. The few who are at post are often engaged in international

consultancies or are burdened with excessive teaching and administrative chores. Institutional capacity to initiate research and supervise doctoral students is thus very weak.

The lack of effective QA processes for research is another challenge. National QA agencies are now being established and their initial emphasis, understandably, is essentially on teaching and learning. A major constraint is a lack of qualified academics to serve as peer reviewers for research.

In addition to quality, the direct relevance to national development of much of the research undertaken is questionable. Current research in African universities is largely undertaken as a personal enterprise, with emphasis on publications as a conduit for promotion. This does not contribute to capacity building of the department, nor does it promote multi-disciplinary research which can support national development.

10.2 Strategies for Improving Research and Research Capacity

For African countries to effectively strengthen national research and research capacity for sustainable economic development, a range of interventions and strategies are needed at national, regional and continental levels, and these are outlined below. They need to be undertaken by different stakeholders, public and private, operating in different sectors; and appropriate mechanisms need to be set up to coordinate them to ensure their effective contribution.

African governments should redefine national investment and expenditure priorities to support universities and research institutions that have most capacity to serve as catalysts for growth and development. Governments should also establish revolving loan funds financed jointly by public and private research sponsors to support the necessary infrastructure in the top quality research departments.

To encourage research, African HEIs should increase their support to staff by providing research grants and funding to attend conferences. The 'publish or perish' policy should be replaced by incentives and rewards for high quality publications which are of societal and national policy relevance. To attract new academics, research funds should be established from which the new staff can access starter grants to facilitate their career development.

African governments should promote synergies between inter-continental and intra-continental research partnerships and development cooperation instruments to enhance the creation and application of new knowledge in support of poverty alleviation and economic growth, and addressing global challenges. In promoting collaborative research networks, governments, donor agencies and regional bodies should focus initially on leveraging existing activities and networks and enhancing coordination and synergies. On their side, African HEIs should vigorously build institutional linkages with other HEIs, both in Africa and outside, that include postgraduate training through 'sandwich programmes', research collaboration, equipment support, access to library resources, etc.

African countries and continental bodies must recognise and encourage the establishment of networks of centres of excellence as one of the most effective approaches for

strengthening the continent's scientific and technological development. Such networks offer a platform for mobilising continental resources to confront and deal with common development challenges and needs. These networks of excellence must have clear objectives and business plans in line with regional sustainable development goal and needs, with the ability to attract stable, adequate and continued funding from diverse sources, including sales of their services to public and private sectors. In addition, they should be led by highly qualified academics in the respective areas, be endowed with up-to-date equipment, information facilities and management systems, and have strong and dynamic links to international S&T bodies and private sector clientele. Several such networks already exist in Africa and they should be supported and strengthened if necessary.

The emerging trend of trans-disciplinary and inter-disciplinary research needs to be encouraged in African HEIs as it will help to place Africa on a competitive global scale in higher education and research.

The emerging trend of trans-disciplinary and inter-disciplinary research needs to be encouraged in African HEIs as it will help to place Africa on a competitive global scale in higher education and research. African HEIs should also undertake structural reforms by providing collaborative platforms for innovation such as Centres of Excellence and Innovation Incubation Centres.

There is need for 'socialising' African scientific research by making it relevant for social, economic and environmental sustainability, and embedding it in African realities. This requires collaboration between researchers and the government, the civil society and the private sector (both formal and informal) to ensure that the research meets the needs of the stakeholders[19]. It also requires grassroots participation and user involvement in the design and implementation of the research. Indeed, an even deeper reform in higher education may be necessary so as to move away from the discipline-based approaches to teaching and learning towards systems thinking through integrated approaches in knowledge generation, dissemination and application.

The context of the importance for Africa to achieve economic and sustainable growth, coupled with meeting the challenges of climate change and resource depletion provides an ideal opportunity for HEIs and researchers to embark on the necessary reforms outlined above.

It is important to share information and best practices, within Africa and from abroad, to serve local communities. Governments, international donors and partners and the private sector should invest in modern information technology to store up and preserve the library holdings of African HEIs, expand their connectivity to the Internet and link them to databases, electronic journals, OERs and other resources, tools and technologies. Also,

---

[19] The active engagement in research among these four major actors - academia, government, industry and civil society - has been referred to as the 'quadruple helix' approach.

African HEIs should aim to improve the dissemination of their research outputs to ensure their usefulness and long-term impact. They should in particular develop mechanisms for moving research results from the laboratory to the field to benefit society.

Effective governance structures and management of research should be put in place in HEIs to guide the development of appropriate policies and mechanisms for strengthening research and ensuring high quality output. These should include developing a strategic vision for research, creating a well-defined system structure, policy formulation, priority setting, monitoring and evaluation, promotion and advocacy and formulation of standards and a code of ethics.

In addition to having research quality assured, it is important to assess the performance of HEIs as a basis for allocation of research funds. This is rare in Africa but examples of research assessment models exist in several countries such as the Netherlands, New Zealand and the United Kingdom. African ministries responsible for higher education should draw from the good practices of these assessment models.

11: LESSONS FROM THE BOLOGNA PROCESS IN EUROPE

11.1 Background

One of the most advanced processes of harmonisation of higher education is the one that has taken place in Europe. In 1999, some 30 European countries met in Bologna, Italy, and agreed to create a European Higher Education Area (EHEA), the objectives being to strengthen the competitiveness and attractiveness of European higher education and to promote academic mobility and graduate employability through the introduction of a system based on easily readable undergraduate and postgraduate programmes and qualifications, with QA playing an important role. A decade later, in 2010, the process, which involves the participation of 47 countries and which is commonly known as the Bologna Process, led to the creation of the EHEA.

In 1999 Europe faced challenges similar to those of Africa today: disparate higher education systems, insufficient academic mobility, diverse providers, a multitude of languages and non-uniformity in quality provision of higher education. In creating AHERS, it would therefore be useful to draw lessons from the Bologna Process.

11.2 The Process[20]

It is important to underline a few important elements of the Bologna Process which led to its successful implementation. These are:

- Although led by European education ministers who are signatories to the Bologna Declaration, the process was a voluntary one and there was no legally binding treaty.

---

[20] See the EHEA official website http://www.ehea.info/ Accessed October 2012.

Also, although a timeframe was established for achieving certain goals, each country was free to proceed according to its own pace.

- There was a close follow-up by the ministers, with a Ministerial Conference held every two years to assess progress. This follow-up continues.
- In addition to the 47 signatory countries and the European Commission, the process involves several key European organisations, in particular the European University Association (EUA), the European Students Union (ESU) and the European Network for Quality Assurance (ENQA).
- The Ministerial Conference set up a Bologna Follow-up Group (BFUG) to oversee the process between the ministerial meetings. The BFUG meets twice a year and it has set up Working Groups to deal with specific topics.
- A Bologna Secretariat, to support the overall follow-up work, is provided by the country hosting the next Ministerial Conference.

11.3 Key Action Lines

The key actions that led to the creation of the EHEA are:

- Establishment of a comparable three-cycle degree system: Bachelor (first cycle, 3 years), Master (second cycle, 2 years) and Doctorate (third cycle, 3 years).
- Creation of a European Credit Transfer and Accumulation System (ECTS) as a means of comparing the study attainment and performance of students, each academic year corresponding to 60 ECTS.
- A Diploma Supplement to be attached to every qualification to make it more readable, comparable and transparent.
- Promotion and collaboration in Quality Assurance.
- Development of a National Qualifications Framework in each country against an overarching European Qualifications Framework, with an emphasis on learning outcomes which allow different paths to a given qualification.
- Promoting a social dimension to higher education in order to ensure equitable access, employability and opportunities for lifelong learning.
- Creating a European dimension in higher education by increasing the modules and teaching and study areas that have a European component.
- Development of doctoral studies, promotion of inter-institutional research collaboration and creation of a European Research Area (ERA), the latter to operate in synergy with the EHEA. It is interesting to note that research was brought on board at a later stage, in 2003, and that the two 'Areas' (higher education and research) are kept separate.

11.4 Challenges in Implementation[21]

---

[21] *"Bologna beyond 2010: Background paper for the Bologna Follow-up Group",* prepared by the Benelux Bologna Secretariat, April 2009, downloaded from www.ehea.info/uploads Accessed October 2012.

Although the successful implementation of the EHEA through the Bologna Process can be regarded as revolutionary for cooperation in European higher education, there have been several challenges encountered and these need to be considered in creating AHERS.

First, not all the signatory countries are implementing the three-cycle degree system as prescribed, especially the Master and the Doctorate ones, the argument being that such changes should be closely linked to the education structure at lower levels of education; hence the importance of qualifications frameworks and learning outcomes. Second, because of the differences in countries and higher education institution systems, progress has been uneven and not all the participating countries reached the stated goals by 2010. It is easy to underestimate the time required to implement such a complex process. Third, there was confusion and lack of understanding in some of the instruments used in the process[22], for example the qualifications frameworks, the concept of student-centred learning and the use of learning outcomes in designing curricula. Fourth, while a major objective of the process was to boost intra-European mobility, this has yet to happen. This is partly because of lack of funds to facilitate mobility and partly because, for financial reasons, higher education institutions are giving greater emphasis on internationalisation and mobility from outside the region.

> *While Africa can learn from the European experience, it should not simply adopt the Bologna Process in creating AHERS, but rather adapt the approaches used to fit the African context.*

Thus, although the EHEA has now been created in 2010, the Bologna Process continues into its second decade. The BFUG continues to operate and the last Ministerial Conference was held in Bucharest in April 2012 where the results achieved since 2010 were assessed.

11.5 Relevance to African Context

As mentioned earlier, higher education in Europe shares many commonalities with that in Africa, but at the same time important differences exist. So, while Africa can learn from the European experience, it should not simply adopt the Bologna Process in creating its higher education and research space, but rather adapt the approaches used to fit the African context.

The first important difference is demography. Europe has an aging population and student enrolment in higher education will eventually stagnate. In Africa, on the other hand, there is a continuously growing and unmet demand for higher education. Second, higher education in Europe is mostly in the public domain whereas in Africa the private sector already caters for a significant portion of tertiary education provision, and this is inevitably going to increase; AHERS needs to take that into account. Starting a process, led by ministers of education, for

---

[22] Adam, Stephen. *"Concept of Higher Education and Research Spaces - the Bologna Process"*. Power Point presentation, Workshop on Creating an African Higher Education and Research Area, Accra, Ghana, December 2010.

creating a higher education space where both public and private institutions exist is much more challenging.

Quality plays a primordial role in a higher education space, whether in Europe or Africa. The implementation of QA is still at a developmental stage in Africa. Linked to quality, there is overcrowding of public institutions and an acute shortage of adequate infrastructure. Yet another important consideration for AHERS is the need for inter-African institutional collaboration, especially for postgraduate teaching and research, in order to share scarce resources. This is not necessarily a priority for Europe. And just as EHEA aims to create a European dimension in its higher education, similarly AHERS must craft an African dimension in its higher education, whether in arts, humanities, science or technology. So far its curricula have largely been copied from the North.

Africa also faces serious social and economic developmental challenges which its higher education sector, and therefore AHERS, must assist in overcoming. Another important feature in Africa is that there are well-established RECs, which have already initiated activities that are in line with the creation of AHERS; these initiatives must be recognised and accommodated.

Other challenges facing Africa are the high cost of travel within the continent, difficulty in obtaining entry visas and poor internet connectivity, all vital for holding regular meetings, physically or virtually, in the development of AHERS. Finally, there is the issue of funding the process of creating AHERS. While funding the Bologna Process was not a major issue for Europe, it is crucial for Africa. Inevitably most of the funding will come from outside the continent, perhaps a significant part from Europe. The challenge for Africa then would be to ensure that AHERS is developed on its own terms, taking into account its own specificities, while incorporating relevant aspects from other regions.

12: CONCLUSION AND WAY FORWARD

African higher education is at a crossroads. Its importance to the continent's development has been acknowledged by the African Union and by the regional political and economic bodies of Africa. Most of the challenges have been identified and several initiatives to address them at different levels have been initiated. However, a concerted, well-defined strategy to enable higher education to play its meaningful role for the whole African region has yet to evolve.

The establishment of an AHERS provides a framework for such a strategy and can help to create synergy among all the major partners and stakeholders of African higher education. This report lists some of the major areas to be considered in its creation, as well as identifies the challenges and key areas of action to be taken at institutional, national, regional and continental level.

The first step forward now is to have the approval of the principle of creating AHERS, and the key areas to be addressed agreed, at the political level in Africa, namely by the Conference of Education Ministers of Africa (COMEDAF) of the African Union.

COMEDAF should then set up an AHERS Committee comprising a few Ministers responsible for higher education from the five regions of Africa to follow up on progress. That Committee, which could be named the AHERS Follow-Up Committee (AFC) should be the catalyst and the driving force behind the creation of AHERS. It should work in consultation with all the relevant continental organisations (e.g. ADEA, AAU, UNESCO-BREDA) as well as the RECs and the regional university associations. A clear plan of action for moving forward should then be developed with the support of donor and development agencies supporting higher education in Africa. While the AFC should lead the process, the plan should be implemented by continental and regional university associations and other higher education partners; in other words the process should be politically led but academically driven.

While the AFC should lead the process, the plan should be implemented by continental and regional university associations and other higher education partners; the process should be politically led but academically driven.

Europe took ten years to develop its Higher Education Area. Africa can hardly expect to achieve AHERS in a shorter period, given its lack of expertise and resources and the fact that it faces many more challenges than Europe. What is important is not so much when AHERS will finally emerge (although a target date needs to be established), but the collaborative and consultative process among all higher education stakeholders that leads up to its creation. In other words, the journey towards AHERS is more important than the destination.

****