Internationalization of higher education and the need for introducing credit accumulation and transfer system (CATS) in Africa: Potential opportunities and challenges

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Abstract

Internationalization of higher education demands both intra and inter-regional academic collaboration. Recently, there is an increasing focus on higher education collaboration within regions. Africa prioritizes engaging in internationalization activities within the region which can be considered as regionalization of higher education. One of the major problems in the process of internationalization of higher education in Africa is lack of instruments that facilitate and promote internationalization activities. This paper argues for the introduction of Credit Accumulation and Transfer System (CATS) in African higher education to facilitate and promote recognition of studies, academic mobility, internationalizing curricula, collaboration of higher education, harmonization of higher education programs, and creation of African Higher Education research and Space (AHERS). By facilitating recognition of studies, which is a key strategy in the process of internationalization of higher education in the region, CATS in African higher education could play a significant role in promoting various benefits such as connecting African higher education with the global higher education system, lessening the challenges and risks of internationalization of higher education in Africa, and promoting African unity and development. However, the introduction of CATS in Africa higher education is not without some challenges and risks.

Keywords: Africa; credit accumulation and transfer system; higher education; internationalization

1. Introduction

Higher education in Africa dates back to 10th century when the current Al-Azhar University founded as Islamic learning institute in Egypt. However, western type of higher education is relatively a new phenomenon in Africa (Jowi, 2009; Sawyerr, 2004; Wagaw, 2001), and its

establishment is associated with most African countries independence in the 1960s. There were, however, a few higher education institutions such as Makerere in Uganda and Yaba in Nigeria that offered postsecondary education in the 1930s (Eshiwani, 1999). For a population of more than 700 million people across 53 countries, Africa has no more than 300 institutions that fit the definition of a university (Teferra & Altbach, 2004). In addition to the disappointing numerical fact, by international standards, Africa is the least developed region in terms of higher education institutions (Teferra & Altbach, 2004), and finds itself on the very edge of the knowledge periphery (Altbach, 1987; Teferra, 2008), particularly in research output (Bloom, Canning, & Chan, 2005).

There are many reasons, ranging from institutional to global, for the slothful development of higher education in Africa; but the pressure of external forces, mainly development partners, has been identified as the major one. For many decades, in developing countries, international financial organizations such as the World Bank along with the International Monetary Fund, either directly through educational programs or indirectly through 'structural adjustment programs', has been promoting policies of human capital development and economic efficiency across the education systems (Moutsios, 2009). These international organizations are highly involved in education policy making in developing countries, and the stringent policies laid out by them had a serious impact on higher education in Africa (Teferra, 2008). The World Bank, which is the most important multilateral organization in shaping the policies of African higher education (Teferra, 2008), had a long standing misconception about the contribution of higher education to Africa's development. For decades, it advocated basic education than higher education because of the belief that higher education has little role in promoting poverty reduction (Bloom, Canning, & Chan, 2005), and the social rate of return to the resource invested in the former is higher than the latter (World Bank, 1995). This advocacy resulted in a shift of public funding from higher to lower level of education (Carnoy, 1999) which crippled the development of higher education in Africa.

At the beginning of the twenty-first century which is considered as a knowledge era (Teferra & Altbach, 2004), complexity and magnitude of African higher education problems has increased because of process of globalization and internationalization. Globalization is challenging the higher education sector across the world (Knight, 2008), and it is perhaps the most fundamental challenge that higher education faced in its history (Scott, 2000). It has an impact on higher education all over the world, and every higher education is subject to the

processes of globalization - "partly as objects, victims even, of these processes, but partly as subjects, or key agents, of globalization" (Scott, 1998, p. x). As it is part of the larger global higher education system, African higher education is increasingly affected by globalization and internationalization phenomena (Sehoole, 2006). This puts more pressure on the higher education system which is already functioning in very difficult circumstances such as scarce financial and human resource, inadequate infrastructure for teaching and research, and internal conflict.

Internationalization is another widely discussed major force shaping and challenging higher education (Knight, 2008). It recently becomes one of the central features of higher education policies and practices at global, regional, and national levels (Shabani, 2008), and perhaps the most important agent of change in higher education (IAU, 2009). Recognizing an increasing opportunities and challenges of internationalization of higher education, Africa, as a region, is engaged in developing and implementing various regional higher education policies, strategies and activities. To this end, the purpose of this paper is to argue for the introduction of Credit Accumulation and Transfer System (CATS) in Africa to facilitate and promote regionalization of higher education, and thus positively respond to internationalization of higher education. In doing so, the paper briefly discusses the potential opportunities and challenges of CATS in relation to internationalization of higher education.

2. Internationalization of higher education in Africa: rationales, benefits and challenges

As a concept, internationalization means different things to different people, and thus they describe it differently (see for example Ebutchi, 1989; Marginson, 2000; Scott, 1998; Van der Wende, 2001). Although it is a widely discussed phenomenon, to date there is no all encompassing definition of internationalization of higher education. The most comprehensive and widely used definition both in research and practice describes internationalization as "the process of integrating an international, intercultural, and global dimension into the purpose, functions (teaching, research and service) and the delivery of higher education" (Knight, 2004, p. 11).

Internationalization is not a new phenomenon in higher education. Internationalization activities such as student mobility dates back to the Middle Ages (de Wit, 2002); but it became very popular in the early 1980's (Knight, 2004; 2008). Although internationalization activities such as intellectual mobility in Africa are as old as the earliest Islamic universities

established in the northern Africa (Zeleza, 2005), the inception of ideas and the motives for internationalization in its popular forms are as early as the beginning of most western type of higher education in Africa. For instance, in the conference on the Development of Higher Education in Africa, which is held in Tananarive in 1962, participants noticed the importance of internationalization for the development of African higher education and agreed to establish a firm cooperation amongst African countries as well as between them and governments and agencies in the rest of the world (UNESCO, 1963).

In higher education, internationalization was for a long time mainly considered as the cross-border mobility of individual students (de Wit, 2002; Van der Wende, 2001). In the last three decades, however, the conceptual understanding of internationalization has broadened, and started to include many international activities. This includes collaboration in teaching, research, and other projects; mobility of students and scholars; inclusion of international dimensions into the curriculum; recruitment of foreign students, establishing campuses in foreign countries; and countries collaborative works toward common frame of reference (Oyewole, 2009; Teferra & Knight, 2008).

The rationales for internationalization of higher education, which indicate why a country or an institution wants to engage in the international dimension of higher education (Knight, 2008), are different from country to country, institution to institution (Knight, 2004; Van der Wende, 2001), and through time (Luijten-Lub, 2007). Several studies categorize the rationales into four major groups: political, economic, academic, and social/cultural (Knight & de Wit, 1997; Knight, 1999). These rationales are not mutually exclusive; rather they are interrelated (Knight & de Wit, 1997; Knight, 2004). The existing and emerging specific rationales for internationalization of higher education includes foreign policy, national security, peace and mutual understanding, technical assistance, income generation, economic growth and competitiveness, labor market, financial incentives, human resource development, institution/nation building, quality enhancement, profile and status, international academic standards, international dimension to research and teaching, strategic alliance, intercultural understanding, citizenship development, social and community development (Knight, 2008).

According to the International Universities Association (IAU) (2009) global survey on the internationalization of higher education, the highest ranked rationales for internationalization of higher education worldwide are 'international preparedness of student' (30%), 'curriculum

and quality' (17%), 'profile and reputation' (15%), research and knowledge production' (14%), and 'increase number/diversity of students' (9%). According to this global survey report, institutions in Africa consider strengthening research and knowledge production, and internationalizing curricula as the major rationale for internationalization. Although major types of rationales (political, economic, academic, and social/cultural) do exist in Africa, studies and reports indicate that academic is the major regional rationale for promoting internationalization in higher education (Oyewole, 2009; Teferra & Knight, 2008). The academic rationale includes strengthening research capacity and knowledge production, internationalizing curricula, enhancing academic quality, developing human resource capacity, and increasing competitiveness (Oyewole, 2009). It is not surprising to see academic as the principal rationale for internationalization looking at the major areas of intervention for revitalization and further development of higher education in Africa which includes enhancing institutional capacity, promoting academic mobility, improving quality assurance mechanism, strengthening research capacity, and improving access to ICT facilities (Shabani, 2008).

The predominant internationalization activities of many African universities in the past several years have mainly been with universities in the North (Jowi, 2009). However, the IAU (2009) global survey report indicates that Africa is giving priority to the regional dimension of higher education collaboration and partnerships. In the report, recognition of studies and visa restriction on students to study abroad are identified as the major challenges for the internationalization of higher education in Africa, whereas brain drain and over emphasis on internationalization are the highest ranked risks of internationalization for African higher education (IAU, 2009).

3. A need for an instrument to facilitate internationalization of higher education in Africa

Internationalization is a worldwide phenomenon that requires increased regional and international cooperation accompanied with workable policies, strategies and ethical standards (Jowi, 2009). Recently, there is an increasing focus on higher education collaboration and exchange within regions, but without withdrawing the attention given to inter-regional cooperation in higher education.

Understanding the importance of recognition of studies to the higher education, both completed qualifications and parts of study programs, five regional conventions on the recognition of studies, diplomas and degrees in higher education were adopted under the auspices of UNESCO. This includes the regional convention in Latin America and the Caribbean (1975), the Arab States (1978), Europe (1979), Africa (1981), and Asia and the Pacific (1983). The main objective of these regional conventions is to promote international cooperation in higher education and to reduce obstacles to the mobility of students and scholars by a mutual recognition of studies, diplomas, degrees and qualifications between the countries that have endorsed the convention (UNESCO, 2004).

The Arusha Convention was adopted on 5 December 1981 in Arusha, Tanzania. This Convention is a legal framework on recognition of studies and degrees of higher education in Africa with a view to promote regional cooperation through the academic mobility of students and scholars (UNESCO, 1981). The convention basically aims to encourage the advancement of knowledge, of achieving a constant and gradual improvement in the quality of higher education and of promoting economic, social and cultural development in each of the African countries and in the continent as a whole by strengthening and increasing the nations cooperation in matters related to education and the use of human resources (UNESCO, 2001). The Arusha Convention signatory countries declared their firm determination to cooperate closely with a view to coordinate the entrance requirements of the educational institutions of each country; to adopt terminology and evaluation criteria as similar as possible in order to facilitate the application of a system that ensures the comparability of credits, subjects of study and certificates, diplomas, degrees and other qualifications of HE; and to promote the widest and most effective use of human resources and avoid the brain drain (UNESCO, 2001).

Although three decades passed since the Arusha Convention ratified, to date there are only 20 signatory countries, and the result is too far from what was planned. This indicates that the convention failed to attract new signatory countries, and lacks to move forward. More than ever before, in recent years, Africa is engaged in the process of internationalization of higher education within the region. Acknowledging the multifaceted importance of the Convention, and taking the major changes that had taken place in higher education over the last three decades, UNESCO and the African Union Commission (AUC) revised the Arusha Convention in 2007 for a better ratification and application. Major African higher education

stakeholders such as Association for the Development of Education in Africa (ADEA) and Association of African Universities (AAU) also urged the full ratification and application of the Arusha Convention. Beside appropriate workable policies and commitment to regional cooperation on higher education, the application of the Convention demands an essential instrument that facilitates its activities. To this end, the introduction of CATS in African higher education has a significant importance in facilitating the proactive implementation of the Convention and various internationalization activities it promotes.

There are several CATS worldwide which are being used at national and regional levels. At regional level, the European Credit Accumulation and Transfer system (ECTS) is the common and successful CATS which also served as a point of departure for the development of CATS in other regions such as University Credit Transfer System (UCTS) for the University Mobility in Asia and the Pacific (UMAP), and SICA Sistema de Creditos Academicos (System for Academic Credits) in Latin America. ECTS is "a learner-centered system for credit accumulation and transfer based on the transparency of learning outcomes and learning processes" (European Commission, 2009, p. 11). It is based on the workload students need to achieve the expected learning outcomes, which is what a learner is expected to know, understand and be able do after successful completion of a process of learning (European Commission, 2004). ECTS has primarily been used as credit transfer system to transfer academic credit from one institution to another in a national or international context, and latter included the credit accumulation system. It mainly aims at enhancing transparency and comparability of study programs and qualifications, and facilitate the recognition of studies (European Commission, 2009). ECTS plays a significant role in facilitating the Lisbon Convention, and the Bologna Process which aims to increase transparency, increase academic mobility and employability, make higher education in Europe more competitive, and to improve recognition of qualification across Europe by creating European Higher education Area (Bergan, 2002).

The CATS for African higher education could be adopted from other regional CATS such as ECTS by taking the African context into consideration. Beside enhancing transparency and comparability of study programs and qualifications, and facilitating the recognition of studies, one of the main objectives of introducing CATS in African higher education is to promote various internationalization activities by facilitating proactive implementation of the Arusha

Convention. The introduction of CATS in African higher education system provides greater opportunities to internationalization of higher education in the region. But it is not without potential challenges and some risks. The potential opportunities, challenges, and some of the risks are discussed in the following sections.

4. Opportunities

4.1. Recognition of studies

Recognition of studies is identified as a major challenge for internationalization of higher education in Africa (IAU, 2009). There are diverse credit systems and study programs in each African country, and this leave institution with no system to measure and compare the learning outcomes achieved by students in another institution or another country. This makes the recognition of studies from another institution very difficult. Introducing CATS in African higher education enables learners to accumulate and transfer credits attached to the learning outcome achieved from one institution to another. It also facilitates the recognition of studies by enabling learning outcomes from different institutions to be measured and compared. Therefore, CATS could be an essential instrument to facilitate effective implementation of the Arusha Convention which in turn promotes various international activities within the region that are discussed below.

4.2. Academic Mobility

Compared with other regions, mainly Asia and Europe, African student population in the international landscape is very small. However, according to UNESCO Institute for Statistics (2006) report, tertiary students from sub-Saharan Africa are the most mobile in the world, with one out of every 16 studying abroad. According to the Black Spat Magazine (2008), which published the 2008 African International Student Census, France (35%) is by far the largest study abroad destination for African students followed by South Africa (11%), United States (11%), United Kingdom (9%) and Germany (7%). African students do not often study in another African country. Most African students study in countries outside the region. Within the region, South Africa is the favorite study abroad destinations for most African students, particularly students from sub-Saharan Africa (McLellan, 2009).

Lack of recognition of studies, poor quality of education, and lack of appropriate regulatory mechanisms are some of the challenges facing higher education in African, and thus affect the

academic mobility across the region. Since its foundation, UNESCO has carried out several activities to promote academic mobility. The adoption of the five regional conventions, including the Arusha Convention, is part of UNESCO's effort in promoting academic mobility (Beridze, 1998). Students decide to study abroad if they think the intuition provides quality education, and if what they learn and achieve will be recognized by their home institutions or national education system. By enabling the transfer of credits awarded in one program to another program, and facilitating the Arusha Convention, CATS could promote an easy academic mobility within Africa.

4.3. Internationalizing Curricula

Curriculum is the backbone of internationalization process (Knight, 1994). Internationalization activities, mainly recognition of studies, requires the transparency and comparability of study programs, and the suitability of the curricula for international students. Internationalization of curriculum refers to infusing international/intercultural dimension of higher education into course content and materials and into teaching-learning process (Association of Universities and Colleges of Canada, 2009).

Most study programs in African higher education institutions are developed from national points of view, and thus not effectively responded to curricula requirements for international students (Jowi, 2009). In the past few years, through collaborations, several institutions of higher education in Africa have engaged in curricular reforms that focused on quality, relevance and inclusion of international dimensions (Shabani, 2008). CATS could contribute to the process of internationalizing curricula by promoting transparency and comparability of study programs and qualification, and facilitating collaboration of higher education and the mutual recognition of studies. Internationalization of curriculum provides a means for African students to develop global perspectives and skills. It also makes study programs, trainings and qualifications more relevant to the region.

4.4. African Higher Education and Research Space (AHERS), and Harmonization of Higher Education Programs

Africa is in the process of creating AHERS. The concept of developing AHERS came out of the 2009 UNESCO World Conference on Higher Education. This concept has been supported by major African higher education stakeholders. AHERS would serve to promote quality assurance, academic mobility within Africa, recognition of certificates, diplomas and degrees,

and encourage the creation of joint degree programs at regional level (UNESCO, 2009). The other development process in African higher education is harmonization of higher education programs initiated by AUC. The rationale for harmonization is based on the belief that such an initiative will help to foster cooperation in information exchange, coordination of procedures and policies, attainment of comparability among qualifications, and possibly the standardization of curricula, so as to facilitate professional mobility for both employment and further study (African Union, 2007).

As mentioned earlier, most institutions of higher education in Africa have more collaboration with institutions outside Africa than institutions within Africa. The creation of AHERS and the harmonization of higher education programs encourage greater collaboration in higher education and research within Africa. This stimulates the pooling of financial and high level human resources across boundaries, enhances the weakened research capability and academic quality standard (Obama & Mwema, 2009), and improves the region's knowledge and research contribution to the world.

The realization of AHERS and harmonization of higher education programs requires closer cooperation between higher education institutions at sub-regional and regional levels. There are sub-regional higher education associations such as the Inter-University Council for East Africa (IUCEA) and Southern African Regional Universities Association (SARUA) which have already commenced the process of harmonization of higher education and collaboration among institutions within their respective sub-region. At regional level, the General Agreement on Trade in Services and the internationalization of higher education in Africa (referred to as the Accra Declaration) put the full ratification and implementation of the Arusha Convention as a strategy towards regional harmonization and closer cooperation in African higher education (Association of African Universities, 2004). Therefore, by facilitating the Arusha Convention and promoting sub-regional activities, CATS could play a significant role in promoting the harmonization strategy which potentially create AHERS, and achieve the African Union's vision that African higher education institutions become a 'dynamic force in the international arena' (African Union, 2007).

4.5. Quality Assurance

The issues of quality and quality assurance are of increasing importance in the higher education sector. Higher education institutions are very selective in establishing academic collaboration, and the quality of education provided by the other institution is one of the common criteria in selecting partner institutions. Despite the controversies in international academic quality standards, the quality of African higher education is very poor (Teferra, 2008), and this directly influences the academic collaboration between African higher education institutions and with institutions from other regions. Although significant progress has been made over the past few years, the system of quality assurance, which refers to the policies, attitudes, actions and procedures necessary to ensure that quality is being maintained and enhanced (Woodhouse, 1999), in Africa are not yet well established. As a result, higher education institutions in Africa are not well positioned to meaningfully contribute to or benefit from internationalization (Ogachi, 2009).

Each higher education institutions in Africa must have a system to assure the quality of education as the primary responsibility for quality assurance lies with each institution (European Commission, 2009). Most institutions of higher education in Africa have its own system of quality assurance with different criteria and procedures, and this resulted in great differences in the systems of quality assurance for higher education in African countries. Internationalization of higher education is challenging the institutional and national quality assurance systems and practices, because promoting various internationalization activities in Africa such as recognition of studies, academic mobility, and harmonization require common understanding of quality, and quality assurance system at sub-regional and regional levels. Accordingly, beside a number of sub-regional networks such as the Inter-University Council of East Africa (IUC-EA), the Higher Education Quality Management Initiative for Southern Africa (HEQMISA), the Conseil Africain et Malgache pour l'Ensignement Supérieur (CAMES), the Southern African Development Community (SADC), and the Southern African Regional Universities Association (SARUA), whose mandates include quality assurance in higher education, in April 2009 the African Quality Assurance Network (AfriQAN) was established with the view of providing assistance to institutions concerned with quality assurance in higher education in Africa. By facilitating and promoting different internationalization activities, among others recognition of studies, internationalization of curriculum, and collaboration in higher education, CATS could make the need for quality assurance become increasingly visible. It also complements institutions' quality assurance tools (European Commission, 2009) by making learning components comparable and measurable.

5. Benefits

In addition to providing the above mentioned opportunities, the introduction of CATS in African higher education would have various benefits such as connecting African higher education with the global higher education system, and lessening the challenges and risks of internationalization of higher education in Africa. As discussed earlier, CATS could facilitate mobility of students, mainly across the region, and this helps in solving some of the main challenges for internationalization such as visa problem. African students do not face the same visa problem to travel across the region as they face to travel to western countries. Already exiting sub-regional and regional political and economic agreements contribute to enhance the academic mobility across the region. By facilitating recognition of studies and academic mobility, which encourages African students to study within the region, CATS could also help to avoid/minimize racism which African students frequently face during their study in western countries (Teferra, 2008).

The tuition fee and living cost in other regions, mainly western countries are too expensive for African students. Scholarship from different organizations and academic institutions is the main source of finance for most African students who study abroad. Sometimes African students finance their living expenses and/or studies by working part time jobs which often affect their time invested on learning. This puts pressure on students to look first for study programs that have scholarship despite their main interest and priority. On the other hand, the tuition fee and living cost in Africa are comparably affordable, and this encourages students to study a program of their interest and priority in one of the higher education institutions across the region. Hence, introducing CATS in African higher education would facilitate and promote recognition of studies, mobility, curriculum and quality, which all in turn encourage students to study within Africa which is not as costly as other regions.

One-third of all African scientists live and work in developed countries (NASAC, 2009). This massive outflow of highly trained professionals, which is commonly known as brain drain, seriously weakens the academic institutions of many African countries (Altbach, 2002). The reasons that highly trained professional leaves their country is multifaceted, encompassing economic, political, social, cultural, and personal, and it varies from country to country,

individual to individual, time to time (Teferra, 2008). Recognizing the diverse reasons for brain drain, introducing CATS in Africa could have a minimal effect in retaining highly trained professionals who leave their university mainly due to economic and political reasons. However, by facilitating different internationalization activities such as easy mobility across the region, recognition of studies, collaboration, and harmonization, CATS could contribute to the effort of retaining some of the highly trained professionals who leave their university seeking a better working condition in other non-higher education institutions within the country/region or out of the region. By facilitating recognition of studies and promoting easy academic mobility within Africa, CATS could also facilitate and help to change the brain drain into a brain circulation within Africa.

African unity and development comes not only through political, economic, cultural and social collaborations among African countries but also academic collaborations between institutions of higher education across the region. Academic collaborations between institutions of higher education often follow sub-regional/regional declarations, conventions or agreements between countries. Thus, by facilitating different strategies such as harmonization of higher education programs, collaborations of higher education, the creation of AHERS, and the Arusha Convention, CATS could enhance African unity and development.

6. Challenges

There are several already existing collaborations, programs, and initiatives of higher education at sub-regional level which give space for the introduction of CATS in Africa. However, introducing CATS in a region like Africa is not an easy task. The differences in the education systems of countries makes difficult to introduce CATS at regional level.

The introduction and implementation of CATS requires unreserved commitment of different actors at different level that play different roles in the internationalization of higher education (Knight, 2008; Luijten-Lub, 2007). For example, higher education institutions and Ministry of Education (national level), Inter-University Council of East Africa (sub-regional level), African Union and AAU (regional level), and World Bank (international level) can play different roles in the international dimensions of higher education in Africa. It is the significant contribution and concerted efforts of all actors involved in the process of internationalization which makes CATS a reality, and thus facilitate and promote

internationalization of higher education in the region. However, getting the trust of different stakeholders on the importance of CATS and accommodating their various interests might be problematic.

The implementation of CATS in Africa demands financing various internationalization activities it facilitate and promote; otherwise, introducing CATS would be meaningless. Financing such multifaceted activities at institutional level would be difficult for most African countries as the public fund, which is main source of finance for most African higher education institutions, in almost all African country is low (Jowi, 2009).

7. Risks

By facilitating the Arusha Convention and various internationalization activities, which play a significant role in preparing skilled professionals that could easily fit with the labor market of the knowledge economy and society without any further input, CATS may partly contribute to increasing the brain drain. By facilitating various internationalization activities, it may also push institution to go too far and over emphasize on regionalization and internationalization that potentially causes unwanted homogenization of higher education which neglects the importance of and respect the diversity of systems, institutions, curricula, and languages.

Conclusion

The paper argued for the introduction of CATS in African higher education to facilitate and promote internationalization activities such as recognition of studies, academic mobility, internationalizing curricula, collaboration of higher education, harmonization of higher education programs, and creation of AHERS. Taking into consideration the region's focus on intra-regional dimension of higher education collaboration, and major benefits, challenges and rationales for internationalization, the introduction of CATS is a worthwhile strategy.

The arguments made in this paper focused on internationalization activities mainly within the region which may be understood as regionalization. This does not mean that Africa should isolate itself from the global higher education systems, and internationalization activities should be limited within the region. Rather, it calls for the introduction of an effective instrument that could facilitate various internationalization activities within the region which enables Africa to actively participate in the process of internationalization both at regional and global levels.

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