ENERGY AGRO-FOOD SYNERGIES WORKING PAPER

QUALITY ASSURANCE SYSTEMS IN AFRICAN PARTNER UNIVERSITIES WITHIN THE ENERGY AGRO-FOOD SYNERGY PROJECT

The University of Pavia and the University of Nairobi

ACRONYMNS AND ABBREVIATIONS

CHE   Commission for Higher Education

CUE   Commission for University Education

EAFS   Energy Agro-Food Synergies

HERQA   Higher Education, Relevance and Quality Assurance

HEIs   Higher Education Institutions

QA   Quality Assurance

QAS   Quality Assurance Systems

QM   Quality Management Systems

SUA   Sokoine University of Agriculture

TCU   Tanzania Commission of Universities Prescribed Procedures for Programme Approval

UON   University Of Nairobi

UQF   University Qualifications Framework

TABLE OF CONTENTS

ACKNOWLEDGEMENTS

1.0 INTRODUCTION

This report highlights the status and practice of higher education quality assurance (QA) in three partner African countries (Kenya, Tanzania and Ethiopia) and four partner/participating universities, namely University of Nairobi (Kenya), Sokoine University of Agriculture (Tanzania), Mekelle University and University of Addis Ababa (Ethiopia) by the period of review. It also captures the status of QA systems in existence at national and regional level.

1.1 Justification for Effective Quality Assurance Systems

The need to provide quality education in universities is critical for training of qualified manpower within an internationally-recognised framework of quality standards.

ON THE GLOBAL arena, the transition to a knowledge-based economy has brought about changes that have in turn created a demand for higher skill levels in most occupations. For Africa, the challenge to creating knowledge economies rests with the balance between improving the quality of tertiary education and simultaneously create a critical mass of highly trained people in appropriate fields (Materu, 2007).

East Africa has for the past ten years experienced a sporadic expansion of the number and enrollment levels in university institutions as triggered by the exponential increase in demand of access to higher education in each of the countries in the region, making safeguarding quality a matter of great concern among multidimensional stakeholders (IUCEA, 2013).

No country or its human capital can operate in isolation. Higher Education Institutions' (HEIs) 'products' (its graduates) are thrust into a competitive environment created by local, national, regional and international expectations and standards (Materu, 2007).

In addition, education has become a tradable commodity across borders world over, hence the need for international quality standards. To this end, efforts are being implemented within regional and international QA frameworks, as already realised in some regional groupings, particularly in Europe as part of the Bologna Process (IUCEA, 2013).

In a nutshell, Quality Assurance Systems (whether regional or international) promote: regional/international comparability and compatibility of higher education; regional/international student and staff mobility; internationally credible higher education area; credibility and academic excellence within regional/international socio-economic block set up; employability of graduates and labour mobility across borders; institutional accountability to national/international stakeholders (Mayunga, 2008).

1.2   Review Objectives

The purpose of the analysis was to enrich, support and enhance the *quality* of developed teaching modules within Energy Agro-Food Synergies collaborative project.

The broad objective of this analytical undertaking was to identify relevant, common/cross-cutting quality assurance systems and standards.

The specific objectives were to conduct a cross-comparative analysis of the national & institutional quality guidelines of African universities in order to identify key quality standards applicable for enriching the teaching modules and also identify/establish criteria for benchmarking the teaching modules at *international*/regional/ national/institutional levels

2.0   REVIEW METHODOLOGY

This report was based on a desk and web-based review of QA published information as well as questionnaire-based responses in all 3 partner Africa countries within EAFS Project. The QA Analysis involved review of documents at international, regional, national and institutional level. A questionnaire based on selected Standards and Guidelines was developed and electronically administered to Energy Agro-Food Synergies (EAFS) Partners from African universities in 2014.

Specifically, the analysis interrogated the following country-specific governing/regulatory bodies' QA documents:

- Commission for University Education (CUE, Kenya): Universities Standards and Guidelines (2014)
- Tanzania Commission of Universities (TCU, Tanzania): Prescribed Procedures for Programme Approval:
    o University Qualifications Framework (UQF)
- Higher Education Relevance and Quality Assurance
- Higher Education: Quality, Quality Assurance, the Concepts and its Elements and HERQA's Focus Areas (Ethiopia)

The QA analysis also interrogated QA-related documented systems for the 4 institutions, namely University of Nairobi (Kenya); Sokoine University of Agriculture (Tanzania); Mekelle University and University of Addis Ababa (Ethiopia).

The following documents were reviewed at Institutional Level:

- SUA Proposed Quality Assurance and Promotion Policy June 2011
- UON Quality Management Doc. No: UON/QM REV NO. 05
- UON Quality Assurance Directorate web docs (on-going)

- Addis Ababa University website QAS documents (e.g. Academic Standards and Quality Enhancement)
- Mekelle University web documents (though scarce at the time)

The Inter-University Council of East Africa (IUCEA) Quality Handbooks (Vol. 1-5) and 'ENQA Report on Standards and Guidelines for Quality Assurance in the European Higher Education Area' and 'Quality Procedures in the European Higher Education Area and Beyond' were reviewed at regional and international levels, respectively.

3.0   REVIEW FINDINGS

3.1   History and Status of Quality Assurance Systems at National level

3.1.1 Kenya

The Commission for University Education (CUE) was established under the Universities Act No. 42 of 2012 as the Government agency mandated to regulate university education in Kenya. It is the successor to the Commission for Higher Education (CHE) which was established by an Act of Parliament (Cap 210B) in 1985 to oversee and enhance the quality of university education in Kenya. The CUE endeavors to mainstream quality assurance practices in university education by encouraging continuous improvement in the quality of universities and programmes.

CUE Vision is stated as **"**Accessible, relevant and sustainable quality university education'' while its **Mission** is to "regulate and assure quality university education by setting standards and monitoring compliance to achieve global competitiveness." Its **Mandate** is "to promote the objectives of university education, by regulating and accrediting universities and programmes, among other functions" (Commission for University Education, 2015).

CUE has established Standards and Guidelines which are categorized into eight Schedules as follows:

- First Schedule: Institutional Standards
- Second Schedule: Standards of Physical Resources

- Third Schedule: Standards and Guidelines for an Academic Programme

- Fourth Schedule: Standards and Guidelines for Open, Distance and E-Learning

- Fifth Schedule: Standards and Guidelines for University Libraries

- Sixth Schedule: Standards for Technical Universities

- Seventh Schedule: Standards for Specialized Degree Awarding Institutions

- Eighth Schedule: Commission Forms

3.1.2 Tanzania

The Tanzania Commission for Universities (TCU) was established in 2005. The Commission's responsibility rests in the recognition, registration, accreditation and general quality management structure, monitoring and assurance system for all public and private higher education institutions, their programmes, courses, students, staff and awards.

TCU's **Vision** is to be a world-class higher education regulatory agency supporting systematic growth and excellence of university education in Tanzania with a **Mission** to promote accessible, equitable and harmonized quality university education systems that produce nationally and globally competitive outputs.

3.1.2.1 TCU Strategic Objectives

1. Improved quality assurance management systems
2. Improved equitable access and coordination of student admission
3. Improved student enrolment in science related programmes
4. Enhanced internal and external linkages and university support systems
5. Improved ICT resources and higher education management information systems
6. Established permanent TCU office premises
7. Enhanced diversification of sources of funding
8. Improved staff development activities, welfare and working environment
9. Enhanced mitigation against the HIV/AIDS pandemic

 (TCU web homepage, 2015)

3.1.3 Ethiopia

In 2003, The Ethiopian government established Higher Education Relevance and Quality (HERQA), as an autonomous agency through the Higher Education Proclamation (351/2003). It is one of the key organizations responsible for guiding and regulating the higher education sector in Ethiopia with the mandate to assure quality education provision in both private universities and private higher education institutions.

HERQA's **mission** is to ensure a high quality and relevant higher education system in Ethiopia. To this end it will assure stakeholders that accredited Higher Education Institutions (HEIs) are of an appropriate standard and that the programs of study offered by these HEIs are of an appropriate quality and relevance to the world of work and the development needs of the country.

HERQA's **vision** is to be a nationally and internationally recognized center of excellence in the safeguarding, accreditation and enhancement of standards and quality in higher education.

HERQA's operational objectives are to:

- Assess the relevance and quality of higher education offered by higher education institutions
- Ensure that the higher education curriculum supports the country's development needs
- Provide an efficient and transparent accreditation system
- Disseminate information regarding standards and programs offered by both Ethiopian and foreign HEIs (HERQA: (http://www.herqa.edu.et/about)

3.2 Quality Assurance Systems and Cooperation in the Regional Context

3.2.1 Inter-University Council for East Africa (IUCEA)

The IUCEA as we know it today was re-established as an institution of the current East African Community (EAC) following the Treaty for the Establishment of the current East African Community (The Treaty) that was signed on 30th November 1999. The Treaty entered into force on 7th July 2000 following its ratification by the original three Partner States, namely Republic of Kenya, Republic of Uganda, and United Republic of Tanzania. Other member countries have since joined the community. In 2009, the East African Legislative Assembly (EALA) enacted the IUCEA Act 2009, thereby integrating IUCEA into the EAC operational framework (IUCEA, 2011).

The IUCEA **Vision** as indicated in its Strategic Plan 2011-2016 is that IUCEA becomes an EAC strategic institution responsible for promoting, developing and coordinating human resources

development and research in the region. Its **Mission** is to promote strategic and sustainable development of higher education systems and research for supporting East Africa's socio-economic development and regional integration (IUCEA, 2011).

The Main Objectives of IUCEA are to facilitate networking among universities within and outside, of the East Africa region; provide a discussion forum on a wide range of academic and other matters relating to higher education in East Africa; facilitate maintenance of internationally com parable education standards in East Africa in order to promote the region's competitiveness in higher education (IUCEA, 2013).

3.3   Quality Assurance Perspectives

3.3.1 What is quality?

IUCEA defines quality as *"achieving our goals and aims in an efficient and effective way, assuming that the goals and aims reflect the requirements of all our stakeholders in an adequate way."*

HERQA (2005) defines 'quality' as: 'fitness for purpose;' 'meeting threshold or minimum standard; or 'compliance with set standards or zero error.'

CUE defines *"standard"* as a reference point against which different aspects of the institution and programmes are compared or evaluated for quality (2014).

IUCEA recognizes the complex nature of Quality Assurance (QA) in Higher Education, given the multiplicity of facets including multiple clients, products and stakeholders: government, employers, academic world, parents, students, and society. Quality is also multi-dimensional in nature. This implies that the concept of quality may be considered from the multiple perspectives: quality of the input, quality of process, and quality of output (IUCEA/DAAD, 2010).

"Quality is achieving our goals and aims in an efficient and effective way, assuming that the goals and aims reflect the requirements of all stakeholders in an adequate way" (IUCEA/DAAD, 2010). IUCEA acknowledges that quality is context-bound. Nevertheless, all universities recognize the need to play a role on the international arena. This reality requires that the institutions meet at least the basic standards applicable globally to higher institutions.

HERQA (2005) defines quality as 'fitness for purpose.' From HERQA's perspective, "quality education provision is assured provided every program launched in a department has defined

purpose that meets specific needs of the industry in particular and the nation's development agenda in general" (Teshome, 2013).

HERQA, like IUCEA, has adopted a tri-element quality model comprising of inputs, process and output (HERQA, 2005). An example of an input is curriculum whose design should include input from stakeholders' (students, parents, employers, government and the society in general. "Consulting government strategic and policy documents, feasibility study on the skills demanded by the industry help institutions to prepare a road map for the preparation of sound curriculum and launching of a program responsive to the industry" (Teshome, 2013).

Quality is context bound. To this end, institutions of higher education in different settings (e.g. those in highly developed/sophisticated regions) should be assessed in their unique context and may necessitate use of different criteria. Nevertheless, an institution, regardless of location may be judged in accordance with the goals (promises) made (IUCEA/DAAD 2010). This is echoed in other quality institutions like HERQA which states that the vision, mission and goals of a Higher Education Provider should guide its academic planning and implementation as well as bring together its members to strive towards a tradition of excellence (Teshome, 2013).

3.3.2 What is Quality Assurance?

Quality assurance is the whole range of actions and mechanisms that support quality in higher education (Teshome, 2013).

According to SUA, Quality assurance is *"A systematic and continuous attention to ensuring that conditions are in place for students to achieve standards set by the institution or the means by which an institution can guarantee that the standards and quality of education of its educational provisions are being maintained."*

3.4   QAS Operational Status at Institutional Level

In the UoN (Kenya), The Vice-Chancellor (VC) is responsible for QAS. The VC has appointed a Management Representative (MR) to be the officer in charge of maintenance and improvement of the QMS. The University Management communicates to the entire staff the importance of meeting customer requirements as well as statutory and regulatory requirements pertinent to the University services. UoN has established Quality Objectives to guide all the University employees in discharging quality service to customers and stakeholders. The UoN Applies the ISO 9001:2008 Standard Requirements in its QMS.

The UoN has seen the establishment of an internal Quality Infrastructure dedicated to quality, in both internally and externally focused viewpoints comprising of a Quality Assurance Board and Directorate of Quality Assurance headed by a Director appointed by the Vice-Chancellor.

The Mandate and Functions of the Directorate of Quality Assurance are outlined as:

1. Development and implementation of Quality Assurance Policy and Procedures for monitoring the students' progress, pass rates, dropout rates, and labour market perception of academic programmes and the graduates of the university;
2. Synthesis of topical Quality Assurance matters in higher education arising from debates and practices in the regional and global contexts and updating the Nairobi University community and management accordingly;
3. Updating the Deputy Vice-Chancellors responsible for the different areas of academic activities on the functioning of the Quality Assurance system as it relates to specific respective activities within the different divisions and the status of quality performance of the research, programmes and as well as programme delivery processes;
4. Development and implementation of mechanisms for periodic review and evaluation of the academic programmes;
5. Provision, facilitation and coordination of programme accreditations and re-accreditations where this is relevant in the profession involved;
6. Development and implementation of a system for quality assurance of the students' assessment and examinations;
7. Development and implementation of a system for quality assurance of the teaching facilities;
8. Development and implementation of a programme-level Self-Assessment framework;
9. Development and implementation of a Management Information system to provide quality related information from quality data;
10. Development and publication of the University of Nairobi Quality Handbook. (www.uobi.ac.ke)

At Sokoine University of Agriculture, QAS is managed by the Quality Assurance Bureau. The institution's Chief Executive Officer is in charge of the QMS through Quality Assurance Bureau. "In compliance with the TCU general quality assurance guidelines, the SUA Council at its *107th meeting held on 18th December 2009* approved the establishment of a Quality Assurance and Promotion Bureau (QAPB), whose main task is "…*to set quality standards and to monitor and evaluate whether SUA's performance is in line with set standards as per University's Vision, Mission and Corporate Strategic Plan (CSP)"(SUA, 2011).* SUA's Policy Objectives *(aligned to QA)* are to:

1. Mainstream quality in planning, implementation and evaluation at all levels.
2. Provide a framework for ensuring quality delivery of academic programs and other services offered within the University.
3. Propel SUA to greater achievement in development of knowledge, technology and scholarly attainment.
4. Contribute towards enhanced application of knowledge, technology and scholarship to solve current and emerging societal problems in the pursuit towards achieving national development goals (SUA, 2011).

In Addis Ababa University, Quality Assurance System is organized under Quality Assurance Directorate Office which is responsible for QMS. It is also responsible for curriculum development and evaluation within each department.

Academic Standards and Quality Enhancement Center exists whose overall purpose is "to guide, assist and coordinate university-wide efforts to improve student learning and enhance institutional effectiveness in the way of assuring and enhancing academic quality and standards." The following are the major tasks of the Office:

1. Develop guidelines and measures of internal systems of quality enhancement
2. Develop quality standards to undertake academic audit on periodic basis
3. Lead and monitor the development of strategies, policies and procedures, directing quality assurance and enhancement
4. Plan and lead academic programs review process; self-evaluation and peer review of an institution or programs towards acceptable standards of education are being met, maintained and enhanced
5. Coordinate and facilitate the academic review of teaching, learning, research and service
6. Support colleges, departments and centers on enhancement of quality of education
7. Coordinate and follow up the international accreditation of programs of the university when necessary (www.aau.edu.et)

At Mekelle University, Quality Assurance head is in charge of the QMS.

Responses from all four institutions indicated existence of formal mechanisms for the approval, periodic review and monitoring of their academic programmes and awards. Their quality assurance programmes include systems for regular feedback from relevant organizations and stakeholders in addition to formal programme approval procedures by an external body besides the institution (internal) itself.

4.0 DISCUSSION

While there was no absolute uniformity in the definition of 'quality' or quality assurance, the implied meaning was cross-cutting and concurs with points of view held by other global schools of thought.

Concept of quality is contextual. That notwithstanding, it is in the best interest that all universities play a role on the international arena, and hence need to embrace benchmarking.

All four Higher Education Institutions under review are operating under clear and elaborate regulatory and accreditation frameworks, developed under reputable leadership. In addition, all 4 institutions under review had documented QA Policies. The institutions have QA Directorates at different stages of development. These are strengths to build on and further 'energise' the institutional leadership into fully adopting and implementing QAS. The Quality Standards adopted by all 3 countries were crafted with reference to European Standards.

5.0 CONCLUSIONS

National Regulatory/Accreditation bodies have provided very elaborate 'Quality blueprints' (Standards & Guidelines) in all 3 countries. It is evident that all the 4 HEIs have the best intentions to operationalize Quality Assurance Systems at institutional level in line with their National Standards and Guidelines. This is evidenced by the setup of QAS Directorates at institutional levels.

While Quality and Quality Assurance aspects at institutional, national, regional or global level may not demand absolute definitional uniformity, it is still imperative that we have a shared idea about quality. To this end, stakeholders, including regulators and implementers, must endeavour to understand what the 'bottom line' for the threshold of quality is, and preferably with the input of our international partners. This will accrue positive returns through creation of credibility and academic excellence within regional/international socio-economic block set up, an environment for regional/international benchmarking of higher education, student and staff mobility within the regional and internationally; and labour mobility across borders, among other benefits.

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