

**TOWARDS ESTABLISHING
THE AFRICAN QUALIFICATIONS FRAMEWORK**

**By
A. B. RUTAYUGA**

The National Council for Technical Education (NACTE)
Dar es Salaam, Tanzania

A PAPER PRESENTED AT THE 21ST ANNUAL CONFERENCE OF THE
ASSOCIATION FOR EDUCATIONAL ASSESSMENT IN AFRICA (AEAA)
AUGUST 25TH – 30TH 2003
CAPE TOWN, SOUTH AFRICA

Towards Establishing the African Qualifications Framework

By: A.B. Rutayuga

The National Council for Technical Education (NACTE)

Dar es Salaam, Tanzania

Abstract

All over the world, many countries are looking for better ways of educating their people and organizing their education and training systems so as to meet the challenges of a competitive economic global environment spearheaded by ever-changing political, economical and technological advancements. The rapid technological developments have placed education systems under extreme pressure while trying to adapt and incorporate these changes in an effort to produce more creative, effective and demand driven work force.

The need for a shift in thinking on the purpose of education from education for employment to education for employability is indispensable. This will broaden learning pathways, which provide access to, mobility and progression within education, training and career paths. Establishment of the African Qualifications Framework (AQF) could be a strategy for realizing this change.

The purpose of this paper is to provide background information on the concept of Qualifications Framework to encourage African countries to establish National Qualifications Framework and ultimately be able to set up the African Qualifications Framework (AQF) that may assist in promoting learner mobility among African countries and elsewhere around the globe. The paper discusses studies on countries that have already established National Qualifications Frameworks, and then unveils the Qualifications Framework for technical education and training established by the National Council for Technical Education (NACTE) in Tanzania. The paper concludes by discussing the rationale for establishing the AQF.

1.0 INTRODUCTION

As a response to the increasing globalization and commodity-quality-driven pressures, countries are now developing national qualifications frameworks as a way of ensuring that qualifications delivered by Education and Training Institutions in their countries are within agreeable standards. Qualifications in this respect are specific descriptions of learning achievements written in the form of broad, field-related outcomes pursued through training programmes. Standards describe the skills, knowledge and values required for a person to perform effectively in the workplace. Course programmes are normally evaluated against set standards with a view to improvement. This development is seen as a way of increasing the mobility of graduates, and also a way of making it easier for education and training stakeholders to compare the qualifications they offer and to be able to recognize articulation possibilities within the country or abroad.

Many countries are thus looking for better ways of educating their people and organizing their education and training systems so as to meet the challenges of a competitive economic global environment spearheaded by ever-changing political, economical and technological advancements. The rapid technological developments have placed education systems under extreme pressure while trying to adapt and incorporate these changes in an effort to produce more creative, effective and demand driven work force.

Through the establishment of the Qualifications Frameworks, education and training institutions are expected to be able to broaden learning pathways, in order to provide access, mobility and progression within education, training and career routes.

Lack of agreeable standards for the different qualifications at different levels within the country means lack of nationally recognised and transferable set of qualifications. This brings about confusion to the various stakeholders in many ways. Students, for instance, find that the qualifications obtained in one institution are not recognised by another, frustrating their desire to progress from one cognate area of study to another or to higher levels of achievement. Students then find they have to repeat courses, which is costly to

them, their sponsors and to the country's resources. Employers, on the other hand, find that they are unable to judge potential employees or to determine the value of a course in developing an existing employee.

Undoubtedly, the qualifications which are not recognised nationally, suffer the consequence of not being recognised internationally. Now that the world is moving towards working as a global village and creating integrated society, on regional basis, this deficiency cannot be left to continue. A starting point for addressing these problems is for each country to establish the National Qualifications Framework (NQF) which should later be unified to form the African Qualifications Framework (AQF).

2.0 THE NATIONAL QUALIFICATIONS FRAMEWORK

Presently many countries globally are seriously engaged in structuring their national qualifications. The Qualifications certify the knowledge and skills a person has achieved through study, training, work and life experience. They are a measure of our 'intellectual capital' and increasingly important in a society where unskilled jobs have disappeared and continuous upskilling is required in all forms of work and in day-to-day life. Whereas the Qualifications are requirements for certification established by a recognised standard setting group, a standard is a nationally registered, coherent set of learning outcomes and associated performance criteria, and management information that supports delivery and assessment. A particular combination of standards as determined by a national standards setting body constitute a national qualification.

The National Qualifications Framework (NQF) constitutes the boundaries for qualifications at national level. The NQF encompasses all nationally registered qualifications and standards, together with the relationships among them. The framework provides a philosophical base for construction of a qualifications system. The NQF provides for a unified structure of nationally recognised and acceptable set of qualifications. It is a set of principles and guidelines by which records of learner

achievement are registered to enable national recognition of acquired skills and knowledge, thereby ensuring an integrated system that encourages life-long learning.

The NQF helps all learners, employers and education and training providers to participate and navigate the qualifications system. Through the National Qualifications Framework, learners can start at the level that suits them and then build up as needs and interests develop and change over time. The Framework assists learners to plan their career progression, at whatever stage they are in within their lives and when they are moving both within the country and overseas.

The NQF is usually designed to provide a coherent framework of competence-based or outcomes-based, quality assured standards and qualifications for the whole country, fit for the needs of the country and fully consistent with comparable standards internationally. The NQF is supposed to link together all nationally registered qualifications and should provide a highly visible, quality-assured national system of educational recognition promoting lifelong learning and seamless and diverse education and training system.

3.0 STUDIES ON NATIONAL QUALIFICATIONS FRAMEWORKS

The following chapter discusses experiences of the countries Australia, New Zealand, South Africa and the United Kingdom in establishing and implementing their National Qualifications Frameworks.

3.1 The Australian Experience

The Australian Qualifications Framework (AQF) is a unified system of twelve national qualifications in schools, vocational education and training (Technical And Further Education-TAFEs and private providers) and the higher education sector (mainly universities). The Framework was introduced on 1 January 1995 and was phased in over five years, with full implementation by the year 2000. The AQF operates under the

guidance of the AQF Advisory Board. The Board is responsible for protecting the AQF qualifications guidelines and promoting and monitoring national implementation of the AQF.

Work-based qualifications and academic qualifications are now part of a single system, allowing maximum flexibility in career planning and continuous learning. Registered Training Organisations are accredited to provide training and issue qualifications according to the requirements of the AQF. The key objectives of the AQF are to:

- (a) provide nationally consistent recognition of outcomes achieved in post-compulsory education;
- (b) help with developing flexible pathways which assist people to move more easily between education and training sectors and between those sectors and the labour market by providing the basis for **recognition of prior learning**, including credit transfer and work and life experience;
- (c) integrate and streamline the requirements of participating providers, employers and employees, individuals and interested organisations;
- (d) offer flexibility to suit the diversity of purposes of education and training;
- (e) encourage individuals to progress through the levels of education and training by improving access to qualifications, clearly defining avenues for achievement, and generally contributing to lifelong learning;
- (f) encourage the provision of more and higher quality vocational education and training through qualifications that normally meet workplace requirements and vocational needs, thus contributing to national economic performance; and
- (g) promote national and international recognition of qualifications offered in Australia.

In Australia, the **pathway** from university to vocational education and training qualifications is becoming increasingly popular as a way of gaining industry experience needed to increase employment opportunities.

An important aspect of the Australian Qualifications Framework is the development of closer connections between Vocational Education and Training (VET) and higher education. The development of structured arrangements to link qualifications across the sectors represents a key process in building closer inter-sectoral relationships. The AQF therefore makes a specific commitment to flexible, transparent and systematic learning pathways and to the removal of boundaries between educational sectors.

3.2 The New Zealand Experience

The New Zealand Qualifications Authority (NZQA) is the official government body responsible for the registration and accreditation of all educational establishments in New Zealand established under the Education Act 1989. The New Zealand Qualifications Authority (NZQA) was established to co-ordinate national qualifications and to ensure provision and quality of qualifications.

The Authority is directly responsible for the quality assurance of all education and training outside universities. It took over the functions of several agencies that had run schools, trades and vocational examinations. It also assumed new responsibilities, notably to develop a national qualifications framework and to approve non-university degrees.

The Authority delegates quality assurance functions (other than degrees) in polytechnics and colleges of education to the Association of Polytechnics in New Zealand (APNZ) and the Association of Colleges of Education in New Zealand (ACENZ) respectively. Quality assurance in university programmes is the responsibility of the New Zealand Vice Chancellors' Committee (NZVCC).

NZQA verifies the quality of a provider's education programmes by carrying out an external check of their quality systems and their effectiveness as a provider. The Authority charges the providers for all quality assurance activities, thus it operates on a cost-recovery basis.

Registration, approval and accreditation are the three main outcomes of the quality assurance process in New Zealand. **Registration** designates that a provider is capable of providing high quality education and training in a sound and safe learning environment.

Course approval provides the public with an assurance that courses *approved by NZQA* have been checked for quality; and **Accreditation** implies that a provider is capable of running an approved course or awarding Framework credits. A provider must be registered and accredited to be able to award credit for unit standards on the Framework.

National qualifications are packages of nationally recognised outcomes, which reflect a meaningful landmark or endpoint on a learning pathway. The purpose of a qualification is to formally recognise significant achievement and to clearly identify what a person knows and can do. The NZQA is committed to:-

- maintaining high quality and credibility of New Zealand's qualifications;
- working in partnership with industry, professional groups, and all stakeholders to ensure that New Zealand has a world-class qualifications system; and
- working with Industry Training Organisations (ITOs) as recognised standard setters in industry.

The NZQA holds the copyright for all registered national qualifications and unit standards.

3.3 The South African Experience

The National Qualifications Framework of South Africa was established in 1996 with an intention to enable learners to know what is expected of them, and help them plan their education, training and career development. In South Africa, the NQF is described as a corner stone of the National Human Resources Development Strategy. It is the basic reference point for both the education and skills development system.

The South African Qualifications Authority (SAQA) has the responsibility of overseeing the development and implementation of the NQF. All national education, training and professional qualifications offered by both public and private providers are being re-designed, registered and quality assured according to the principles and criteria approved by SAQA in terms of government policies.

The NQF is thus meant to be a powerful instrument to enable young learners and workers to achieve meaningful qualifications that have value and are fully recognised in the labour market. It is aimed at establishing a truly national learning system, covering both education and training from the most basic to the most advanced levels. The functions of the Authority are essentially twofold:

- (i) To oversee the development of the NQF, by formulating and publishing policies and criteria for the registration of bodies responsible for establishing education and training standards or qualifications and for the accreditation of bodies responsible for monitoring and auditing achievements in terms of such standards and qualifications;
- (ii) To oversee the implementation of the NQF by ensuring the registration, accreditation and assignment of functions to the bodies referred to above, as well as the registration of national standards and qualifications on the framework. It must also take steps to ensure that provisions for accreditation are complied with and where appropriate, that registered standards and qualifications are internationally comparable.

The SAQA Act clearly states that the NQF must be set up after consultation and in co-operation with those bodies and institutions responsible for education, training and certification of standards affected by the NQF.

SAQA is made up of representatives from education and training stakeholders in South Africa. The Authority advocates that knowledge creation is never the preserve of

narrowly-defined groups of ‘experts’; a concept which is addressed in the SAQA structures.

The NQF’s commitment to outcomes-based education and training as the means for bringing about systemic change in the nature of the education and training system in South Africa addresses the need for a balance between society’s needs and the needs of the individual. By describing national standards and qualifications in terms of learning outcomes through a participatory process, the NQF is placing the national demands in respect of quality, before the citizens of the country. This means:

- No longer can the nation tolerate a situation where the range of competence that exists between holders of the same qualification is so wide that the employers of the qualifying students cannot be sure of what the competences are;
- No longer can the nation tolerate discrimination against learners on the basis of perceptions of what their competences are;
- No longer can the nation afford to ignore global standards in qualifications. In short, the learning outcomes, standards and qualifications, must be clear so that there is no doubt as to what is expected of qualifying learners.

SAQA has two ‘arms’ i.e. Standards Setting and Quality Assurance. The sub-structures in the standards setting arm are the National Standards Bodies (NSBs) and the Standards Generating Bodies (SGBs), while the sub-structures in the quality assurance arm are the Education and Training Quality Assurance bodies (ETQAs).

3.4 The UK Experience

Two qualifications frameworks cover England, Wales and Northern Ireland, namely:

- The National Qualifications Framework covering qualifications awarded by bodies other than higher education institutions; and

- The Higher Education Qualifications Framework covering qualifications awarded by higher education institutions, designed to ensure consistent use of qualification titles.

3.4.1 The National Qualifications Framework

In the past the responsibility for accrediting qualifications in the UK was diffused. The result was that in many occupational areas a confusing array of qualifications and training courses had come into being. Since few of these had been developed to meet a national standard it was difficult for employers, workers and students to judge which were the most credible or relevant to specific needs.

Following the Education Act, 1997 the regulatory authorities for England, Wales and Northern Ireland are charged jointly with establishing a new national qualifications framework. The National Qualifications Framework (NQF) was introduced in 1998 to help learners, teachers, trainers, employers, universities and colleges to understand qualifications offered and to show progression routes. The national qualifications framework has two broad aims:

- to bring all national qualifications (other than academic ones at first degree, or equivalent, or higher) within a clear framework which is better understood and more accessible to the general public, and
- to provide a coherent mechanism for quality assuring courses and programmes of study leading to a formally awarded, or authenticated qualification.

It is a key part of the Government's policy for raising standards and levels of attainment in education and training and for supporting life long learning. The framework has two dimensions:

- categories of qualifications identifying the nature of the provision i.e. academic; vocationally-related and occupational, and

- levels of attainment, which is a broad measure of difficulty in terms of knowledge, skills and understanding required for the qualifications.

The national qualifications framework is a new way of organising and quality-assuring qualifications. It shows how different qualifications relate to each other and helps people to plot possible progression routes. It is like a map showing not only how qualifications fit together, but also how the quality of the qualifications within it is guaranteed. In short the National Qualifications Framework is designed to provide quality, coherence and comparability in general, vocational and occupational qualifications.

The framework is intended to:

- promote lifelong learning through clear routes of progression supporting the achievement of national targets;
- promote access, motivation and attainment in education and training;
- avoid unnecessary duplication and overlap between qualifications, while ensuring that there is sufficient breadth to meet the full range of needs;
- promote confidence in the relevance and integrity of national awards.

The regulatory bodies for England, Wales and Northern Ireland are respectively the Qualifications and Curriculum Authority (QCA), the Curriculum and Assessment Authority for Wales (i.e. Awdurdod Cymwysterau, Cwricwlwm ac Asesu Cymru – ACCAC), and the Council for Curriculum, Examinations and Assessment (CCEA). National Vocational Qualifications (NVQs) are the sole responsibility of QCA.

To be admitted into the National Qualifications Framework, qualifications must make appropriate and distinctive contributions to the framework and meet the needs of users. Qualifications have to conform to criteria defined by the regulatory authorities (QCA, ACCAC and CCEA) to gain admission.

Qualifications in the NQF will have to meet high standards. That is, in order to be approved for admission into the NQF each qualification must meet accreditation criteria relating to qualification design, relevancy and accuracy, and assessment arrangements. The aim of the accreditation process is to ensure that high-quality qualifications are available to meet the full range of national requirements through awarding bodies equipped to provide an appropriate level of quality assurance, service and support to candidates, users and learning providers.

Each qualification submitted for approval will be checked against the accreditation criteria to ensure that:

- The awarding body has appropriate quality assurance mechanisms in place;
- The awarding body can meet a common code of practice governing the way the qualification is assessed and awarded;
- The qualification includes opportunities to develop relevant key skills (essential skills needed to succeed in any kind of work: communication; application of number; information technology; problem solving; improving own learning and performance; and working with others);
- There is a clear rationale for the qualification and it will contribute to the quality and coherence of provision nationally;
- All occupational and vocationally related qualifications must have a unit structure and must be linked to the relevant national occupational standards, which set out real-world job skills defined by employers; and
- Each qualification is designed to be understood by employers, universities and colleges.

Once qualifications have been accepted into the framework, they will be checked regularly to make sure that they continue to meet these standards. The regulatory authorities are committed to keeping the NQF and criteria under review.

3.4.2 The Higher Education Qualifications Framework (HEQF)

The Quality Assurance Agency (QAA) for Higher Education was established in 1997. It has the responsibility of assessing the quality of higher education (HE) in England and Northern Ireland. The QAA established the HEQF for England, Wales and Northern Ireland in January 2001.

The purpose of the framework

Public confidence in academic standards requires public understanding of the achievements represented by higher education qualifications. The qualifications framework is designed to ensure a consistent use of qualification titles.

The main purposes of the framework are to:

- enable employers, schools, parents, prospective students and others to understand the achievements and attributes represented by the main qualification titles;
- maintain international comparability of standards, especially in the European context, to ensure international competitiveness, and to facilitate student and graduate mobility;
- assist learners to identify potential progression routes, particularly in the context of lifelong learning;
- assist higher education institutions, their external examiners, and the Agency's reviewers, by providing important points of reference for setting and assessing standards.

The number of levels in the framework

The higher education qualifications awarded by universities and colleges in England, Wales and Northern Ireland are at five levels; three of which are undergraduate and two are postgraduate.

At this juncture it is important to note that although the NQF is managed by the QCA, the responsibility for the upper levels of qualifications in the NQF is shared with the QAA. This, together with the assignment of credits to qualifications has made it possible to bridge the NQF with the HEQF.

4.0 QUALIFICATIONS FRAMEWORK FOR TECHNICAL EDUCATION AND TRAINING IN TANZANIA

The National Council for Technical Education (NACTE), established by the National Council for Technical Education Act, 1997 (No. 9 of 1997) came into operation on the first day of July 1997 by virtue of Government Notice No. 235 published on 20th June 1997.

The Act provides a legal framework for the Council to build an efficient National Qualifications Framework, which will ensure that products from technical institutions are of high quality and respond to the changing needs as well as new technological innovations.

In NACTE's context technical education is *“education and training undertaken by students to equip them to play roles requiring higher levels of skill, knowledge and understanding, and in which they take responsibility for their area of specialization”*. NACTE is thus a multi-disciplinary and multi-sectoral body.

The inception of NACTE was a deliberate move to fulfill a requirement of the Technical Education and Training Policy that of establishing a body to manage and coordinate all matters concerning technical education and training. These include programme validation, college accreditation, and standardization of programmes and awards which had serious inefficiencies.

Lack of a statutory body to manage and coordinate technical education and training in the country resulted into mushrooming of substandard technical education and training institutions which were offering low quality or substandard academic awards characterized by lack of uniformity in standards and consistent pattern.

Other problems were the lack of nationally recognised and transferable set of qualifications in tertiary education, duplication and/or under-utilization of resources allocated to tertiary technical education and training, and lack of a standard pattern of registration of institutions and accreditation for delivery of national awards or for the recognition and validation of courses.

The need to solve these problems led to the establishment of the Council in order to fulfill the following objectives:

- (a) To ensure overall coordination of technical education and training;
- (b) To bring order to the pattern of qualifications offered by non-university tertiary institutions by establishing a national system of awards;
- (c) To establish and institute systems of quality control and quality assurance in technical education and training;
- (d) To ensure the relevance of technical education and training to labour market demands;
- (e) To register and accredit both public and private technical education and training institutions capable of delivering courses;
- (f) To register technical teachers and qualified technicians; and

- (g) To ensure the establishment of a central database on technical education and training serving as a source of information for advising the Government on the strategic development of technical education and training.

These objectives are reflected in the vision and mission statements of NACTE. The **vision** of NACTE is *to develop a well-organized, efficient and effective system of national qualifications framework and to ensure the quality and excellence of the delivery of technical education and training, and the resulting output.*

The **mission** of NACTE is to:

- (i) *Establish policies and procedures which will set and maintain standards in technical education and training;*
- (ii) *Assist technical institutions to maintain the quality of education and training they provide; and*
- (iii) *Advise the Government on the strategic development of technical education.*

The NACTE Act (Section 11) empowers the Council to approve curricula, examinations, and awards for autonomous non-University Institutions and to conduct and set examinations for other non-autonomous institutions; confer certificates, diplomas, degree, and other related awards.

4.1 National Technical Awards (NTA)

NACTE has defined and established a range and levels of awards in technical education and training. The awards of NACTE are known as National Technical Awards (NTA). The NTA are competence based and are designed to testify that the holder of the award is able to apply competently the knowledge and skills described in the relevant occupational sector. The seven level system of the NTA is linked to a three level system of Vocational Education and Training Authority (VETA) known as National Vocational Training Awards (NVTA) so as to provide a ten level framework of vocational and technical

education qualifications. The NACTE's NTA Levels synchronized with VETA's NVTA system provide a Framework of Progression through the ten levels as shown below:

- (a) NVTA Level 1 (Trade Test Grade III).
- (b) NVTA Level 2 (Trade Test Grade II).
- (c) NVTA Level 3 (Trade Test Grade I).
- (d) NTA Level 4 (Pre-Technician Certificate)
- (e) NTA Level 5 (Technician Certificate).
- (f) NTA Level 6 (Ordinary Diploma).
- (g) NTA Level 7 (Higher Diploma).
- (h) NTA Level 8 (Bachelors Degree).
- (i) NTA Level 9 (Masters Degree).
- (j) NTA Level 10 (Doctor of Philosophy (PhD)).

Each Technical education qualification is assigned to a level in the above named Qualifications Framework. Each level in the Qualifications Framework has a broad competence descriptor. These descriptors set out the characteristic generic outcomes of learning for the level of award. They are intended to provide a general, shared understanding of each level and to allow broad comparisons to be made between qualifications. They are not intended to give precise or comprehensive statements with regard to particular subject areas and it is not expected that each qualification or programme should have all of the characteristics.

Table1: Competence Descriptors for National Technical Awards

NTA Level	Title of Award	Statement of Learning Outcomes			Statement of wider abilities developed
		<i>Knowledge and understanding</i> (Cognitive learning domain)	<i>Applied knowledge and understanding</i> (Psychomotor learning domain)	<i>Communication, ICT and numeracy skills</i> (Psychomotor learning domain)	<i>Autonomy, accountability and working in a team</i> (Affective learning domain)
		Characteristic outcomes of learning include the ability to:			Typically the holder of the qualification will be able to:
4	Pre-Technician Certificate	Demonstrate and/or work with: • A limited range of knowledge and cognitive skills • Basic knowledge in a subject or discipline which is mainly factual but has some theoretical component • Knowledge and understanding of basic processes, materials and terminology.	Carry out processes that: • Are limited in range • Are routine in nature (employed within closely defined contexts).	• Use a limited range of simple and familiar numerical and graphical data in familiar and everyday contexts • Carry out a limited range of tasks involving processing data and accessing information.	• Work alone or with others in directed activity • Work alone or with others on tasks with close supervision • Take no responsibility for the work or learning of others.
5	Technician Certificate	Demonstrate and/or work with: • Basic operational knowledge • Readily available information • Known solutions to familiar problems • Little generation of new ideas • Ability to determine operational problems and suggest tentative solutions.	Carry out processes that: • Are moderate in range • Are established, familiar or less familiar. • Offer a clear choice of routine responses. • Go beyond routine functions.	• Produce and respond to simple written and oral communication in familiar, routine and non-routine contexts • Select and use standard/basic IT applications to obtain and process information.	Work alone or with others in directed activity: • Under general supervision and quality control • With some responsibility for quantity and quality • With possible responsibility for guiding others.
6	Ordinary Diploma	Demonstrate and/or work with: • basic theoretical knowledge • Interpretation of available information • Discretion and judgment • A broader range of known responses to familiar and non-familiar problems. • An awareness of the evolving or changing nature of knowledge and understanding, including demonstrating ability to react to such changes.	Carry out processes that: • Require a range of well developed skills • Offer a significant choice of procedures • Are employed within a range of familiar and unfamiliar contexts.	• Use a range of forms of communication effectively in both familiar and new contexts. • Use standard IT applications to process and obtain a variety of information and data. • Use a range of numerical and graphical analysis skills.	Work alone or in a team in directed activity with some autonomy: • Under general supervision and quality checking • With significant responsibility for the quantity and quality of output • Managing limited resources within defined areas of work. • With possible responsibility for the output of others.

NTA Level	Title of Award	Statement of Learning Outcomes			Statement of wider abilities developed
		<i>Knowledge and understanding</i> (Cognitive learning domain)	<i>Applied knowledge and understanding</i> (Psychomotor learning domain)	<i>Communication, ICT and numeracy skills</i> (Psychomotor learning domain)	<i>Autonomy, accountability and working in a team</i> (Affective learning domain)
		Characteristic outcomes of learning include the ability to:			Typically the holder of the qualification will be able to:
7	Higher Diploma	Demonstrate and/or work with: • A broad range of knowledge base incorporating some core theories, principles and concepts • Analytical interpretation of information • Informed judgment. • An outline knowledge and understanding of research and equivalent scholarly /academic processes. • A range of innovative responses to concrete but often unfamiliar problems.	Carry out a range of processes that: • Require a wide range of technical or scholastic skills. • Offer a considerable choice of procedures. • Are employed in a variety of familiar and unfamiliar contexts. • Require basic principles of enquiry, development or investigation into professional level problems and issues.	• Use a range of standard applications to process and obtain data • Use a range of established techniques to initiate and undertake critical analysis of information, and to propose solutions to problems arising from that analysis; • Use and evaluate numerical and graphical data to measure progress and achieve goals/ targets.	Work alone or with others in self-directed activity: • Under broad guidance and evaluation. • With complete responsibility for quantity and quality of output. • With possible responsibility for the quantity and quality of the output of others in defined areas. • Exercising some initiative and independence in carrying out defined activities at a professional level.
8	Bachelors Degree	Demonstrate and/or work with: • A broad knowledge base with substantial depth in key subject areas. • A critical understanding of a selection of the principal theories, concepts and terminologies. • Analytical interpretation of a wide range of data. • Synthesize and evaluate information pertaining to problems and data in the subject area and general practice.	Carry out processes that: • Require a wide range of specialised technical or scholastic skills • Involve a wide choice of standard and non-standard procedures • Are employed in a variety of routine and non-routine contexts. • Practice routine principles of enquiry and/ or research. • Determine appropriate methods and procedures in response to a range of concrete problems with some theoretical elements.	• Effectively communicate information, ideas, problems and solutions to both specialist and non-specialist audiences; • Communicate with professional level peers, senior colleagues and specialists. • Use a range of IT applications to support and enhance work. • Interpret, use and evaluate a wide range of numerical and graphical data to set and achieve goals/ targets.	Work alone or with others in self-directed and sometimes directive activity: • Within broad general guidelines or functions • With full responsibility for the nature, quantity and quality of outcomes • With possible responsibility for the achievement of group outcomes. • With possible responsibility for allocation of resources, policy, planning, execution and evaluation • Exercising autonomy and initiative in some activities at a professional level. • Delegating functions to technicians and peers.

NTA Level	Title of Award	Statement of Learning Outcomes			Statement of wider abilities developed
		<i>Knowledge and understanding</i> (Cognitive learning domain)	<i>Applied knowledge and understanding</i> (Psychomotor learning domain)	<i>Communication, ICT and numeracy skills</i> (Psychomotor learning domain)	<i>Autonomy, accountability and working in a team</i> (Affective learning domain)
		Characteristic outcomes of learning include the ability to:			Typically the holder of the qualification will be able to:
9	Masters Degree	Demonstrate and / or work with: • A critical understanding of the principal theories, concepts and principles. • Extensive, detailed and critical knowledge and understanding in one or more specialisations, much of which is at or informed by developments at the forefront. • Critical awareness of current issues in a subject or discipline and one or more specialisations. • Knowledge that covers and integrates most of the principal areas, features, boundaries, terminology and conventions of a subject or discipline. • Demonstrated mastery of the subject area. • Plan and carry out research/project work to internationally recognised standard demonstrated by the completion of a substantiated research paper or dissertation.	• Deal with complex issues both systematically and creatively. • Make sound judgments in the absence of complete data and communicate their conclusions clearly to specialist and non-specialist audiences. • Continue to advance their knowledge and understanding, and to develop new skills to a high level; and will have the qualities and transferable skills. • Have independent learning ability required for continuing professional development.	• Effectively communicate information, ideas, problems and solutions to both specialist and non-specialist audiences • Use a wide range of software to support and enhance work at this level and specify new software or refinements/improvements to existing software to increase effectiveness. • Undertake critical evaluation of a wide range of numerical and graphical data. • Use a range of established techniques to initiate and undertake critical analysis of information and propose solutions to problems arising from that analysis.	• Exercise ability of initiative, creativity and personal responsibility. • Exercise substantial autonomy and initiative in professional and equivalent activities. • Take significant managerial or supervisory responsibility for the work of others in defined areas of work • Take continuing account of own and others' roles, responsibilities and contributions in carrying out and evaluating tasks • Work in support of current professional issues in accordance with current professional and/or ethical codes or practices • Demonstrate originality or creativity in the application of knowledge, understanding and practice.

NTA Level	Title of Award	Statement of Learning Outcomes			Statement of wider abilities developed
		<i>Knowledge and understanding</i> (Cognitive learning domain)	<i>Applied knowledge and understanding</i> (Psychomotor learning domain)	<i>Communication, ICT and numeracy skills</i> (Psychomotor learning domain)	<i>Autonomy, accountability and working in a team</i> (Affective learning domain)
		Characteristic outcomes of learning include the ability to:			Typically the holder of the qualification will be able to:
10	Doctor of Philosophy (PhD)	Demonstrate and/or work with: • A critical understanding of the principal theories, concepts and principles • A critical, detailed and often leading knowledge and understanding at the forefront of one or more specialisations. • Knowledge and understanding that is generated through personal research or equivalent work, which makes a significant contribution to the development of the subject /discipline, judged by independent experts applying international standards.	• Employ skills, practices and/or materials which are specialised or at the forefront of a subject /discipline • Critically evaluate arguments, assumptions, abstract concepts and data (that may be incomplete), to make judgments, and to frame appropriate questions to achieve solution-or identify a range of solutions to a problem • Have the learning ability needed to undertake appropriate further training of a professional or equivalent nature • Use a few skills, practices and/or materials which are specialised, advanced, or at the forefront of a subject/discipline • Practise in a range of professional level contexts which include a degree of unpredictability and/or specialisation.	• Effectively communicate information, ideas, problems and solutions to both specialist and non-specialist audiences. • Communicate with professional level peers, senior colleagues and specialists. • Communicate at the standard of published academic work and/or critical dialogue and review with peers and experts in other specialisations. • Interpret, use and evaluate a wide range of numerical and graphical data to set and achieve goals/targets.	• Exercise autonomy and initiative in professional or equivalent activities • Take full responsibility for own work and /or significant responsibility for the work of others. • Demonstrate leadership and originality in tackling and solving problems and issues. • Work in ways which are reflective, self-critical and based on research. • Deal with complex ethical and professional issues in accordance with current professional and/or ethical codes of practices. • Recognise the limits of these codes and seek guidance where appropriate. • Deal with complex ethical and professional issues and make informed judgments on issues not addressed by current professional and/or ethical codes and practice.

In establishing the National Qualifications Framework (NQF) in Tanzania, efforts are being made for the three regulatory bodies which are VETA in charge of vocational education and training, NACTE responsible for technical education and training, and Higher Education Accreditation Council (HEAC) responsible for Universities and their affiliated Colleges, as well as the Ministry of Education and Culture which plays a crucial role in preparing students for tertiary education and some categories of teachers to enable

them to put up a sound proposal for establishing the National Qualifications Framework in Tanzania.

4.2 Core Functions of the National Council for Technical Education

In order to fulfill the objectives that were mandated to NACTE the following functions had to be undertaken:

4.2.1 Registration and Accreditation of Technical Institutions

Registering and accrediting technical education and training institutions, both public and private, are among the core functions of the Council.

The main purpose of *registration* is to determine whether an institution seeking registration is a legal entity and that it has appropriate resources to enable the same conduct training sustainably.

Accreditation is essentially a quality assurance mechanism that is aimed at ensuring that institutions providing specific training have in place a system for attaining the required quality of the output. In NACTE's context accreditation is defined as *approval or certification granted by the relevant authority representing the interest of both the public and students, to an institution, on account of having programmes and quality assurance system that ensures the provision of set qualification(s) and educational standard(s) for a particular period of time*. In the case of NACTE, accreditation is renewable after every five (5) years.

The main purpose of accreditation is to:

- (a) Assure the educational community, the general public, and other stakeholders that an institution:

- (i) Has clearly defined objectives appropriate to technical education and training;
 - (ii) Has established conditions under which training achievements can reasonably be expected;
 - (iii) Is so organised, staffed, well supported and that it can be expected to continue to do so; and
 - (iv) Meets educational and training standards demanded by the relevant occupational sector.
- (b) Encourage institutional development and improvement through self study and periodic evaluation by qualified peer professionals.
 - (c) Develop and use NACTE standards to assess and enhance educational quality and institutional performance.
 - (d) Promote interchange of ideas among public and private institutions through various fora such as annual meetings, publications and other forms of information dissemination.
 - (e) Protect institutions against encroachments that might jeopardise their educational effectiveness or academic freedom.

4.2.2 Recognition of Departments in Technical Institutions

Recognition in the accreditation context refers to a formal acceptance, by NACTE, of a department as being capable of evolving, designing, delivering or managing a course programme to the required standard. Thus *Recognition is certification, by NACTE, that a department in an institution has the capacity to deliver a curriculum devised or approved by NACTE.*

A technical institution applying for initial accreditation must have departments that can be recognized.

4.2.3 Approval of Curricula in Technical Institutions

Accreditation is fundamentally centred on programmes which should lead to quality assured qualifications. Curricula for use in technical institutions are either prepared or approved by NACTE. Autonomous technical institutions develop their own curricula, however these are also validated/approved by NACTE to ensure their quality after obtaining institutional approval. In order to be both internally and externally (by NACTE) approved a programme, has to meet labour market demands and the needs of the stakeholders (i.e. employers, students, teachers, parents, and professional and regulatory bodies).

4.2.4 Quality Assurance in Technical Institutions

NACTE is mandated to set standards and lay down guidelines regarding quality control and quality assurance. The aim is to promote public confidence regarding quality of provision and standards of awards in technical education and training institutions. One of the conditions for a technical institution to acquire accreditation is to have in place a quality system. This is a structured system that describes the policies and procedures for ensuring that work processes, products, or services satisfy stated expectations or specifications. All technical institutions accredited by NACTE are required to establish and implement a quality system.

4.2.5 Registration of Technical Teachers and Qualified Technicians

The quality of provision in technical institutions depends, among other things, on the quality of the teaching staff and other personnel. It is therefore important that NACTE establishes and maintains a register of qualified technical teachers and qualified technicians.

5.0 RATIONALE FOR ESTABLISHING THE AFRICAN QUALIFICATIONS FRAMEWORK (AQF)

Many countries are nowadays viewing the purpose of education as a means of developing the ability to adapt acquired skills to new working environments, rather than was originally conceived as a means for developing the ability to do a specific job. The development of the ability to adapt acquired skills to new working environments is realized through the establishment of the NQF which is a bold and new approach to education and training that encourages life-long learning. Progressive education and training systems must therefore be able to support the notion of a demand driven workforce.

When learners know that there are clear learning pathways, which provide access to, and mobility and progression within education, training and career paths, they are more inclined to improve their skills and knowledge; as such improvements increase their employment opportunities.

The rationale for establishing the African Qualifications Framework (AQF) is supported by its many advantages including the ability to:

- (a) Promote confidence and credibility in the relevance of qualifications from African countries.
- (b) Establish a standard pattern of continental system of awards.
- (c) Facilitate creation of quality control and quality assurance systems in education and training institutions.
- (d) Facilitate mobility of skilled labour within member countries of the African Union and beyond.
- (e) Promote life-long learning through clear pathways of career progression within the Africa bloc.

- (f) Establish comparability of African qualifications standards with those of developed world and other developing countries to ensure international competitiveness.

Undoubtedly, to bravely face the global development challenges, the African countries will need to establish the African Qualifications Framework, which will consequently enable its people to be equipped with the necessary knowledge, skills and values to adjust readily to multiple career changes. The formation of the African Qualifications Framework will provide greater opportunities for students, employers and entrepreneurs in Africa. The increased knowledge and skills base of the African workforce has a wider implication including the enhancement of the functional and intellectual capability of the African nations, and proliferation of the chances for success in the global community.

Through the African Qualifications Framework people in African countries whose careers have been blocked because their prior knowledge and skills, acquired either informally or through work experience, have not been recognised for admission to further learning opportunities, or for employment purposes will have the access to mobility and quality within education and training.

Cognisance of the various African regional groupings such as the Southern African Development Community (SADC), African Union (AU), New Partnership for African Development (NEPAD), East African Cooperation (EAC), Economic Community of West African States (ECOWAS), Association for Educational Assessment in Africa (AEAA) etc. which aim at promoting regional cooperation and integration could be used as a platform for selling the concept of the African Qualifications Framework. Protocol aiming at achieving equivalence, harmonisation and standardisation of the education and training systems in the region could be drawn and implemented in order to remove existing disparities in the education and training systems of the member states of the African region.

Technical Committees in the various areas of Education and Training could be established with the purpose of developing and recommending policy guidelines,

instruments, structures and procedures that would facilitate equating, harmonisation and eventual standardisation of accreditation and certification of qualifications. The Technical committees could be charged with the responsibility of implementing objectives related to the establishment of the African Qualifications Framework, such as to:

- (g) Strengthen national assessment and accreditation structures, systems and procedures.
- (h) Facilitate the development and implementation of national qualifications frameworks.
- (i) Develop the African Qualifications Framework on the basis of the national qualifications frameworks.

From the aforementioned reasons it is apparent that the idea of establishing a unified African Qualifications Framework is a necessity and therefore need to be supported by all African countries for it will enable the African Qualifications to win a wide international acceptance.

6.0 CONCLUSION

This paper has attempted to underscore the need for establishing the African Qualifications Framework for the African Countries. The African Qualifications Framework (AQF) should be seen as a base in seeking integration of all quality assured qualifications that will eventually help in promoting learner mobility and life-long learning amongst the African States.

A way forward to establishing the AQF should consider a number of factors including the following:

- (i) Need for a political will and member countries thrust, backed by stakeholders support to establish the same.

- (ii) Need to study the international experience on national qualifications frameworks.
- (iii) Need to spell out in clear terms the AQF objectives.
- (iv) Need to consider the existing strategies, resources and regional plans for human resource development, skill development and education as inputs to the implementation of the AQF.
- (v) Need to define the crucial implementation stages and responsible parties at all levels of implementation.

In order to guarantee a successful implementation of the AQF, consideration of clear criteria that are compliant to flexible interpretation must be encouraged during the design of qualifications and systems of quality assurance.

References

- [1] Ed. CIL, (1997), *“Employment and Technical Education Studies”*, Draft Report - Phase I Submitted to the Government of the United Republic of Tanzania.
- [2] Frary R. B. (2001), *“Integrity in Graduate Study”*, Virginia Polytechnic Institute and State University, USA.
- [3] International Labour Office (1990), *“ISCO-88 International Standards Classification of Occupations”*, Geneva
- [4] NACTE (1996), *“Technical Education and Training Policy”* The National Council for Technical Education, Dar es Salaam.
- [5] NACTE (2000), *“The NACTE Act, 1997”* The National Council for Technical Education, Dar es Salaam.

- [6] NACTE (2001), *“Procedures for Registration of Technical Education and Training Institutions”* The National Council for Technical Education, Dar es Salaam.
- [7] NACTE (2002), *“Procedures for Accreditation and Recognition in Respect of Technical Institutions Under NACTE”* The National Council for Technical Education, Dar es Salaam.
- [8] NACTE (2003), *“Procedure for Setting Standards of the National Technical Awards for Technical Institutions Under NACTE”* The National Council for Technical Education, Dar es Salaam.
- [9] NACTE (2003), *“Procedures for Quality Control and Quality Assurance for Education and Training”* The National Council for Technical Education, Dar es Salaam.
- [10] NACTE (2003), *“Procedures for Curriculum Development, Review, Approval and Validation”* The National Council for Technical Education, Dar es Salaam.
- [11] NACTE (2003), *“Procedures for Registration of Teachers and Qualified Technicians Supporting the Teaching Process”* The National Council for Technical Education, Dar es Salaam.
- [12] The World Bank Group (2002), *“The Nature of Public Examinations”*, The World Bank Group.
- [13] [www. aqf.ed.au](http://www.aqf.ed.au)
- [14] [www. detya.gov.au](http://www.detya.gov.au)
- [15] [www. educationforum.org.nz](http://www.educationforum.org.nz)
- [16] [www. hw.ac.uk](http://www.hw.ac.uk)
- [17] [www. ita.org.za](http://www.ita.org.za)

- [18] www.jupmet.org.za
 - [19] www.nankir.com
 - [20] www.nicats.ac.au
 - [21] www.nzqa.ac.nz
 - [22] www.nzqa.govt.nz
 - [23] www.qaa.ac.uk
 - [24] www.saqa.org.za
 - [25] www.skillsafrica.com
 - [26] www.tolicollege.com
 - [27] www.ukcge.au.uk
-