

Qualifications Frameworks: Implementation and Impact

**Background case study on Botswana
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Foreword

This report was prepared as one in a series of background studies under an international research project conducted by the ILO Skills and Employability Department in partnership with the European Training Foundation on the implementation of National Qualifications Frameworks (NQFs) and their use and impact. The individual country studies and the subsequent cross-country comparative analysis strengthen the empirical foundation for eventual policy advice on whether and, if so, then how to introduce a qualifications framework as part of a strategy to achieve countries' wider skills development and employment goals.

Whether the emphasis is on increasing the relevance and flexibility of education and training programmes, easing recognition of prior learning, enhancing lifelong learning, improving the transparency of qualification systems, creating possibilities for credit accumulation and transfer, or developing quality assurance systems, governments are increasingly turning to qualifications frameworks as a policy tool for reform. Despite the growing international interest, there is very little empirical research about the actual design process, implementation and results of NQFs as an approach to reform skills development systems where it has been attempted.

This report on Botswana is one of a dozen studies of countries around the world undertaken to examine the extent to which qualifications frameworks are achieving policy objectives and which types of qualifications frameworks seem most appropriate in which contexts. The case studies were conducted through two stages of field work. The first stage generated a description of the qualifications framework, the design process, its objectives and the existing system of qualifications that it was intended to reform. For the second stage, the focus was on implementation, use, and impact of the qualifications framework, including asking employers, training providers, workers, and government agencies about the extent of their use of the qualifications frameworks and the extent to which they felt it was serving their needs.

In addition, five case studies on the early starter qualifications frameworks (Australia, the English NVQs, New Zealand, Scotland, and South Africa) were written on the basis of existing research and documentation only, and published as an Employment Working Paper (Allais, Raffae, Strathdee, Wheelahan, and Young, ILO 2009).

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Dr. Stephanie Allais, as Research Associate in the ILO Skills and Employability Department, supported the group of researchers in preparing the country studies and wrote the synthesis report (*The implementation and impact of National Qualifications Frameworks: Report of a study in 16 countries*, 2010) which also explains the methodology set out for the country studies. I would also like to thank Judy Harris for editing the case study.

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Summary

The discourse about vocational education and training (VET) has become globalized. This study enters this discourse with specific reference to the creation of the Botswana National Vocational Qualifications Framework. The research is premised on the hypothesis that a systematically created qualifications framework will enable Botswana to meet its VET goals, which include increasing access to training, increasing job opportunities, and reduction of poverty. Data were collected from documents, interviews, and field notes based on observation and interaction with employers, trainers, trainees, and workers in different sectors. Analysis of the data revealed indicators about sustainability of the new framework. Some positive points were noted, for example, that the framework has introduced useful ideas for the unification of national efforts in VET. On the negative side, the framework is facing challenges to do with buy-in from some of the stakeholders, more specifically when it comes to acceptance and implementation of unit standards. Whilst it may be too early to make a definitive judgment of the failure or success of the framework regarding the VET goals outlined above, the odds seem to be substantially against the successful implementation of the framework.

Acknowledgements

We wish to acknowledge the support and contribution made to the study by the parties involved in the creation of the new Botswana National Vocational Qualifications Framework. The officers from the Botswana Training Authority made a significant contribution by giving inside information about the QF. Employer organizations and providers provided their perceptions about the impact of the QF, following their participation in its formation. Taskforce team members gave useful insight into the strengths and weaknesses of applying the unit standards approach, and providers echoed this. We also wish to acknowledge the contributions made by those who allowed us to interact with them when we conducted oral interviews.

1. Introduction

According to Young and Allais (2009), a growing number of countries are introducing qualification frameworks (QFs) following a common definition of outcomes, level descriptors, and a set of occupational or knowledge fields. Botswana has been no exception to this trend. The passing of the Vocational Training Act (1998) led to the creation of the Botswana National Vocational Qualifications Framework (BNVQF). Prior to that, there had been no QF. It is noteworthy that even to date, there is no inclusive national qualifications framework (NQF) in place. Typically, an NQF would, according to Allais (2009, p.1) include “all forms of learning at all levels”. The BNVQF is best conceptualized as a sectoral QF on account of its focus on vocational education and training (VET). It actually stands on its own without any links to general and higher education.

The present study, the first of its kind to reflect on the three phases of the QF (introduction, capacity building and implementation), investigates the progress of the QF to date. This is accomplished by critically examining evidence, thereby establishing the extent to which aspirations and claims have been met.

The Government of Botswana has had a policy on vocational education (VET) and training since independence. The Department of Vocational Education and Training (DVET) played a coordinating role without any framework to guide it. Training providers and industry did not have any binding relationship, and training was largely institution-based. The creation of the BNVQF arose from a belief by the Government that there was a mismatch between acquired skills and needs dictated by economic circumstances. The present study, therefore, aims in part to establish the extent to which the new QF is capable of addressing the perceived need.

Botswana was faced with a difficult decision of determining what framework would best suit its circumstances. It had to either borrow or learn from countries which already have qualification frameworks in place. Commenting on difficulties in this regard, Johanson and Adams (2003) are of the opinion that this should not be done *ad hoc*. A similar view is echoed by Young (2005, p. 8) who argues that a qualifications framework “is a revolutionary, not an evolutionary change”.

For Botswana, alternatives for a suitable QF came from developed countries such as the United Kingdom (UK) or New Zealand. Donor agencies and consultants who rendered funds and technical support also came from different backgrounds. National bodies tasked with development of the new framework, therefore, needed to be both critical and analytical as the process of development unfolded.

A distinction is made between rhetoric about the suitability of a framework and what it actually achieves in real time and environment. The research conducted in the Botswana scenario had two aims in mind; the first one being to capture the structure of the new BNVQF as reflected in documentary evidence and from observation. The second was to critically examine the sustainability of the framework by looking at the initiation, capacity building, implementation and evaluation stages. Evaluation of the

QF will encapsulate both positive and negative evidence of its impact. Discussion will reflect what is typical and distinctive about the BNVQF.

2. The background

The Republic of Botswana is a land-locked country in Southern Africa. It gained independence on 30 September 1966. It is bordered by South Africa to the south and to south east; Namibia to the west; Zambia to the north; and Zimbabwe to the north east. Despite its vastness (582,000 square kilometres), Botswana is sparsely populated with a population of 1.7 million according to the 2001 census (Republic of Botswana, 2003). The country is home to a relatively stable political system and has since independence, maintained a stable democracy (Holm and Molutsi, 1989). Botswana's economy is one of the most successful in Africa, rated second fastest growing in the world (UNESCO, 1998); dominated by an expanding service sector, a thriving manufacturing industry and world-renowned mining (especially diamonds). As Tau (2006, p. 7) observes, this has been the result of conscious effort from the mid 1970s to "diversify its economy away from cattle and marginal agriculture with the discovery of diamonds and the development of nickel-copper matte, soda ash, coal, and investment in tourism".

The country's demographics, which impact on VET, have shown some dynamism over the years. According to the World Bank (1993), at independence, 96 per cent of the population lived in rural areas, while only 4 per cent lived in urban areas. By the 1990s, the latter figure had increased to 30 per cent. The number of people in formal employment dramatically rose from 14,000 to 222,700 in 2005. Notwithstanding impressive economic growth, income distribution is for the majority, negatively skewed, and the problem of unemployment rampant among the youth who according to Tau (2006) constitute 60 per cent of the population.

The Government of Botswana, like many developing countries, is thus continuously grappling with the socio-economic challenges of youth unemployment and their migration to cities and towns, soaring crime, school drop-out and poverty alleviation. Unemployment reached a record high of 34.6 per cent by 1998 (Republic of Botswana, 1998). Currently, 30 per cent of the population lives below the poverty datum line (Republic of Botswana, 2005). It is against this backdrop that the issue of qualifications framework will be examined.

It was our observation that the land-locked nature of Botswana has had some impact on the economy and accounts its limited diversity of industrial activities and services compared to South Africa, Botswana's more powerful neighbour in economic terms. Over the years, many unskilled and semi-skilled Botswana have sought employment in South Africa. This trend is slowing down, mainly because South Africa has its own unemployment issues to contend with.

The politics of Botswana take place in a framework of a representative democratic republic in which the President is the Head of State, Head of Government and Head of a multi-party system. Democracy and multi-partyism are catchwords in the country, and account for aspirations for economic diversification. With that national vision, the Government has encouraged employment creation and access to education

and training opportunities for its citizens; hence the national efforts to make the provision of Vocational Education and Training (VET) more systematic.

The increase in Government revenue from diamonds has led to a great expansion in educational provision. Students are guaranteed 10 years of basic education leading to a Junior Certificate. Approximately half of this school population attends a further two years of secondary schooling leading to the award of the Botswana General Certificate of Secondary Education (BGCSE), which is equivalent to the Cambridge School Certificate (CSC). After leaving school, students with weaker passes at BGCSE attend one of the six technical colleges or take vocational training in the Brigades (independent community-based organizations) where training in trades like carpentry, motor mechanics and brickwork is offered. The Government hopes that by investing a large part of national income in vocational education, the country will become less dependent on diamonds for its economic survival, and also become less dependent on expatriates for its skilled workers.

The above issue is critical in the Botswana construction industry where the majority of artisans are from neighbouring countries, notably Zimbabwe. While it is true that the Brigades and the six technical colleges have been playing their role, there has been a credibility crisis, something noted during fieldwork interaction with employers. The rating given to qualifications from different providers was not uniform; qualified Batswana tend to lose out in the face of competition. Foreigners' qualifications are perceived as higher by employers. Furthermore, the ambitious expansion of education has not been properly coordinated, with duplication of qualifications being a common phenomenon. There was therefore the need to harmonize VET efforts, hence the creation of the Botswana National Vocational Qualifications Framework (BNVQF) (RNPE, 1994).

3. Motivation for the new BNVQF

Factors that compelled the Government to put in place a new framework included:

- Lack of experience and job-specific skills among citizens.
- The labour market not adjusting quickly enough to rapid demographic change.
- The absence of a Human Resource Development Strategy since independence.

Whilst this is the thinking upon which the good intentions of the Government were based, it is quite another thing to get intentions realized in practice, as discussed later. In brief, the purpose of the QF was to support wider social and economic transformation by:

- promoting access and progression within the education system;
- reducing unemployment by equipping learners with relevant skills;
- promoting lifelong learning;
- reducing poverty; and
- providing an instrument of accountability among providers.

The VET system which the newly introduced BNVQF sought to reform can be summarized briefly as follows: there are six technical colleges that provide vocational training opportunities through the Botswana Technical Education Programme

(BTEP). These fall under the Department of Vocational Education and Training (DVET). The BTEP is planned at four different levels: foundation, certificate, advanced certificate, and diploma. Qualifications are quality assured and co-awarded by the Ministry of Education and the foreign-based Scottish Qualifications Authority (SQA) (Republic of Botswana, 2009). The Brigades engage in local development and provide vocational training and employment opportunities. Private colleges offer franchised courses, mostly accredited in foreign countries. This state of affairs led the Permanent Secretary in the Ministry of Education and Skills Development to observe that there is poor coordination among the training providers (*Mmegi*, 2009).

The purpose of the qualifications framework (QF) was to promote quality and standards by rationalizing existing provision in a manner similar to the way Ireland approached the design and implementation of its QF (NQAI, 2008). According to Young (2005, p. 21), the Irish framework was “incrementalist”, that is, it built on previous developments. To a certain extent, the BNVQF has followed a reformist approach by not being over prescriptive. On the other hand, the BNVQF was not meant to be simply a tool for volunteers to adopt. Rather, through the Botswana Training Authority (BOTA), the QF was itself expected to be the driver of change through enforcement of guidelines on course development, quality assurance, and the increased accountability by providers. It is this approach that makes it reformist rather than being either communications- or transformation-oriented as per the typology of NQFs advanced by Raffe (2009).

Our evaluation led us to the conclusion that while there was a system of some kind, there was limited dialogue among providers regarding articulation or transfer of credits from one institution to another. Secondly, there was no coordination at national level to ensure an absence of ambiguity regarding the credibility of qualifications. Thirdly, there was some duplication between what the Brigades and the Botswana Technical Education Programme (BTEP) colleges offer. Fourthly, and further compounding the state of affairs, was the fact that private providers offer courses that are developed and accredited elsewhere (for example, secretarial courses accredited by Pitman, or courses accredited by the City and Guilds of London Institute or the Institute of Commercial Management in the UK). Therefore, there are many qualifications of various descriptions associated with the same type of job. For example, someone with a three-month Pitman’s certificate would compete with a counterpart holding a six-month BTEP Certificate. Stakeholders who were interviewed expressed their concern about these discrepancies.

According to its officials, this is why the Botswana Training Authority (BOTA) introduced the idea of unit standards; so that competencies possessed by trainees could be harmonized irrespective of time taken to complete a given course. This, of course, is the ideal expectation; the fulfillment of which is yet to be established in this study.

Informed by the perceived inadequacy of the current system, and influenced by developments in neighbouring countries, notably South Africa, policy developers drafted the Revised National Policy on Education (1994). Inter alia, they noted the following with regard to the vocational education system in Botswana:

- There was no unified system to guide the development of training, and no clear philosophy and goals.
- Vocational training was institution-based, fragmented and the quality of education differed from institution to institution.
- There were no clear, standardized qualifications with appropriate equivalencies.
- The curricula for different vocational courses did not meet the demands of the economy because some were developed outside the country for altogether different purposes.
- Some practicing vocational trainers were not qualified to train.
- Vocational education and training was under-funded despite its importance to society.

From the point of view of research, these are critical concerns at national level, but the relevant questions to ask are the extent to which a new vocational qualifications framework can solve the problems, and secondly, how such a framework will be able to do that on its own. The reform agenda has produced mixed results with overwhelming evidence of limited success.

4. The (N) QF: Description and analysis

The BNVQF was established following the passing of the Vocational Training Act 1998. The Act established the Botswana Training Authority (BOTA) with a mandate to develop the framework and coordinate training skills to enable Botswana to be competitive in the labour market. Though commenting from a different context, Godfrey (1991) echoes the view that this effort positions those who acquire skills to compete both at home and internationally.

The first question to be addressed is: What does the qualifications framework look like? Presently, Botswana does not have a national qualifications framework like that of South Africa which consists of three bands, namely, General Education (level 1), Further Education and Training (levels 2-4), and Higher Education (levels 5-8). What presently obtains in Botswana is what Young (2005), and Young and Allais (2009) refer to as a sectoral qualifications framework on account of its focus on the vocational or occupational field. The BNVQF comprises three levels - levels 1, 2 and 3. It is the locus of these levels that is problematic because they are not synchronized to an NQF.

The other question is: How does the BNVQF actually work? The whole idea, it would seem, is that it should harmonize the different approaches taken by the Botswana Technical Education Programme (BTEP), the Brigades and public and private providers. It is the case that BTEP and the Scottish Qualifications Authority have continued to offer courses in the way they were doing before the creation of the BNVQF. That means that the BTEP continues to offer courses without following BOTA unit standards. However, the Government has authorized the Botswana Training Authority (BOTA) to begin regulating the training offered nationwide up to certificate level. Existing awards have been placed on the BNVQF on a best-fit basis, pending full re-designation in terms of framework standards and criteria. However, according to a member of the BOTA quality assurance department, “no deadline has

been set for the providers to comply”. The incrementalist approach is comparable to some of the developments in the Irish national framework as described by Raffe (2009).

The Botswana Training Authority (BOTA) has adopted the idea of unit standards as the best way to unify qualifications. This has to be set against the situation where institutions have been providing training following conventional methods of designing curricula. BOTA has approached the situation as follows:

Registration

The Botswana Training Authority (BOTA) registers any provider that meets minimum requirements in terms of the trainers, student numbers, budget, facilities and resources to offer training. Statistics show that as at 16 December 2008, the 4th year of implementation of the qualifications framework, 124 institutions had been registered nationwide (BOTA, 2009). This represents most of the institutions in the country. According to one BOTA official, all institutions are to ensure that they are registered by the end of 2009 and “those that do not meet registration requirements should close shop”. It emerged during interviews that all government providers, including the Botswana Technical Education Programme (BTEP) colleges, were registered by December 2008. It was mainly private colleges and the community-owned Brigades that were still to be registered. The Government has, however, recently taken over the Brigades, a step that should facilitate speedier registration. The distribution is reflected in table 1 below.

Table 1. Distribution of registrations by number of institutions

Type of institution	Number
Private	66
Public	13
Community	34
Workplace	6
Non-governmental Organization (NGO)	2
Parastatal	2
Total	124

Source: BOTA, 2009.

Approval

The Botswana Training Authority (BOTA) has allowed institutions to continue with their training but does undertake audits of the programmes offered. Approval involves rating a given programme and assigning it to a BOTA level (BOTA, 2009) pending compliance with unit standards in the future. According to BOTA, to be approved, a course must satisfy certain criteria and be rigorous in terms of the skills to be developed. Approval simply means that BOTA is unable at the present time to widely and immediately enforce unit standards. It therefore accredits the course in its current form and pegs it at one of its levels. Therefore, approval is in effect accreditation in the absence of compliance with unit standards. Out of a total of 643 programmes offered across the 124 institutions, 633 programmes are approved, and each one has been equated to one of the three BNVQF levels. Training providers, and not BOTA, offer learners completion certificates providing they meet the quality criteria of the regulatory body.

Accreditation

Accreditation goes beyond approval and involves compliance with unit standards. The Botswana Training Authority (BOTA) accredits those courses that are based on unit standards registers the unit standards with the regulatory body. According to statistics (BOTA, 2009) only 10 programmes have been accredited on the basis of the BNVQF criteria as illustrated statistically below (see table 2). The first column shows that unit standards for only 10 sub-fields, out of a total of 64, have been developed to date. Against each sub-field there is an indication of the type of provider that has complied with the unit standards stipulation.

Table 2. Programmes accredited by BOTA

Field	Type of provider					
	Private	Public	Community	Workplace	NGO	Parastatal
Generic		2				
HIV/AIDS			1			
Food and beverages				1		
Tourism	2					
Wholesale and retail				1		
Computer application	2	1				
AAT					1	
HRM					1	
Hospitality	1					
Carpentry					1	

Source: BOTA, 2009.

Typically, accreditation of programmes involves elaborate procedures (Tuck, 2007). An institution requiring a programme to be accredited has to be registered as a provider in the first instance. Forms are filled in specifying the availability of trainers and assessors, the curriculum and any other relevant information. The institution then puts in place the study material to be used to train and the assessment procedures to be followed. Thereafter, a team from the Botswana Training Authority (BOTA) visits the institution on an appointed date to ask specific questions and tour the facilities to get first-hand information. Thereafter, the Authority communicates its results. If accredited, a certificate of accreditation will be issued. This is usually for a fixed period not exceeding five years.

In our view, approval and accreditation as described above suggest that two systems of alignment with the qualifications framework are being used. Whilst accreditation is seemingly the ideal, and supposedly the ultimate route, the approval route (which should be temporary) is currently the more dominant. Given this slow institutionalization of the ideal route, the question that looms large is whether BOTA is winning or losing in its efforts to entrench a qualification framework anchored on unit standards.

It appears that the main influence regarding the potential benefits of a qualifications framework came primarily from South Africa, where it was thought that the South

African Qualifications Authority (SAQA) had demonstrated successes since it was created in 1995. The study established that the officers from BOTA who undertook visits to South Africa were more interested in the positive aspects of SAQA. The foci of the visits were to research guidelines for setting out boundaries of qualifications, levels of vocational education and training in the South African NQF and the structure of the regulatory authority. One of the differences noted by the officers was that whereas SAQA saw the apartheid system as an inadequate starting point (South African NQF, 2009), the BNVQF preferred engagement with stakeholders and rationalization of the existing system.

The German Technical Cooperation (GTZ) had some influence on the development of the Botswana National Vocational Qualifications Framework (BNVQF), mainly in terms of funding. It supplied an international expert who participated in workshops run by BOTA, and offered an international perspective on the purpose of a qualifications framework in a developing country. The expert cited examples from other countries in Africa where certain ideas had either worked or failed to work, in order to guide the development of the BNVQF. The GTZ specifically insisted on the development of HIV/AIDS unit standards as a priority. These are now registered on the BNVQF.

The other important influence on the Botswana National Vocational Qualifications Framework (BNVQF) came from Cue F Consulting Ltd., a New Zealand-based consultancy. A consultant preaches what he/she knows, and the audience may not be aware of this. In retrospect, the research established that the design of the BNVQF bears close similarities with that of New Zealand, particularly in the following areas:

- the use of unit standards and achievement standards;
- recognition of credit for a wide range of knowledge;
- the idea of fields and sub-fields,
- the idea of task force teams;
- quality assurance systems and procedures; and
- assessment procedures. (NZQA, 2009)

Motivated by a sense of urgency and to keep pace with developments in other countries, the Botswana Government, therefore, borrowed quite significantly from the New Zealand model. The New Zealand Qualifications Framework, which was inclusive of all educational levels, 10 of them, was established in 1991. Tuck (2007, p. 18) however, reports the failure of the framework mainly because universities “strongly resisted what they perceived as the atomization of coherent degrees”. The New Zealand Ministry of Education also had concerns about the role of unit standards in schooling. Though no research has been conducted in Botswana on the success of the BNVQF, there are some indications of atomization. The framework is sectoral in a context where there are no defined levels for general and higher education. It floats alone without clearly defined pathways, and is burdened by the language of unit standards; little understood by stakeholders.

4.1. Policy Framework

The Revised National Policy on Education has over successive years guided the Ministry of Education, recently renamed the Ministry of Education and Skills

Development. The Policy, with specific reference to vocational education and training (VET), emphasized the need to equip learners with skills for the job market through:

- collaboration with industry;
- promotion of equity and access to quality vocational education; and
- lifelong learning for self-employment.

This national imperative is in line with the International Labour Office (ILO), which considers education, vocational training and lifelong learning as pillars of employability and sustainable enterprise development (ILO, 2008, p. 1).

The new qualifications framework was thus meant to bring these high sounding ideals to reality. Other policies were formulated (Fleming, 2003) and bodies were created to support the BNVQF. These include:

1. National Youth Policy of 1996, aiming to assist young people to access adequate and appropriate programmes in order to attain the knowledge, skills and experiences required to effectively participate in national development. The policy led to the creation of the Botswana National Youth Council, with responsibility for funding young people to start small-scale businesses and for providing information on opportunities in education and the job market.
2. National Policy on Vocational Education and Training of 1997, aiming to establish an integrated, accessible and equitable vocational education and training (VET) system and lifelong learning for the formal and informal sectors.
3. Policy on Small Medium and Micro Enterprises (SMME) of 1999, to foster citizen entrepreneurship, encourage the development of a competitive and sustainable SMME community and create sustainable employment opportunities. The policy has led to the creation of the Citizen Entrepreneurship Development Agency (CEDA) by the Government. CEDA provides:
 - A funding agency for those who want to start businesses provided they meet certain criteria, such as possession of relevant skills in business management.
 - Statistics on small to medium businesses in the country, as well as their success rate.
4. Vision 2016 –Towards Prosperity for All, which envisages the transformation of Botswana in the coming years into a prosperous nation through the pursuit of seven strategic pillars, among them the building of an “educated and informed nation” and a “prosperous, productive and innovative nation”.
5. Regulatory bodies such as the Botswana Training Authority, established through the Vocational Training Act 1998, and the Tertiary Education Council (TEC), established through the Tertiary Education Act 2004. These bodies are charged with the responsibility of regulating technical and vocational education and training (TVET) in Botswana.

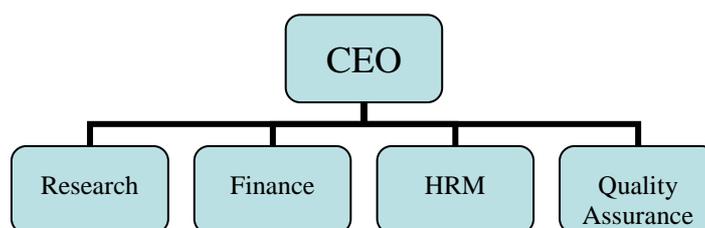
The Botswana Training Authority (BOTA) regulates vocational education and training up to certificate level. The Tertiary Education Council (TEC) quality assures training from diploma-level upwards. TEC was recently created (2004), and at the time of research, the envisaged levels after the three by BOTA are not yet in place.

The extent to which the policies outlined above support the BNVQF will be focused on under the section on sustainability.

Detailed development and implementation of the Botswana National Vocational Qualifications Framework (BNVQF) are carried out at the three levels, namely, at foundation, intermediate and full certificate levels). The consultant from Cue F Consulting Ltd., who facilitated the structuring of the BOTA (2002), emphasized that the framework is national because it is a national resource, representing a national effort to integrate vocational education and training into a unified structure of recognized qualifications. This view is shared by Tuck (2007) in his characterization of what a national qualifications framework is, as well as by Young and Allais (2009) in their discussion document on the role of qualifications in educational reform.

It is presumed that when learners know that there are clear learning pathways, which provide access, mobility and progression within education, training and career paths, they are more inclined to improve their skills and knowledge, and subsequently increase their employment opportunities. This is an assumption, which is perfectly well placed at the level of principle and aspiration, but yet to be established when issues of sustainability of the qualifications framework are taken into account.

The Botswana National Vocational Qualifications Framework (BNVQF) has become institutionalized under the Botswana Training Authority, which is headed by the Chief Executive Officer (CEO), under whom are three main bodies (each under a director). These are Research, Finance and Quality Assurance. The portfolios of Human Resources Management and the Internal Auditor are also answerable to the CEO. The Quality Assurance organ is responsible for key functions, namely: assessment and evaluation; registration and accreditation; and the regulation of trainers and assessors. The organizational structure can be represented diagrammatically thus:



4.2. The mandate of the Botswana Training Authority (BOTA)

The Botswana Training Authority was mandated to review and develop national training standards for levels within the new BNVQF to form a clear and consistent system relevant to the Botswana economy. The Vocational Training Act 1998 empowers the Authority to:

- coordinate the regulation of public and private vocational training institutions and assessment centres;
- regulate vocational trainers and assessors; and
- establish and implement a new framework of national vocational qualifications below technician level.

4.3. Structure of the qualifications framework

The Vocational Training Act sets out broad plans for a three-tier vocational qualifications framework (BOTA, 2002; Fleming, 2003; Raleru and Modungwa, 2003). Regulations pertaining to the new qualifications system were drawn up and approved by the Minister of Labour and Home Affairs under whom the Authority falls. The regulations elaborate on the nature of the vocational qualifications, and establish **unit standards** which are registered components of the vocational qualifications. The framework is structured as follows:

Level 1: Foundation Certificate level

This includes broad-based initial training and reflects competence to perform, under supervision, routine jobs and some non-routine jobs. The level matches employers' minimum vocational criteria for recruitment into a sector. Task force teams were established by BOTA to ascertain sectoral requirements in order to determine the performance criteria for a given level. This level, as with all three levels, was seemingly borrowed as is from the New Zealand QF on the basis of its logic.

A Foundation Certificate is a minimum of 40 credits at level 1 or above, relative to a specific vocational field, of which a minimum of eight credits reflect numeracy and technology skills, and a further minimum of eight credits reflect communication and interpersonal skills

Level 2: Intermediate Certificate level

This level includes competence to perform, with minimum guidance and supervision, routine and some non-routine jobs. An Intermediate Certificate is a minimum of 60 credits related to a specific vocational field of which a minimum of 40 credits are at level 2 or above.

Level 3: Certificate level

This includes competence to perform tasks associated with skilled jobs of a non-routine and complex nature, and indicates potential for supervisory functions. A Certificate is a minimum of 120 credits related to a specific vocational field of which a minimum of 40 credits are at level 3 or above.

A unit standard

According to the Botswana Training Authority (BOTA), a unit standard formally reports the attainment of an outcome of learning worthy of national formal recognition in its own right. Unit standards have descriptors of what skills and performances align with each of the three levels. The Botswana National Vocational Qualifications Framework (BNVQF) has levels, level descriptors and unit standards; in this way it complies with what Tuck (2007) refers to as the essential elements of a national qualifications framework.

Unit standards are developed for each qualification and for each sub-field. This takes place under the supervision of BOTA. One of the key questions the investigation sought to address was: How are unit standards developed in practice? During the capacity building stage (March 2000 to July 2004), BOTA trained stakeholders in the development of unit standards. Thereafter, 14 task force teams were formed, each

tasked to develop unit standards one of the following fields: generic skills; tourism; hospitality; wholesale and retail; information communication technology; practice standards; automotive; skin and body therapy; hair dressing; textiles; travel; building construction; electrical trades and metal trades.

The idea was that the teams would develop unit standards for the three different levels. These would be verified and registered on the BNVQF. This was the main approach.

The other approach was for institutions or workplaces which intended to develop their own curricula, to work with BOTA to establish the unit standards to be registered on the BNVQF. The institution would then develop its course using those unit standards.

To date both approaches have resulted in only 10 courses being developed in accordance with BNVQF standards. No national research has been conducted nationwide to establish the numbers of learners who have been awarded certificates, and how many of these have managed to find jobs. At a micro level, however, it was established that the Botswana College of Distance and Open Learning (BOCODOL) has awarded 1,060 certificates at level 2 of the BNVQF. These relate to four annual intakes into the Small Business Programme. A tracer study is being planned by the research section of the College to establish how many of the certificate holders have been able to access employment. However, from observation, there seems to be overwhelming evidence that a very limited number have been able to secure employment. The two cases that came to light were: one former student who managed to access a government loan to start a brick-molding business, and the second who set up a chocolate manufacturing enterprise. As noted earlier, BOTA has approved a number of courses developed as stated above, without insisting on unit standards. Deviation by BOTA in this way might be an acknowledgement that registered institutions do not find it easy to comply with unit standards.

5. Design issues

As explained in section 4.3 above, the intention is that the three levels of the framework will be based on unit standards and learning outcomes will be derived from these. According to the Botswana Training Authority (BOTA), the determination of outcomes of learning is a crucial aspect of the framework, and follows these guidelines:

- Workplace operations are the determinants of the outcomes and capabilities to be expressed through unit standards.
- The task team analyses each work-related stage to determine what knowledge, skills, and values are to be demonstrated. This is subject to verification and quality assurance by BOTA. A work-related stage refers to the particular stage for which demonstration of skills is required e.g. assembling the chassis of a car in the production chain.
- Once the lists of knowledge, skills, and attitudes have been completed, they are grouped into families.
- The team then turns the family groupings into outcome statements.

The outcomes are determined from three sources: curriculum documents; training manuals or from work situations if no curriculum exists (BOTA, 2004). One provider actually analyzed the knowledge and skills required for all identified areas in the workplace (VOLVO Bus and Truck Builders Ltd.) in order to formulate key outcomes. However, this is not common practice across the programmes that BOTA has accredited so far. VOLVO required a training programme to be developed for its employees. To that end, the Botswana College of Distance and Open Learning (BOCODOL) engaged in a brainstorming exercise with the stakeholder and a course relevant to the communication needs of the workers was then developed. It was approved by BOTA although not following the generic communication unit standards already registered on the BNVQF.

5.1. Deriving outcomes of learning where no curriculum exists

The Botswana Training Authority has also taken on board the accreditation of courses where no curriculum exists (Abbey and Makhulela, 2008). According to BOTA, the framework certifies traditional dancing groups and those engaged in basketry. In 2007, BOTA extended this experiment to traditional dancers of the Kalahari. Experts in the field of music and dance were engaged and from the cultural section of the Ministry of Education through education officers who were in touch with practitioners. The method of accreditation included these steps:

- Experts were asked to describe what knowledge, skills and values the people to be assessed were to show as evidence.
- Learners were asked to specify what they knew and what they were able to do.
- The experts then assessed the group against unit standards that had been developed.

This experiment is discussed in some detail in section 9 of this report where responses to interview questions are analyzed.

It is noteworthy that the different purposes for a given programme may not be met with a single unit standard, since the evidence required may differ markedly for each purpose. This is in agreement with the view of Jessup (1990), with reference to the situation in the UK where different unit standards are written for what are, in essence, different outcomes.

5.2. Features of unit standards

Data obtained from interviewing BOTA staff showed that it is at the level of unit standards that the quality of any given programme ought to be manifested. The supposition is that the clarity with which a given unit standard is articulated forms the basis of assessment, which in turn leads to an award. In one of the interviews, the officer acknowledged that the view about unit standards was “the ideal which was proving difficult to implement mainly because stakeholders found it difficult to come to terms with unit standards”. Indeed, the observation has already been made that most stakeholders do not comply with the gospel of unit standards.

In the earlier discussion about how unit standards are developed, key players were specified. However, in terms of the design of the framework, BOTA quality assurers

provide guidance to stakeholders that when developing and writing titles for unit standards, unit standards should typically:

- represent a measurable and meaningful outcome of learning or required performance;
- be expressed as an outcome, in the format VERB, NOUN, CONTEXTUAL CONDITION (where applicable);
- describe demonstrable and assessable outcomes; elements that describe tangible outcomes allow for direct assessment; and
- apply to broad rather than specific applications.

Providers, used to institution-based approaches, continue to find it difficult to adapt to this aspect of the framework. Apart from the complexity associated with the interpretation of unit standards, the other specific reason for eschewing unit standards was financial. In response to a specific question on why private providers were not developing courses that met BOTA requirements: “private providers did not have government funding, and the time taken to re-design courses attracted costs regarding development of materials and upgrading training of trainers”. The issue of profit-making in an increasingly competitive business environment features quite prominently in the apparent resistance to unit standards.

An important observation to make is that a unit standard is broken down into elements and performance criteria for purposes of assessment. Elements are the outcomes of learning specified in the title of a unit standard that are assessed and reported on. Moreover, the identification of elements assists the design and administration of assessment:

- Elements are the key sub-divisions into which the outcome expressed in the title of the unit standard can be broken down.
- Elements are the necessary parts, or chunks, separately identified to assist the manageability of assessment of the outcomes of learning that will be reported on.
- Collectively, elements equate with the title.

Performance criteria (PC) are derived from elements. These are the characteristics of performance criteria:

- They are written as clear descriptions of the performance required to prove that the outcomes have been attained.
- They detail all the essential evidence that must be produced to achieve each element.
- They are measurable statements that accurately describe the quality of achievement of the stated outcomes.
- In specifying the required evidence the PC states that something (a result of this ability) is evident and that certain actions or behaviours should be manifested by the learner.
- In focusing not on *the doing* but on *what is done*, they are expressed in the format OBJECT + VERB e.g. something is done *this* well and the result of doing has *these* characteristics.

The formulation of elements and performance criteria is the responsibility of those who teach the curriculum, referred to as role-holders or trainers. What follows is a

brief illustration of how the unit standard, the elements and performance criteria are interlinked. The unit standard (used as an example in figure 1) is drawn from Generic Computing.

Adherence to unit standards, elements and performance criteria forms the basis for quality courses that are readily accredited by the Botswana Training Authority BOTA. Stakeholders were taken through the standard-setting process in a series of workshops. Collaboration in this regard resulted in the production of three guides to the qualifications framework:

1. *Generating Unit Standards for Registration on the BNVQF* (BOTA, 2002).
2. *Registration and Accreditation Instruments for Vocational Education and Training Institutions* (BOTA, 2003).
3. *Guidelines for Preparing Curricula Linked to Unit Standards* (BOTA, 2004).

Figure 1. Unit Standard: Exchanging messages using electronic mail

Purpose	
People credited with this unit standard are able to describe the use of e-mail, create, send, receive, organize, and save e-mail.	
Entry	
Open, however the person should have the prior knowledge to operate a personal computer.	
Element	Performance Criteria
1. Describe the use of e-mail	<ul style="list-style-type: none"> ▪ The advantages and disadvantages of e-mail systems are outlined and compared to other forms of communications ▪ Alternative forms of e-mail are compared ▪ Ethical issues associated with the use of e-mail are outlined
2. Create e-mail	<ul style="list-style-type: none"> ▪ The message header (subject) and content are appropriate to the message purpose and target audience ▪ The message is addressed to the required recipients ▪ The message conforms to organization standards for e-mail ▪ A document (where necessary) is attached to an e-mail message
3. Send, receive, organize, and save e-mail	<ul style="list-style-type: none"> ▪ Evidence is provided that e-mail messages have been sent to recipients ▪ The recipients of incoming mail are recognized ▪ The contents of incoming e-mail are displayed and printed. ▪ Precautions when sending and receiving mail are observed

Source: BOTA, 2002.

The aim was that these guides would become key references for institutions aspiring to be registered and have their courses accredited by the Botswana Training Authority (BOTA). However, the observed resistance to unit standards has meant that this aim has not been achieved. It is worth noting that interviews with stakeholders who participated in the training by BOTA on how to formulate unit standards revealed that the activity was somewhat difficult mainly because it was too technical.

6. Role of stakeholders and users

The key stakeholders of the Botswana National Vocational Qualifications Framework (BNVQF) are:

- Education institutions (both public and private); among them are the Botswana College of Distance and Open Learning, which is a public provider, and the Gaborone Institute of Professional Studies (one of many private providers). The number of registered institutions is yet to be established.
- The Government that formulates policy and funds the Botswana Training Authority (BOTA).
- Training providers e.g. the Botswana Police Service and Okavango Wilderness Safaris that provide training for police officers and employees in the tourism and hospitality sector, respectively.
- Employers, who run in-house training for employees and seek accreditation by BOTA.
- Non-governmental organizations (such as the GTZ) that provide part of the funding.

Initially, stakeholders participated in the determination of elements and performance criteria related to given fields and sub-fields. In order for people to find their way around the BNVQF, a classification system has been developed. This allows people to quickly locate unit standards and qualifications on the BNVQF and also provides a means for vocational training institutions and assessment centres to specify the parts of the NQF for which they wish to be accredited. Similarly, trainers and assessors can be accredited to teach and train in different fields. Qualifications are named according to fields, sub-fields and learning domains. Where unit standards are in place for certain courses, we noted that all stakeholders can easily specify the parts of the qualification framework for which they wish to be accredited. The newly established Francistown College of Technical and Vocational Education and the Botswana College of Distance and Open Learning are examples of providers actively engaged with BOTA regarding unit standards in the areas of information technology, problem solving, communication, and more recently in entrepreneurship.

7. The BNVQF fields

According to the Botswana Training Authority (BOTA) “fields” are the broadest divisions on the Botswana National Vocational Qualifications Framework (BNVQF). The Board of the Botswana Training Authority approves the names of the fields, while the management of BOTA, in consultation with standards-setting task force teams, approves the sub-fields. Twelve fields of learning were approved by the BOTA Board in 2002 (see figure 2 below). This is a “wish list” which should be viewed in conjunction with the statistics regarding how many unit standards are actually in place. Statistical representation of this is given in table two (above).

Figure 2. Fields and sub-fields of the Botswana National Vocational Qualifications Framework

Fields	Sub-fields
1. Agriculture and Nature Conservation	<ul style="list-style-type: none"> ▪ Horticulture ▪ Nature Conservation ▪ Forestry and Wood Technology ▪ Livestock ▪ Fisheries and Wildlife
2. Business and Commerce	<ul style="list-style-type: none"> ▪ Finance ▪ Economics and Accounting ▪ Management and Human Resources ▪ Purchasing and Procurement ▪ Administration ▪ Public Relations Marketing
3. Culture, Arts and Crafts	<ul style="list-style-type: none"> ▪ Design Studies ▪ Visual Arts and Photography ▪ Performing Arts ▪ Cultural Studies ▪ Recreation ▪ Music ▪ Sport ▪ Film ▪ Television and Video
4. Education	<ul style="list-style-type: none"> ▪ Early Childhood ▪ Teacher Aids ▪ Workshop Assistants ▪ Lab Assistants ▪ Day Care Centre ▪ Adult Learning Tutoring
5. Engineering and Manufacturing	<ul style="list-style-type: none"> ▪ Engineering and Related Design ▪ Manufacturing and Assembly ▪ Fabrication and Extraction ▪ Textiles
6. Health and Social Services	<ul style="list-style-type: none"> ▪ Preventive Health ▪ Promotive Health and Developing Services ▪ Curative Health and Rehabilitative Health
7. Law and Security	<ul style="list-style-type: none"> ▪ Safety in Society ▪ Justice in Society and Sovereignty of the State
8. Information and Communication Technology	<ul style="list-style-type: none"> ▪ Computing ▪ Computer Systems Support ▪ Information Technology ▪ Communication Technology ▪ Information Security ▪ Computer Human Interaction
9. Services	<ul style="list-style-type: none"> ▪ Hospitality ▪ Tourism ▪ Travel ▪ Gaming and Leisure ▪ Transport ▪ Operations and Logistics ▪ Personal Care ▪ Wholesale and Retail ▪ Consumer Services and Liabilities
10. Planning and Construction	<ul style="list-style-type: none"> ▪ Physical Planning ▪ Design and Management ▪ Building Construction ▪ Civil Engineering, Construction and Electrical Infrastructure

	Construction
11. Generic Skills	<ul style="list-style-type: none"> ▪ Literacy ▪ Numeracy ▪ Problem Solving ▪ Team Skills ▪ Communication ▪ Entrepreneurship ▪ Self Management and Work Readiness
12. Mining and Quarrying	<ul style="list-style-type: none"> ▪ Plant Operator ▪ Construction Plant Equipment Technology

A training provider e.g. BOCODOL awards a qualification (e.g. Certificate in Small Business Management) after learners have completed the prescribed modules within a given time. Such an award is based on the fact that the programme is either accredited or approved and quality assured by BOTA.

8. Stages of development and implementation strategy

Three phases are distinguishable (BOTA, 2007). The first phase involved the establishment of the Botswana Training Authority (BOTA) as a parastatal under the Ministry of Labour and Home Affairs in 2000. The process actually started in November 1996, when the Botswana government seeking support in VET policy formulation and the establishment of a VNQF approached the German government for assistance. The second phase (March 2000 to July 2004) concentrated on capacity building and staff development in order to prepare BOTA for its role to reform, operationalize and monitor the vocational education and training (VET) system in Botswana. The current phase started in August 2004 and is concerned with implementing the qualifications framework. Implementation has therefore been underway for the past five years. It is when the three phases are taken together that the issue of sustainability arises, especially with regard to implementation.

9. Sustainability

The sustainability of a qualifications framework refers to the extent to which it is viable and can be kept going or maintained. Four sources of data were used to gauge sustainability, namely: BOTA's operational documents; conference papers; oral interviews with key stakeholders; and observation of developments on the ground. The following are some of the stakeholders interviewed:

- officers from BOTA;
- providers of training, e.g. public and private colleges;
- government officials (Ministry of Education/Labour);
- members of task teams created by the Authority;
- representatives of donor organizations;
- employer organizations; and
- the Chief Executive Officer of the Botswana Training Authority.

In examining the impact of the new qualifications framework, the challenges faced during the second phase (the capacity building phase) and the third phase (the

implementation phase) will be addressed. The first part focuses on challenges and negative perceptions of the qualifications framework and the second part on challenges and positive perceptions.

9.1. Implementation challenges and negative perceptions

The reformist aims of the Botswana National Vocational Qualifications Framework (BNVQF) are measured by evaluating the extent to which it has achieved those aims in practice. To that end, political, social and technical impact will be examined. Some of the negative indicators (derived from findings) are that:

- The existing system, led by the Botswana Training Authority (BOTA), is neither properly coordinated nor coherent.
- The system cannot on its own promote access to vocational education and training (VET).
- From a technical point of view, unit standards have been resisted, partly because of the opaque language.
- Established institutions have resisted the qualifications framework (QF).
- The absence of a national QF renders the BNVQF isolated with clear pathways for articulation.
- The aims e.g. reduction of poverty and unemployment are seen to be rather too broad for a QF, which is more of an instrument of change rather than an agent of change.
- Borrowing from countries like New Zealand or South Africa, and failure to take time to learn, seems to account for some of the shortcomings of the framework.

In the sections that follow, the above findings are evaluated, cognizant of the limitations noted by the interviewees. In that regard, some interviewees (especially employees of the Botswana Training Authority) were not self critical. Indeed, they seemed unable to separate themselves from the policy imperatives of the QF they are working to install. There were instances where they were defensive regarding borrowing ideas and a language from the New Zealand Qualifications Authority (NZQA) without attention to local contextual conditions. Other stakeholders e.g. providers, employers and learners who had acquired BOTA-accredited qualifications gave information that could be viewed as more objective in its own way.

In practical terms, the purpose of the qualifications framework was to improve the social and economic competitiveness of citizens by facilitating access to technical and vocational education and training (TVET) opportunities. In our opinion this was somewhat out of touch with reality and rather too ambitious. In particular, the reduction of poverty and the creation of employment opportunities do not seem feasible. It is one thing to see the qualifications framework (QF) as an instrument of change to which other drivers of change are duly acknowledged and accommodated, and quite another for the QF to be the sole driver of the intended reform. The BNVQF's insistence on applying the model has been met with resistance, a phenomenon referred to by Young and Allais (2009) as a challenge in the management of expectations.

Borrowing heavily from the New Zealand Qualifications Authority (NZQA), the regulatory authority (BOTA) launched the initiative calling stakeholders together to explain and teach them about unit standards. The Authority taught related terminology (elements, performance criteria, descriptors, etc.), and created task teams to develop unit standards for fields and sub-fields. Some participants expressed concern about the lack of time to reflect on the structure and design of the qualifications framework. Thus, technical problems were noted early in the life of the QF. Other imperatives were also influential. One of these was the pressure on Botswana to develop a framework as a matter of urgency. Botswana had to move with the times, just like its neighbour South Africa had done. In a sense this was a recipe for limited success.

The very slow progress made in the five-year period of implementation can, at least in part, be attributed to pressure. Where partners are pressurized to follow an approach, they tend to resist. The CEO of BOTA acknowledges that:

Uptake of the framework by stakeholders has not been as fast as BOTA would have expected. Possibly, one of the factors could be the limited time that was allowed to learn all about the framework before its implementation. The second one has to do with interpretation in practice of unit standards, and applying them to influence course development. Thirdly, training providers, especially private colleges, find it difficult to change ways of doing things because there is the cost factor involved, at least initially.

The best way to ensure stakeholder participation is to create familiarity with procedures and involve stakeholders in a meaningful manner. Gallagher et al., (2005) make this useful observation with reference to the Scottish Qualifications Framework, which is described by Raffe (2009) as a communications model; one that is not prescriptive. As is the case in South Africa (RSA, 2002), the BNVQF has prescribed regulations, quality assurance and assessment procedures, unit standards and a prescribed language of reform. Our findings show that stakeholders found these to be cumbersome, and have therefore retained course offerings in the traditional mode. This is overwhelmingly true of private providers who continue to offer programmes accredited elsewhere e.g by the City and Guilds of London Institute which the Botswana Training Authority (BOTA) approves.

Private colleges are interested in making profit, and prefer offering courses that are easy to provide irrespective of the link to employment; as one provider put it:

Offering courses accredited outside Botswana does not have any hassles as a way of earning a living for private colleges. To be honest, we do not think long and hard about the employment opportunities that our courses can open. If students want courses on our menu, we simply give them.

Participation in a qualifications framework (QF) would inevitably lead to higher costs for private providers who would have to train trainers, buy new resources and pay for the other processes required to meet BOTA accreditation and registration standards. This has a negative impact on the prospects of success for the QF. Letamo and Thothe (2003) have articulated these and other inconsistencies in Botswana's technical and vocational education and training (TVET) policies.

Other providers, even the more compliant government colleges, have not been able to develop courses according to BOTA's unit standards. A trainer from a government institution had this to say: "The idea of unit standards sounds like a good academic exercise, and we find it difficult to translate it into practice. Some of us do not see the point of abandoning tried and tested ways of developing curriculum. It has always worked." As in the private sector, public institutions have also continued to design their own courses and BOTA has approved them. Arguably, this is a sign of failure on the part of the qualifications framework.

Unit standards have not been generated for the many sub-fields that have been prescribed. Moreover, the few unit standards that are registered on the QF are not widely used. As discussed, out of the 643 programmes offered across the 124 institutions under the BNVQF, only 10 programmes comply with the unit standards specifications. Many qualifications, therefore, remain outside the framework, despite five years of implementation. The few unit standards that are registered on the qualifications framework have been developed in generic skills, computer application, tourism, hospitality, and HIV/AIDS. According to the BOTA CEO:

Tourism and hospitality have registered high success because most operators in the sector are from South Africa. They are used to unit standards and value their significance in enhancing the services they offer against their competitors.

Government institutions constitute the main body of providers that have taken up generic skills unit standards, presumably because they find these easier to offer. However, such skills do not address one of the main objectives of the QF, namely, increasing employment opportunities. Respondents from the Ministry of Labour argued that while in theory the idea of generic skills makes logical sense, courses based on these skills do represent a good investment (Letamo and Thote, 2008). This is because there is no evidence to suggest that those who acquire the skills are better able to use them to secure employment or reduce poverty.

An officer from the Botswana Confederation of Commerce, Industry and Manpower (BOCCIM) reinforced the above position and shed more light on it.¹ She said that:

- Industry does not find generic skills crucial to economic development in the short term, though BOTA is insistent on them.
- BOCCIM finds it difficult to sell the idea of unit standards to industry because few employers find it easy to translate them into practice.
- Member industries find courses offered by BOCCIM more relevant to their needs than courses registered on the BNVQF.
- BOCCIM continues to offer courses to its member industries without BOTA accreditation.
- Progress to meet BOTA's requirements is too slow for BOCCIM.

The data above demonstrate the difficulties that BOTA has yet to overcome in order to bring everybody on board. It is an organization with such a wide range of industry

¹ BOCCIM is a private non-profit organization registered under the Trade Unions and Employers' Organization Act 1983. It represents the interests of the private sector, and is recognized by the Government as fulfilling this task. BOCCIM administers an extensive programme of training courses; offers industrial relations assistance; and provides business management counseling.

membership has not been able to meet BOTA's expectations, and vice versa. In our opinion, this shows the lack of systematic coordination of vocational education and training (VET), a situation which casts doubts about the prospects of success in implementing the QF.

Both public/government institutions and private providers have made use of the unit standards that are registered on the qualifications framework in computer application skills. We observed widespread excitement about computers in Botswana and private providers have capitalized on that. Computer courses are offered in urban centres and in almost every village (electricity permitting). Many holders of BOTA-accredited qualifications in this field are unemployed. This can hardly be called a success indicator in the reduction of unemployment and poverty. Moreover, the computer courses do not articulate with other courses in the system because there is nothing to articulate with, since the three BNVQF levels are not synchronized with any other framework (and no other framework exists).

Distance education has been encouraged to play a role. Although providers in this category have not used unit standards, they have been allowed to design courses, notably in the areas of generic skills such as of entrepreneurship and communication. These have been approved and offered to learners. Interviews revealed that the position of these learners in the job market has not improved. Moreover, the graduates cannot transfer to another provider as there are no nationally accepted pathways. The University of Botswana does not recognize these courses, for example. What the qualification framework (QF) can be credited with, in the present situation, is creating opportunities for access to education. However, in terms of sustainability, the situation prefigures limited success, if not failure to meet QF objectives.

The issue of recognition of prior learning and the related award of qualifications is still to be realized. Our research showed an ambitious attempt to recognize prior learning through the award of a BNVQF intermediate certificate (level 2) in a situation where there was no pre-existing curriculum in existence. The Botswana Training Authority (BOTA) decided to engage traditional dancers and musicians; rural people without any formal education. Experts were hired to design unit standards, then assessors were engaged to quality assure the project before certificates were awarded.

Two failings were observed. Firstly, (according to BOTA quality assurers), the language issue proved problematic at two levels. The first was to do with the dancers and musicians themselves because they could only communicate in the vernacular. The experts hired to work out unit standards had problems coming to terms with the language of the unit standards. Notwithstanding the impediments, the project went ahead.

The second failing (observed by BOTA officers and corroborated by those awarded certificates) has to do with progression, a key issue for the BNVQF. After the excitement had died down, those who received certificates, including the Chief of the area began asked relevant questions, namely, what the certificate was worth and what they could do with it. When closely analyzed, it was clear that acquisition of the certificate had done little to increase opportunities for employment; increase economic development; or reduce poverty. Although the initiative boosted egos and

raised confidence, these are not adequate or progressive goals in and of themselves, especially in the light of the overall objectives of the qualifications framework. Further, we are of the view that recognition of prior learning (RPL) for its own sake is not viable. Since that project was undertaken in 2007 there has been nothing to indicate that RPL is seriously regarded as a major tool for increasing access and certification for those excluded from training opportunities under the previous VET system. In our opinion, it is fair to conclude that the challenges outlined above are weaknesses that threaten the sustainability of the BNVQF.

There seems to be silent contestation on the part of established institutions, regarding what the qualification framework (QF) stands for. Academic disciplines are jealously guarded as is institutional autonomy. In particular, there is ambiguity regarding the link between unit standards and the traditional ways of developing and implementing curricula. Equally problematic is the issue of outcomes on the basis of which unit standards are premised. There is some truth in the view that the established order is not easy to dislodge, and that the conservative elitist mentality is still very much at work when it comes to untested phenomena and educational practices. That, obviously, is dependent on the manner of engagement adopted by the driver of the QF, namely BOTA. Our findings revealed that there was insignificant participation by the University of Botswana in the second phase of the project, the capacity building stage.

In comparative terms, the above issue also partly accounted for the failure of the New Zealand Qualifications Authority (NZQA) as explained variously by Tuck (2007) and Strathdee (2009). Both analysts acknowledge considerable conflict and controversy between the Authority and key stakeholders. Despite the fact that the NZQA designed a broader NQF, with 10 clearly defined levels and provision for articulation, the framework failed. It makes logical sense that sustainability is questionable given the fragmentary nature of the BNVQF (with its three levels precariously isolated) and the hiatus between it and other systems. In our estimation, as long as there is no national qualifications framework to bring together various levels of the education system, the attainment of BNVQF goals risks becoming a pipe dream.

The issue of coordination seems to be central to sustainability i.e. the systematic and conscious administration of effort by all the different stakeholders with an interest in vocational education and training (VET). Interviewees recommended the creation of a further coordinating body because BOTA cannot be both player and referee in the advancement of the qualifications framework. As an example, what the Brigades engage in, what technical colleges provide, what private providers expend effort on and what distance education providers contribute, remains institutional and individualized. This renders programmes institution-driven rather than demand-driven. The ideal is to have programmes that are demand-driven in line with national economic and social imperatives. Instances of duplication of effort were noted in practice. If, for example, access to quality education is to be realized, then courses such as those in the field of computers need to be harmonized into clear levels of nationally validated programmes. The absence of a coordinating body leads individual providers to offer courses their own way, and the risk of regressing to sub-standard provision is real. The qualification framework has not gained enough prominence to champion this discrepancy, which is anathema to success.

Equally, buy-in from relevant bodies such as the Citizen Entrepreneurship Development Agency and the Local Enterprise Authority (which provide financial assistance to graduates in the area of entrepreneurship) should be sought so that they understand and appreciate the developments being undertaken. Similarly, although policies intended to support the qualifications framework e.g. the National Youth Policy 1996, the Vocational Education and Training 1997 and the policy on Small Medium and Micro Enterprises, have been put in place, research shows that there is no clear coordination between them and the Botswana Training Authority (BOTA). Those in charge of them seemingly handle their affairs independently, and there is every reason to argue that the Botswana National Vocational Qualifications Framework (BNVQF) would be more sustainable if this 'jungle of initiatives' were consciously and systematically synchronized.

Botswana is expansive; to reach places, vast distances have to be covered. This is a contextual variable that makes the situation unique in the sense that vast resources are required. The Government, faced with other competing needs, has been constrained in terms of funding BOTA to the fullest extent. This is compounded by the fact that donor funding has now ceased. Quality assurance and assessment visits require funding, and interviewees expressed concern that low-level funding compromises success. The extension of the problem lies in the availability and training of expertise. During the second, capacity building phase, there was investment in skills development. This was envisaged as an ongoing exercise to cope with expansion in responsibilities. However, investigation has shown that financial constraints have made staff development problematic at a time when expansion is needed most. Limited resources are, therefore, perceived as a threat to sustainability (Abbey and Makhulela, 2008).

The Botswana National Vocational Qualifications Framework (BNVQF) is housed in the Ministry of Labour and Home Affairs by virtue of it being vocational in conceptualisation. The situation on the ground, however, shows that BOTA does most of its business with the Ministry of Education and Skills Development. In other words, it is within the Ministry of Education that most, if not all, providers of vocational courses are located. Issues pertaining to the curriculum, unit standards, assessment and the evaluation of outcomes are the proper province for educational expertise rather than labour expertise. To cite Hart (2009), phenomena like learning outcomes and the curricula upon which they are based require professional judgments and external references and benchmarks. In our opinion, the Ministry of Education and Skills Development is best positioned to address this.

There also seems to be a political dimension that has been reported as impact negatively on work progress due to bureaucracy and limited expertise. As one interviewee observed, "the QF is best located within the ambit of a ministry that deals with education". An officer from the assessment department of the Botswana Training Authority (BOTA) shared this view. It seems more pragmatic to follow that route in the interest of sustainability. It is heartening to find that this has been noted, and the process of relocating BOTA has started as per information communicated by its CEO. However, undoing systems will exert a delaying effect that may be prejudicial to the success of the Botswana National Vocational Qualifications Framework.

9.2. Implementation challenges and positive perceptions

Notwithstanding negative aspects, the qualifications framework (QF) has made a mark on the Botswana education system. First and foremost, the introduction of a sectoral QF has raised awareness of gaps and shortcomings, especially the absence of a national qualifications framework. Plans are underway to establish one (Abbey and Makhulela, 2008). Some of the successes noted by respondents were that:

- The new QF is transparent although limited.
- Industry and training providers can now collaborate unlike in the past when employers did not take training seriously.
- The QF has overcome problems of incoherence by introducing a rigorous monitoring system.

Further evidence to support these claims is now presented and discussed. During the second phase, the newly created regulatory body made the effort to run workshops and visited countries such as South Africa (for purposes of benchmarking) and identified a consultant with a background in the New Zealand Qualifications Framework, especially its vocational side. This obviously showed seriousness of purpose; these were positive moves aimed at getting all stakeholders on board. The calculated end result of the workshops was the collaborative writing of guidelines on curriculum development, how to write unit standards as well as guidelines for trainers and assessors. To all intents and purposes, this ushered some measure of transparency into the system, a development with the potential of attracting buy-in. Most importantly, bringing together different parties had the potential to harmonize interests, although capacity to sustain momentum seems to have been constrained by a lack of financial resources.

The introduction of instruments for quality auditing processes held the potential of enhancing effective self-monitoring by those institutions offering programmes approved by the Authority. This is a reform indicator in a situation where existing providers had not been exposed to ideas about systematic self-monitoring. Writing about the South African experience, McGrath (2003) underscores the importance of quality assurance and quality auditing if the qualifications framework is to achieve its goals. This view supports the effort by the Botswana Training Authority (BOTA) to put in place a quality assurance system for the BNVQF.

Two employer organizations concurred that the qualifications awarded to employees, after the companies had participated in the development of curricula and formulation of unit standards, were more relevant to the workplace in terms of improved performance. The collaborative effort between providers and industry, encouraged by the provisions of the QF, although isolated, demonstrates what the QF can achieve as an instrument of change.

To reinforce further the success of the Botswana National Vocational Qualifications Framework (BNVQF) based on the efforts of BOTA, the qualifications framework has raised stakeholder awareness of gaps in the skills of Botswana relative to certain areas of business. Evidence of this came from one of the training providers who observed that in Botswana e.g. in supermarkets, wholesale shops, immigration and other service providers, the majority of operatives lack customer care skills. The Botswana Training Authority, so the argument went, should conduct a survey to

establish areas in which employees could be given training in order to better meet customer expectations. Although this is yet to be explored by the Authority, it is an indicator of the potential to bring about change. According to King and McGrath (2003), transforming attitudes so that citizens become more enterprising is now a widely acknowledged responsibility of the regulatory bodies as they develop and implement qualifications frameworks.

Another success indicator of the new QF is that insistence on having properly qualified trainers to handle courses in colleges (private and public alike) ensures, in principle, consistency of standards across the different providers. This call by BOTA is well placed if standards are to be raised.

Findings pointed to a further very important success indicator, namely the feedback that can be garnered from stakeholders. As observed earlier, no known study has been undertaken to date to evaluate the impact of the BNVQF. What are available are conference papers, which draw attention to specific aspects. By calling ‘availability of feedback’ a success indicator we are suggesting that if BOTA actively solicited such feedback, then useful information on the social, technical and political dimensions of the BNVQF could easily be collected. In turn, this will facilitate the introspection and reflective thinking necessary to review the qualifications framework. From the point of view of research, this approach is viewed with some degree of seriousness. Its benefits have been acknowledged with reference to the South African situation, where implementation challenges were experienced. Raffe (2009, p.12) makes the following important point:

[T]he NQF was effectively re-launched by an Act of 2008, which established it as a looser, more differentiated, more “bottom-up” framework, with more input from educational institutions.

It will be prudent for the Authority to learn from experience on the ground. On the basis of research data, it appears that the BNVQF was borrowed in order to provide a somewhat quick solution to the multifarious skills challenges facing vocational education and training in Botswana. Unfortunately, risks and challenges were not adequately planned for, and as discussed, the numerous challenges need re-evaluating and addressing from a more informed position.

10. Conclusion

The investigation was conducted on the basis of the following hypothesis:

A systematically created qualifications framework will meet its VET goals of increasing access to training, increasing job opportunities, and reduction of poverty.

Data were gathered from documents and interviews, and then subjected to critical review. Testing the hypothesis has not confirmed conclusively that the new qualifications framework has necessarily led to the reduction of unemployment and poverty. These aims are considered too broad for a (partially borrowed) qualifications framework implemented in the absence of a national qualifications framework. The probability is that reduction of poverty is a long-term objective, which cannot be gauged at this early stage of the Botswana National Vocational Qualifications

Framework, now in its fifth year of implementation. Regarding the potential of the qualifications framework to increase employment opportunities, dynamic collaboration between industry and training providers remains to be demonstrated, and only after some reasonable period of successful demonstration, can success be measured.

Observations indicate that there are learners who have attained qualifications in the few courses based on unit standards who remain unemployed. Two factors account for this, namely, an economic environment where there is limited diversification of industry for which skills are developed. Secondly, formal employment has been shrinking in the context of a global recession. The one hope that remains is self-employment, but this option does not seem to have been taken up by many, and remains to be further investigated.

Currently, it is not clear whether the limited range of qualifications within the Botswana National Vocational Qualifications Framework is consonant with labour market skills needs. What emerges from the foregoing disquisition and analysis is that whilst the qualifications framework has ushered in some positive developments, the odds are largely stacked against its sustainability.

Acronyms

BGCSE	Botswana General Certificate of Secondary Education
BOCCIM	Botswana Confederation of Commerce, Industry and Manpower
BOCODOL	Botswana College of Distance and Open Learning
BOTA	Botswana Training Authority
BNVQF	Botswana National Vocational Qualifications Framework
BTEP	Botswana Technical Education Programme
CEDA	Citizen Entrepreneurship Development Agency
CEO	Chief Executive Officer
CSC	Cambridge School Certificate
DVET	Department of Vocational Education and Training
GTZ	German Technical Cooperation
ILO	International Labour Office
NZQA	New Zealand Qualifications Authority
NQF	National Qualifications Framework
PC	Performance Criteria
QF	Qualifications Framework
RNPE	Revised National Policy on Education
RPL	Recognition of Prior Learning
SQA	Scottish Qualifications Authority
TEC	Tertiary Education Council
TVET	Technical Vocational Education and Training
VET	Vocational Education and Training

Bibliography

Abbey, E. and Makhulela, K. 2008. *The Experience of the Botswana Training Authority in the Assessment and Certification of Candidates in Traditional Skills*, paper presented at International Vocational Training Association, Livingstone, Zambia.

Akoojee, S. and McGrath, S. 2003. *Challenges Facing VET Transformation in the SADC Region*, paper presented at IVETA, Gaborone, Botswana.

Allais, S. 2009. *Qualifications Frameworks: Implementation and Impact*, ILO discussion paper.

Ashton, D. and Green, F. 1996. *Education, Training and the Global Economy*. Cheltenham, Edward Elgar.

Atchoarena, D. and Esquieu, P. 2002. *Private Technical and Vocational Education in Sub-Saharan Africa (SSA): Provision, patterns, and policy issues*. International Institute for Educational Planning (IIEP) for the World Bank, Paris.

BOTA. 2002. *Generating Unit Standards for Registration on the BNVQ*. Gaborone.

BOTA. 2003. *Registration and Accreditation Instruments for Vocational Education and Training Institutions*. Gaborone.

BOTA. 2004. *Guidelines for Preparing Curricula Linked to Unit Standards*. Gaborone.

BOTA. 2007. Available at (<http://www.bota.org.bw>)

BOTA. 2009 Available at <http://www.bota.org.bw> (retrieved 21 May 2009),

Cosser, M. 2003. "The graduate survey", in Cosser, M. et al. (eds) *Technical College Responsiveness*. Cape Town, HSRC Publishers.

Crouch, C., Finegold, D. and Sako, M. 1999. *Are Skills the Answer? The Political Economy of Skill Creation in Advanced Industrial Societies*. Oxford, Oxford University Press.

Dailynews. 2009. 8 May

DVET / Courses and Institutions / BTEP. Retrieved 20 November 2008 from <http://www.moe.gov.bw> dvetcourses

Fleming, P. 2003. *Achieving a National Vocational Qualifications Framework*, paper presented at International Vocational Training Association, Livingstone, Zambia.

- Foster, P. 1965. "The vocational school fallacy in development planning", in Anderson, C. and Bowman, M. (eds.). *Education and Economic Development*. Chicago: Aldine.
- Gallacher, J., Toman, N., Cadwell, J., Edwards, R., and Raffe, D. 2005. *Evaluation of the impact of the Scottish Credit and Qualifications Framework*. Edinburgh, Scottish Executive.
- German Technical Cooperation (GTZ) Retrieved 30 April 2009 from: <http://www.bota.org.bw/html/techcooperation>
- Godfrey, M. (ed.). 1991. *Skills Development for International Competitiveness*. Cheltenham, Edward Elgar.
- Hart, J. 2009. "Cross-referencing qualifications frameworks". *CES Briefing 49*. Edinburgh, CES, University of Edinburgh.
- Held, D. et al. 1999. *Global Transformations*. Cambridge, Polity.
- Hom, J. and Molutsi, P. 1989. *Democracy in Botswana*. Gaborone, Botswana Society and University of Botswana.
- ILO. 2009. *Conclusions on skills for improved productivity, employment growth and development*. Geneva.
- Jessup, G. 1990. *Outcomes, NVQs and the Emerging Model of Education and Training*. London, Falmer.
- Johanson, R. and Adams, A. 2003. "Skills Development in Sub-Saharan Africa". Draft Report for the World Bank (February).
- King, K. and McGrath, S. 2002. *Globalisation, Enterprise and Knowledge*. Oxford, Symposium.
- Letamo, H. and Thothe, B. 2008. *Inconsistencies in TVET policies: The Botswana Scenario*, paper presented at International Vocational Training Association. Livingstone, Zambia.
- McGrath, S. 2003. "Reflections on some of the challenges facing skills development for enterprise development in South Africa". In *Small Business Monitor*.
- NQAI 2008. *Background paper on the development, implementation and impact of the National Framework of Qualifications and related policies on access, transfer and progression*. Dublin, NQAI.
- Mmegi. 2009. "Botswana Education Ministry Emphasises Brigades Training". (3 February 2009).
- NZQA. <http://www.nzqa.govt.nz> retrieved 23 May 2009.

- Raffe, D. 2009. "Towards a dynamic model of National Qualifications Frameworks". *Discussion Document 2*. ILO
- Raleru, B. and Modungwa, A. 2003. *Building a Better Future for Vocational Education and Training in Botswana*, paper presented at International Vocational Training Association. Gaborone, Botswana.
- Republic of Botswana. 1998. *Public Service Management Directive No. 18 of 1998: Report of the Presidential Commission on Public Service Salaries and Conditions of Service, 1998*. Gaborone, Government Printer.
- Republic of Botswana. 2003. *2001 Population and Housing Census Dissemination Seminar, 8-11 September 2003*. Gaborone, Government Printer.
- Republic of Botswana. 2005. *Trends in International Mathematics and Science Study (TIMSS) 2003*. Gaborone, Government Printer.
- Republic of Botswana (2009) Ministry of Education and Skills Development [online] <http://www.moe.gov.bw>.
- Revised National Policy on Education. 1994.
- South African NQF: Case study for the ILO NQF Research. 2009.
- Strathdee, R. 2009. "Report into the Implementation and impact of New Zealand's National Qualifications Framework". ILO
- Tau, D. R. 2006. *An Investigation into the Educational System of Selection and Incentives in Botswana*. (Unpublished Doctoral Thesis): University of Bath.
- Tuck, R. 2007. *An Introductory Guide to National Qualifications frameworks*. ILO
- UNESCO. 1998. *World Education Report 1998. Teachers and Teaching in a Changing World*. Paris, UNESCO Publishing.
- World Bank 1993. *Opportunities for Industrial Development in Botswana: An Economy in Transition*. Washington, World Bank.
- Young, M. and Allais, S. 2009. *NQF Research: Discussion Document*