Qualifications Frameworks: Implementation and Impact

Background case study on Mauritius Carmel Marock, independent researcher

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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 advise 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 Mauritius 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, Raffe, Strathdee, Wheelahan, and Young, ILO 2009).

I would like to thank Ms Carmel Marock for carrying out the research and preparing this case study report. I would also like to acknowledge our gratitude to the practitioners and stakeholders who made time to respond to the questions and share their views. The paper reflects the views of the author and not necessarily those of the ILO.

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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Contents

For	eword	ii
1.	Introduction	1
2.	Contextual imperatives: locating the NQF	1
	2.1.Broad political and economic context	1
	2.2. Description of the current education and training system	3
	2.3. Challenges related to the current education and training system	10
3.	Addressing the challenges: Meeting the skills needs of the future	11
	3.1. Processes leading to the legislation	
	3.2. National Human Resource Development: structures and plans	13
	3.3 The NQF: Structure, imperatives and practices	15
4.	Utility of the NQF	26
	4.1 Promote access, motivation and achievement in education and training, strengthening international competitiveness	26
	4.2 Promote lifelong learning by helping people to understand clear progression routes	28
	4.3 Avoid duplication and overlap of qualifications while making sure all learning needs are covered	29
	4.4 Promote public and professional confidence in the integrity and relevance of national awards	30
5.	Conclusion	32
Ref	erences	35

1. Introduction

The development, implementation and maintenance of the National Qualifications Framework (NQF), was entrusted to the Mauritius Qualifications Authority (MQA) under the terms of the Mauritius Qualifications Authority Act 2001 (No. 42).

This case study outlines the manner in which the National Qualifications Framework (NQF) was conceptualized in Mauritius and considers the extent to which it has been given practical expression in the eight years since it began.

The NQF was created to play two distinct roles: (i) to operate as an organizing framework for three sectors, that is, primary and secondary education, technical and vocational education and training (TVET) /workplace, and tertiary education; and (ii) to operate as an outcomes-based framework for the TVET/workplace sector.

The NQF has enjoyed some success as an organizing framework – that is, relationships between qualifications do appear to be more explicit. However, it appears to have enjoyed very limited success as an outcomes-based framework – whilst new qualifications have been generated, none have yet been taken up and used.

This case study explores the reasons for these apparent successes, and the lack thereof and will attempt to understand whether weaknesses relate to the manner in which the NQF was implemented or to unrealistic objectives and plans for the NQF as a whole.

2. Contextual imperatives: locating the NQF

This section considers the context in which the NQF was introduced and factors which contributed to policy makers determining the need for it.

2.1. Broad political and economic context

Mauritius is a volcanic island; it is 1,864 square kilometres in area and is situated in the Indian Ocean. As of December 2006, the population was estimated at 1,256,727 of which 621,704 were males and 635,423 were females, with a ratio of 97.8 males to 100 females. The administrative language is English and home languages include Arabic, Bhojpuri (an Indian dialect), Chinese, Creole, French, Hindi, Marathi, Tamil, Telegu and Urdu.

During the French occupation of the island in the eighteenth century, the sugar industry gained prominence, using slave labour from Africa. With the capture of the island by the British in 1810, slavery was abolished and the sugar planters subsequently brought large number of labourers from India. The descendants of these Indian workers now make up 60 per cent of the population. The rest of the population includes black Africans, Creoles, Chinese and Europeans.

Reliance on the production of sugar for export continued until the 1970s when the Mauritian government established an Export Processing Zone (EPZ) which focused on the textile and clothing sectors. The manufacturing industry has also been a key

driving force behind economic growth and in 2000 it contributed 25 per cent of the Gross Domestic Product (GDP), half of which was accounted for by the EPZ.

Subsequently, the economy was diversified to include Tourism, Financial Services and the development of the Information and Communication Technology (ICT). Recent strategy documents indicate that the economy has further expanded to include emerging sectors such as: the Land Base Oceanic industry, the Seafood Hub, Real Estate sand the Pharmaceutical industry. Through these varied interventions, Mauritius has been able to emerge as an upper-middle income country, with significant rises in living standards and socio-economic conditions since Independence.

However, more recent studies show that the underlying attractions of cheap labour and a high export base (fuelling the success of the Export Processing Zone) have been placed under pressure by international competition (Baguant, 2003) and a slowdown in exports has been identified as the key contributor to rising unemployment. Related to this, Mauritius now faces increasing pockets of poverty, linked to poor educational levels and low employment status amongst its more marginalized communities (particularly the Creoles) (Bunawaree, 2001). Of concern are the United Nations Development Programme (UNDP) figures that state that in the first six months of 2004 employment decreased by 7,426 people. The report developed by the HRD Council plan suggests that this constitutes a trend as between 1991 and 2004 the local workforce in the Export Processing Zone (EPZ) decreased by 30 per cent. Other figures confirm this trend, reporting that while in 2002 the unemployment rate was 7.2 per cent, this had risen to 9.1 per cent by 2006. More recent figures show that estimated unemployment has gradually increased from 432,000 in 1990 to 523,700 in 2007. Of particular concern is female unemployment. Women constitute 35 per cent of the labour force and 61 per cent of the unemployed population (HRD Council, 2009)

What particularly requires attention within this report on the NQF, including the rationale for its introduction and the role that it has actually played, is what appears to be a direct relationship between employment and levels of education.

The National Human Resource Development Plan (HRD Council, 2009) states that the educational profile of the registered unemployed is as follows:

- 36.5 per cent have primary education or less than primary;
- 34 per cent have between Form I and Form IV;
- 21.8 per cent have the School Certificate;
- 6.1 per cent have the Higher School Certificate; and,
- 1.6 per cent are professionals.

These figures show that unemployment figures directly decrease with higher levels of qualification. They emphasize growing concerns over inequality and highlight the extent to which access to education plays a critical role in subsequent access to employment opportunities.

The perspective that employment status is closely related to educational level is given further weight in the National Human Resource Development (NHRD) Plan (HRD

Council, 2009) which suggests that despite the fact that the rate of unemployment has continuously been rising, the number of foreign workers has also been soaring. The Plan states that statistics from the Employment Division of the Ministry of Labour, Industrial Relations highlight that the overwhelming majority of work permits are issued in the occupational category of "skilled workers" (93 per cent on average). Figures highlight that while for example in 2006 there were an estimated 16,700 foreign workers in Mauritius, there were also 51,700 unemployed people. More recent figures state that the number of foreign skilled workers increased from 14,600 in 2000 to 24,000 in 2008 (HRD Council, 2009).

These figures all suggest that whilst the economy is absorbing increasing numbers of skilled individuals, unemployment is rising amongst people with lower levels of qualifications.

This situation represents an important part of the context that explains why it was thought that there was a need for change: it was argued that if increased numbers of people could become skilled then this would assist in reversing unemployment. The next section considers the rationale for the introduction of an NQF rather than a continued reliance on the existing education and training system.

2.2. Description of the current education and training system

This section provides an overview of the structure of the education system. It is organized in terms of the three segments of the Mauritian NQF, that is: primary and secondary education, TVET/workplace and tertiary education.

Schooling

Schooling allows for two years of pre-primary education. Pupils enter Standard I at the age of five. Mauritius then has a 6+5+2 education structure i.e. six years of compulsory primary schooling from Standard I to Standard VI leading to the Certificate of Primary Education (CPE). This is followed by five years of compulsory secondary education from Form I to Form V leading to the Cambridge School Certificate (SC) and a further two years at secondary level ending with the Cambridge Higher School Certificate (HSC).

In March 2006, there were 290 primary schools including 13 in Rodrigues (an island governed by Mauritius). A total of 121,387 pupils were attending 277 schools in Mauritius and 4,700 pupils were attending the 13 primary schools in Rodrigues. The total number of students in secondary education increased to around 110,000 in 2005. Presently there are 70 state secondary schools and 109 private secondary schools. The private schools are also allocated government funds through the Private Secondary Schools Authority (PSSA).

In 1975, the Mauritius Institute of Education (MIE) was established to provide teacher training (pre-service and in-service) at primary and secondary levels. The MIE was also responsible for curriculum development for schools. In 1985, this function was taken over by the Curriculum Development Centre (CDC) under the aegis of the Ministry of Education, and in 1993 the CDC became the National Centre for Curriculum Research and Development (NCCRD). However, it is noted that while the CDC was central to curriculum development at the primary level, curricula for the

secondary level was primarily developed by the University of Cambridge Local Examination Syndicate (UCLES) with local inputs.

With regards to assessment and examinations, interviewees indicate that the Mauritius Institute of Education (MIE) was initially concerned with this. However in 1984, the Mauritius Examinations Syndicate (MES) was established and given responsibility for conducting all national examinations including the Certificate of Primary Education (CPE), the Cambridge School Certificate (SC), and the Cambridge Higher School Certificate (HSC). The MES also conducts examination-based research aimed at improving the assessment system and informing policy decisions. Figures provided in the National Human Resource Development Plan (HRD Council, 2009) suggest that out of every 100 students joining Standard I at primary level, only 35 access the upper secondary level, and only about 28 of those successfully complete the Higher School Certificate or A-level examinations. Put differently, the Plan observes that:

- Around 72 per cent of a cohort completes the CPE examinations successfully every year at first or second attempt.
- 55 per cent of the cohort successfully completes the School Certificate.
- Only 35 per cent access upper secondary education (i.e. the HSC/GCE Alevel).
- Only about 28 per cent of every cohort is successful at HSC level.
- The remaining 65 per cent, representing about 13,000 children, are not sufficiently catered for. The NHRD Plan indicates that these children either follow various vocational courses or join the world of work.

The above figures indicate high levels of wastage and serious progression difficulties. This despite the provision of free education at primary and secondary levels up to age 20, and the introduction of compulsory education for all young people between the ages of three and 16.

This issue of high numbers not completing schooling underscored the need for a change in the system to find a way of ensuring that those young people who left school could still access the requisite skills for the economy and progress into higher education if they so chose. The challenges within the TVET system and its perceived inability to meet this need are discussed below as it is because of these "system failures" that the imperative for an NQF was generated.

Technical and vocational education and training (TVET)

Technical and vocational education and training (TVET) is seen as a critical component of the education and training system, both to create an alternative learning pathway for young people that leave the school system prior to completion, and also for those wishing to progress to a more advanced skills level.

TVET in Mauritius focuses on vocational programmes that are benchmarked at the same levels of the NQF as schooling (though this is not at this stage making a statement regarding equivalence) and diplomas and higher diplomas that are pegged

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¹ This figure is made up of 5,000 children who are successful at SC/GCE O-level but whose results do not allow them to proceed to the upper secondary level; 4,000 children who are unsuccessful at SC/GCE O-level; and 4,000 children following pre-vocational courses.

at level 5 and a more limited number at level 6 on the NQF (again not making a statement regarding equivalence).

The main provider of TVET in Mauritius is the Industrial and Vocational Training Board (IVTB). The IVTB is a public provider established in 1988 as an attempt to overcome what was described as a poor training legacy (SQA, 1998). It was envisaged that the IVTB would create a more coordinated and responsive approach to training. Because of the size of Mauritius, it was possible to establish the IVTB as the sole public provider of TVET. This in turn ensured that the government could focus its resources on a single provider. This situation has allowed the IVTB to secure resources and facilities to support the provision of a range of technical programmes which cannot be offered by private providers because the equipment required for learning is considered to be prohibitively expensive.

The Industrial and Vocational Training Board, established through the IVTB Act 1988 (No. 8), under the direct responsibility of the Prime Minister, was given responsibilities for:

- advising the Prime Minister on matters related to training;
- monitoring the needs for training in consultation with relevant authorities;
- administering, controlling and operating training schemes; and
- providing for, promoting, assisting in and regulating the training or apprenticeship of persons who are or will be employed in commercial, technical or vocational fields.

In practice, this translated into three broad areas of responsibility:

- registering training providers (as it was the only public provider this meant in practice that it was responsible for registering private providers);
- implementing the levy-grant system; and
- managing the National Trade Certification System through technical and vocational training centres which provided training.

The Industrial and Vocational Training Board (IVTB) was established with a Council which includes representatives from government, employers and unions from key sectors. This was to ensure the relevance of training to the labour market. To enhance this, committees were established in each of the different fields to provide guidance on training needs and curriculum design and to facilitate consultation at different levels.

However, there were growing concerns that the IVTB was playing a dual role: that of training provider and training regulator/facilitator. There was also concern about the administration of the levy-grant system, particularly in terms of the bureaucratic requirements associated with it. As a result, the International Labour Office (ILO) was requested to undertake a review of the IVTB and to develop a report of its findings and recommendations. It was recommended (and agreed) that the IVTB would be restructured as an "enhanced training provider" with a focus on training, assessment and certification. This led to the IVTB expanding its programmes to include higher level skills as well as provision that require a high level of capital investment, for example engineering. It was further agreed that the regulatory functions that had been

situated within the IVTB (including registering private training providers and implementing the levy-grant scheme) be transferred to the Mauritius Qualifications Authority and the Human Resource Development Council respectively.

These changes represented a clear decision in Mauritius in favour of distinct functions: the regulation of provision (schools through the Ministry, TVET through the MQA and tertiary education through the Tertiary Education Commission; the planning of skills development including decisions related to the levy/grant system (through the HRD Council); and provision (including the assessment of programmes) through varied public and private sector providers. The manner in which these functions do in reality exist in a complementary manner that allows for streamlined functions will be explored throughout this report.

Based on these decisions, the Industrial and Vocational Training Board (IVTB) was restructured to comprise 12 training "institutions" or sites focusing on the provision of the National Training Certificate (NTC). The NTC was changed so as to recognize the need for technical training to move into higher levels of the NQF, and was restructured into three levels:

- NTC level 3: this is described as a basic course which will enable an individual to work under supervision.
- NTC level 2: this is described as a combination of practical and theoretical components that enable the individual to work with minimal supervision at this level a person can become a qualified artisan.
- NTC level 1: does not in reality exist and was been replaced by the Diploma and Higher Diploma. This level is increasingly offered by the IVTB, often jointly, with international institutions/organizations.

National Training Certificates offered in 20 trades at level 3; 17 trades at level 2; and 11 trades at Diploma (technician) and Higher Diploma (technologist) levels - in 10 vocational fields:

- Automotive Engineering
- Building and Utility Maintenance
- Electronics and Telecommunications
- Food and Beverages Services
- Hospitality and Tourism Management
- Industrial Engineering
- IT and Multimedia
- Printing and Graphic Design
- Textile Production
- Wood Technology

With regards to the IVTB's responsibility, managing the National Trade Certification System, the IVTB was also given responsibility for technical and vocational examinations. The IVTB carried this responsibility out jointly with the Mauritius Examinations Syndicate (MES). In practice this has meant that the Industrial and Vocational Training Board (IVTB) facilitates the practical assessment and the MES moderates the assessment schedule and quality assures the examinations. The MES

also takes full responsibility for the theoretical examinations and students write the examinations at MES centres.

A large number of private providers offer vocational or occupationally directed programmes, including the NTC. It is estimated that there are some 347 registered private training institutions, including work-based institutions, providing some 937 awards and 2,661 non-award courses in Agriculture, Beauty Care and Hairdressing, Engineering, Health and Safety, Hotel and Tourism, Information Technology, Management, Office Skills, Textile and Design.² As mentioned, private providers tend to be biased towards provision that requires limited equipment, for cost reasons.

The Industrial and Vocational Training Board (IVTB) no longer has responsibility for the registering of private providers. However, interviewees explained that the IVTB still has a relationship with these providers especially in relation to National Training Certificates (NTC) where the IVTB retains responsibility for quality assurance. The IVTB and Mauritius Examinations Syndicate (MES) are jointly responsible for assessment and certification of NTC programmes regardless of provider.

Non-NTC programmes offered by private providers tend to be linked to an international provider and in some cases are examined and certificated by that provider. In other cases, partnerships exist between international and local providers and in some cases (such as the City and Guilds of London Institute) the Mauritius Examinations Syndicate (MES) undertakes the assessment and certification on behalf of the international body.

In line with the decision to support higher level skills development, the Industrial and Vocational Training Board (IVTB) is also offering an increasing number of diplomas and higher diplomas. This decision took into account the "prospective changes" that were being made to the education system, that is, the introduction of compulsory education up to age 16 (2005). It was believed that more students would then wish to move into vocational programmes taking them to higher skills levels.

While interviewees suggested a continuing need for vocational education at a lower level because students continue to leave school early, despite there being compulsory and free provision, they also emphasized the need for programmes that allow vertical mobility. This emphasis is based on the assumption that many students will not be able to move from NTC levels into higher education (this issue is explored in the following section). A previous research report (Gewer, 2004) stated that the Employer Federation supported the above emphasis, reporting that is was important that the Industrial and Vocational Training Board (IVTB) "expand vertically rather than horizontally".

Higher level programmes are externally assessed and students are awarded a certificate from the relevant HE institution. Interviewees from the IVTB indicated that some certificates mention IVTB on the certificate while others do not: this is dependent on the arrangement that the IVTB has with the particular provider.

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² It was not possible during this research process to ascertain the actual figures for private provision.

In addition to the Industrial and Vocational Training Board (IVTB), the Ministry of Education and Scientific Research established the Technical School Management Trust Fund (TSMTF) in 1990 to manage the three polytechnics which also offer post-Form V diplomas. This Fund is discussed as part of this section because polytechnics are considered as part of the vocational /workplace sector of Mauritian education. At the point of doing this research, a process was underway to merge the IVTB with the Technical School Management Trust Fund (TSMTF). This process had been underway for some months, and there appeared to be some uncertainty about the implications of the merger. The one issue on which there is agreement is that the new organization will continue to provide vocational programmes that span levels 2 to 7 on the NQF, with an emphasis on levels 2 to 6. In addition, it appears that the new institution will have awarding powers. The Technical School Management Trust Fund is also mentioned in the following section which addresses the tertiary sector as their programmes are also considered part of the tertiary sector and many enable access to university.

The polytechnics were established in response to the need for intermediate-level skilling for middle managers. They operate for students graduating from secondary schools and create a potential bridge to university. They also provide part-time programmes for middle managers in formal employment to upgrade their skills. The focus is on para-professional training for technical and professional support staff.

The three polytechnic institutions that are part of the Technical School Management Trust Fund (TSMTF) have different foci:

- The Lycee Polytechnique is based on the French system of technical Education and offers courses for the development of technicians. These courses are offered in French and enable students to achieve a diploma. Assessment and certification is undertaken by the Mauritius Examinations Syndicate (MES) together with the Lycee Brevet de Technician. An interviewee from TSMTF reported that students wishing to progress further in their studies can access programmes offered by the Institute of Technology although many students choose to remain in institutions that offer programmes in French.
- The 'Institut Superieur de Technologie' also offers trade-related skills, but to a higher level than the Lycee, which enables students to access a diploma which is considered to be two years post A-level. This institute offers provision up to Bachelor of Science (BSC) level but retains its vocational focus. The awarding body for these programmes is the TSMTF together with the University of Limoges in France (under the supervision of the Mauritius Examinations Syndicate [MES]).
- The Swami Dayanand Institute of Management focuses on enabling students to enter the services sector of the economy, offering diplomas in Business Administration, Business Informatics and Information Systems for school leavers with two A-levels. This institution was started with the assistance of Singapore and has since established a relationship with the Technical and Further Education (TAFE) International (an Australian Association). The

TAFE is responsible for the quality assurance of the courses through moderation of examination papers and scripts.

Programmes offered by polytechnics within the Technical School Management Trust Fund (TMSTF) are free for full-time students. Some interviewees suggested that centres may introduce fees in the future as this is viewed as critical for their sustainability. However this was disputed by interviewees from the Technical School Management Trust Fund (TMSTF).

Table 1 (below) shows that the polytechnics represent a small number of enrolments relative to other institutions and reports suggest that their capacity for expansion is limited. However, an interviewee from the TSMTF reported that there had been some growth and more was anticipated.

Table 1. Post-secondary (polytechnic) statistics for 2002

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Institution	Total student	Male Student	Female student		
	population	Population	population		
Swami Dayanand Institute	583	231	352		
of Management					
Sir Guy Forget (French	350	347	3		
name: Lycée Polytechnique)					
Institut Superieur de	114	111	3		
Technologie					

Source: Central Statistics Office, 2002.

Tertiary Education

Tertiary education in Mauritius has a wide range of public and private institutions. In the public sector, it revolves around the University of Mauritius (UoM), the Mauritius Institute of Education (MIE), the Mahatma Gandhi Institute (MGI) and the Mauritius College of the Air (MCA). Interviewees explained that these four tertiary education institutions (TEIs) are overseen by the Tertiary Education Commission (TEC) which has responsibility for allocating public funds, and fostering, planning and coordinating the development of post-secondary education and training. At this point in time, education is free for full-time students in public institutions.

As discussed, there are three polytechnics in the public sector which are managed by the Technical School Management Trust Fund (TSMTF). As was also indicated, the Industrial and Vocational Training Board (IVTB) and the Mauritius Institute of Health (MIH) offer tertiary-level programmes.

Over and above the publicly-funded institutions, there are an estimated 35 private institutions and 50 overseas institutions/bodies. These institutions mainly deliver tertiary-level programmes in niche areas like Information Technology, Law, Management, Accountancy and Finance. They operate on a part-time basis, in the evenings, weekends and on some weekdays with relatively small student cohorts. Most, if not all, of the programmes are offered by franchise agreements whereby an overseas institution provides programme materials and/or tutorial support. Apart from playing an administrative role, local partners sometimes provide tutorial support and occasionally deliver programmes using exclusively their own resources.

The local tertiary education scene also comprises four regional education institutions: the University of the Indian Ocean (UIO); the Institut de la Francophonie Pour L'Entrepreneuriat (IFE); the Sir Seewoosagur Ramgoolam Medical College (SSRMC); and the Mauras College of Dentistry (MCD). The activities of these institutions are geared towards programmes in very limited or specific disciplines.

Interviewees from the Tertiary Education Commission (TEC) also indicated that the provision of tertiary education extends beyond the local tertiary education institutions given that a significant number of Mauritian students either go overseas or resort exclusively to open learning for pursuing their studies.

2.3. Challenges related to the current education and training system

Specific concerns were raised about the nature of the education and training landscape: interviewees and documents emphasize the low throughput in schooling and the number of young people that do not attain the relevant school leaving certificate. This has a knock-on effect; providers and employers highlighted the challenges of providing vocational training in the absence of sufficient levels of literacy.

In addition, frequent references were made to what was described as a "jungle of qualifications" with little relationship to one another. Interviewees explained that this was as a result of both the number and range of providers in the country and also because of the large number of international providers offering programmes either face-to-face or through open (or distance) education. Interviewees from the Ministry of Education were of the view that this plethora of qualifications was a concern across the education and training system: for example in higher education there was confusion about the difference between a higher diploma and an advanced diploma.

Interviewees emphasized that the absence of a system that enabled individuals to understand the relative standing of the varied qualifications in relation to each other was however a particular problem in TVET. The Director of the Industrial and Vocational Training Board (IVTB) claimed that:

...much confusion emanates from the present situation due to the existence of a variety of certification systems which are operating in parallel. It is indeed very difficult to seek equivalence of the different certificates issued. People following courses in private training centres are therefore not guaranteed of getting value for money at the end of the day. (Dubois, 2000, p. 4)

Another concern was the large number of non-award bearing programmes. Documents motivating for the NQF consistently suggest that this has created difficulties for learners and for employers as there was no objective way of determining the value of such programmes.

Interviewees argued that lack of articulation made it difficult for learners to achieve mobility up a learning pathway and for employers to know what to expect from a graduate of a particular TVET related qualification. As an interviewee from the Mauritian Employer Federation put it: "We have had a fragmented approach; we wanted some rationalization of the qualifications so people could know what level

their qualification is at. This would also assist with learning at the workplace – in terms of creating a bridge between academic and vocational streams."

Other interviewees, particularly from government, indicated that the confusion with regards to the myriad of qualifications specifically contributed to the diminished status of Technical and Vocational Education and Training (TVET) within the education and training landscape. They argued it was in the TVET area that there was the largest number of award and non-award programmes with little relationship to each other. It is noted though, that the low status of TVET, relative to schooling and higher education, may a reflection of the international reality, that traditionally academic routes are often preferred by families and learners.

Employers were not overly concerned about formal qualifications and articulation. In the NHRD Plan employer surveys, it was reported that: "As a whole, employers were happy with the level of qualification of their employees" (HRD Council, 2009). This perspective was reinforced by many of the employer interviewees who pointed out how hard it is to create standards for workplace learning when processes change more often than formal standards can accommodate. For example, an interviewee from the Information and Communications Technology (ICT) sector argued that "jobs are defined every day – and it's difficult for academics to follow these changes as this is so quick." Other employers raised the question of who qualifications were for, arguing that workers at the higher levels have qualifications already and so there is no concern, whereas workers who are in the trade-related areas do not have sufficient academic knowledge to enable them to access qualifications. Employer interviewees generally were of the view that it was more important that their workplace programmes be approved (by the MQA) more quickly so that they could access their levy monies and pay for the training.

Further, interviewees from the construction unions stated that while they felt that formal qualifications would be of value to their members, employers were unlikely to agree to such an approach as it would have implications for wages. Interestingly, union interviewees in the tourism sector did not share the view that companies would object, but indicated that the existing system of qualifications was already adequate (that is the programmes and certificates already in place in the tourism sector, as opposed to the NQF qualifications which have not yet been introduced in the sector and which the unions had no knowledge of despite it being eight years since the NQF was introduced).

These last comments suggest that while government and the employer representative structures had real concerns about the lack of articulation of qualifications and the number of non-award programmes, many individual employers are less concerned about the formal nature of the qualification and more concerned about ways to finance training for employees.

3. Addressing the challenges: Meeting the skills needs of the future

The Mauritian NQF was borne within the context outlined above: that is the increase in unemployment and the need to increasingly import individuals with skills combined with the perceived failures in the education and training system (low level of throughput in schooling and the concomitant need for TVET to provide an alternate solution for these young people, fragmentation and low levels of recognition of TVET programmes and the multitude of qualifications in higher education).

Critically, policy makers were committed to ensuring that education and training address the need for the country to engage with new technologies and to grow varied sectors of the economy capable of absorbing local labour.

The expectations and hopes for the NQF can be seen in the manner in which the MQA Act was motivated in Parliament. It was stated that the NQF would: "Assist to support Mauritius to become a 'knowledge economy' and in particular facilitate the integration of the ICT hub through 'the development of a culture of training." ³

It is clear that policy makers were of the view that the NQF would protect the public by ensuring that qualifications articulate and that learners who had completed non-award programmes would receive recognition for these achievements.

It was further indicated that a central motivation for the NQF was to support mobility. Qualifications would be pegged on a level and a body that would indicate its equivalence to international qualifications where required. This was an important driver of the NQF because of the large numbers of people that migrate, particularly to Australia, Canada, and Europe as well as, to a more limited extent, within the region. It would similarly benefit the reportedly large numbers of immigrants to Mauritius.

The Mauritian Qualifications Framework took other regional and international frameworks into consideration to ensure that this mobility could be attained. In particular, the Mauritius Qualifications Framework was influenced by the Scottish Qualifications Framework (SQF), the New Zealand Qualifications Framework (NZQF) and South African Qualifications Framework (SAQF).

The above issues are reflected in the way in which the NQF was introduced by champions within the Industrial and Vocational Training Board (IVTB) who claimed that it would be: credible and useful to employers; readily understood by the public; able to give students any opportunity to advance in their learning path; and recognized internationally.

Further, policy makers within Mauritius considered the strategies that would be required to address these challenges. It was argued that there was a need for a body that focused on determining training priorities and encouraging provision in these areas; a need for an entity that could register and quality assure providers; and providers to focus solely on provision (including in many cases assessment and certification).

The following section indicates how this was given legislative expression, focusing on the two core strategies were adopted, that is HRD planning and the National

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³ Second Reading, Mauritius Qualifications Authority Bill 2001 (No. XXXIX), 11, 12, p. 1.

Qualifications Framework. It then briefly considers the HRD planning policies before considering the NQF in far more depth.

3.1. Processes leading to the legislation

The perception that Technical and Vocational Education and Training (TVET) was undervalued, in part because of the large array of qualifications, goes some way to explaining why the initial push for a NQF came from the TVET system and specifically from the Industrial and Vocational Training Board (IVTB). The IVTB determined options to address the above concerns. One such option was to commission the Scottish Qualifications Authority (SQA) to undertake a feasibility study regarding an NQF as the preferred option for Mauritius. The SQA undertook this study and developed a set of proposals which formed the basis for a NQF.

These proposals went to the Industrial and Vocational Training Board (IVTB) and subsequently to the then Ministry of Environment, Human Resource Development and Employment in 1999. Once submitted, there was a considerable delay in decision making partly explained by a ministerial restructuring process. Documents produced by the MQA (for example the National Qualifications Framework for Mauritius, Preliminary Report, April 2001) indicate that in 2000 the Ministry of Training, Skills Development and Productivity began to move the process again. Interviewees suggest that this was in part because of pressure from the Southern African Development Community (SADC).

This led to two key developments: the establishment of the NQF and the production of a human resource development plan. Two structures were established to give effect to these priorities: the Human Resource Development Council; and the Mauritius Qualifications Authority (MQA).

The following section briefly explains the National Human Resource Development Council and outlines the core elements of the National Human Resource Development Plan and then focuses attention on the National Qualifications Framework (NQF). In particular it considers the manner in which the NQF has evolved and whether this has addressed the concerns that lay behind the decision to develop the NQF.

3.2. National Human Resource Development: structures and plans

The Human Resource Development Council Act was passed in July 2003. This created the basis for the establishment of the HRD Council whose primary objective was to provide a high-level coordinating mechanism for guiding and putting into action national HRD policies, in particular ways to determine training priorities and incentivize provision. Its specific functions included:

- advising the Minister on HRD policies and strategies;
- establishing linkages between the education and training system and the workplace;
- providing a forum for debate and consensus building around HRD;
- taking measures to reduce the mismatch between supply and demand;

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⁴ It is noted that the ministry in charge of these processes has changed a number of times. However, interviewees suggest that except for the delays by ministerial restructuring, this does not appear to have has a significant impact on the manner in which developments have unfolded.

- commissioning research in the field of HRD;
- encouraging employers to invest in the training of their workforce;
- initiating and monitoring studies on the impact of training on socio-economic development;
- promoting benchmarking and knowledge management at enterprise and national levels:
- identifying and monitoring the implementation of appropriate skills development and apprenticeship schemes;
- monitoring participation of employers, employees and job seekers in training schemes;
- developing schemes for retraining and multi-skilling;
- providing incentives for training institutions to acquire and upgrade their equipment and facilities; and
- managing the National Training Fund.

The Council was launched on 19 November 2003 by the Minister of Training, Skills Development and Productivity, with broad representation from government, private sector and trade unions. In order to undertake the above-mentioned activities, it was agreed to develop a National HRD Plan. The argument for this is set out below:

The National Human Resource Development Plan (NHRDP) is a policy framework for education, training programmes and career progression to meet the country's skills and competence needs; it will promote sustained economic growth by using the available human resource effectively and by drawing on their expertise and ingenuity.

Further:

The plan will give an idea of the likely employment opportunities that would be generated in the economy by sectors, by occupations and by educational skill categories. It will provide a basis for training and educational planning, counselling and guidance - the process of education and training being a vital one to induce manpower qualities and capabilities. It will also help to alert the government and other stakeholders to emerging manpower problems. (HRD Council, 2009, p.20)

Specifically, it was indicated that the Plan would address the following objectives, to: estimate demand for manpower in key sectors in terms of different skills/knowledge; decrease the mismatch between the demand and supply of manpower; and develop proactive human resource development policies.

In order to develop a National HRD Plan that would indicate training needs and priorities, the National Human Resource Development Council undertook a survey in August 2005. Through the Ministry of Civil Service and Administrative Reforms, questionnaires were sent to around 15,000 employers in the private sector, all parastatals and all ministries.

The National HRD Plan developed by the Human Resource Development Council, noted that although the response rate varied in different sectors, the following economic sectors were covered in the plan: Agriculture, Manufacturing, Tourism, Information and Communication Technology, Public Services, Finance, Seafood Hub, Education sector/Knowledge Hub and Rodrigues. Responses informed the priorities

set out in the plan and determined funding priorities for skills programmes for the unemployed. Interviewees from the MQA and the NHRD Council stated that they have also guided areas that have been selected for Recognition of Prior Learning (RPL) pilots.

3.3 The NQF: Structure, imperatives and practices

The Mauritius Qualifications Authority (MQA) was established as a corporate body under the Mauritius Qualifications Authority Act 2001. The MQA is accountable to the Minister who is responsible for training.⁵

The MQA has a Board which is drawn from government, employers (in particular the Mauritius Employers' Federation), the Tertiary Education Commission, the Industrial and Vocational Training Board, representatives from private providers and representatives from the trade unions. However interviewees noted that employers do not have the same number of representatives as government and that only public sector unions are represented. This has implications for the functioning of the system and is explored further in this report.

According to the Annual Report (MQA, 2006-07) the Act envisaged that the MQA would have a number of roles including, to: develop, implement and maintain a National Qualifications Framework; ensure compliance with provisions for registration and accreditation of Training Institutions; and ensure that standards and registered qualifications are internationally comparable.

In order to fulfil these broad roles, the Act specifies that the MQA has the following functions:

- (a) To formulate and publish policies and criteria for
 - (i) the registration of bodies responsible for establishing national standards and qualifications;
 - (ii) the accreditation of bodies responsible for monitoring and auditing such standards and qualifications; and
 - (iii) the registration and accreditation of training institutions.
- (b) To generate and register national standards for any occupation.
- (c) To register qualifications obtained from primary to tertiary level.
- (d) To register and accredit training institutions in Mauritius.
- (e) To recognize and validate competencies for purposes of certification obtained outside the formal education and training systems.
- (f) To evaluate qualifications.

(g) To keep a database of learning accounts of Mauritians.

- (h) To publish an annual list of registered unit standards, qualifications and training institutions.
- (i) To advise the Minister on matters pertaining to the National Qualifications Framework.
- (j) To perform any other function which the Minister may assign and which is relevant to the National Qualifications Framework.

⁵ Responsibility for training has changed, this the Act ensures that the MQA is retained by whichever minister is responsible for this function.

This next section of the report considers the manner in which the NQF has been implemented. It then, in the concluding section, considers whether the objectives originally set out for the NQF have been realized.

NQF: Central concepts used in the framework

The structure of the Mauritian NQF is defined in terms of three critical concepts: the level, the nature of a qualification within each level, and the segments that constitute the NQF. A chart of these arrangements is provided as figure 1 (below).

There are 10 levels on the NQ, each indicating what the learner will be able to do and the nature of the processes that the learners are able to carry out.

According to the preliminary report (MQA, 2001), the process of defining the levels was coupled with an agreement about the definition of a qualification. It was stated that a qualification shall:

- Represent learning outcomes or competencies that a person has achieved relevant to identified individual, professional or industry needs and a basis for further learning.
- Have both specific and critical cross field outcomes which promote life long learning.
- Be internationally comparable.

Qualifications to be located on the NQF need to be defined as above and with regard to level descriptors. However, the NQF does not stipulate the way in which the qualification should be generated, for example, whether it should speak directly to the curricula or be separate from this process. Thus qualifications could take the form of a provider-generated qualifications (as in the case of higher education) which stipulate broad outcomes) or a qualification generated by a group especially formed to generate qualifications in terms of outcome-based statements and assessment criteria.

Figure 1 also illustrates the three segments that constitute the NQF:

- Qualifications in the primary/secondary education and levels 1 to 5 on the NQF with specific qualifications at certain levels such as the CPE, the SC, HSC, Baccalaureate).
- Qualifications in the TVET/workplace sector at all levels of the NQF.
- Post-secondary/tertiary qualifications at levels 6 10.

Interviewees explained that an understanding was reached that while qualifications in all three segments would be pegged on the same 10 levels of the NQF, the focus would not be on establishing equivalence between for example a school certificate and a vocational certificate even though they may be on the same level on the NQF and defined by the same level descriptors. The qualifications registered on the NQF are intended to allow vertical progression (enabling learners to move to higher levels), but are not intended to allow horizontal equivalence across segments i.e. there is recognition that a school certificate does not include the same type of content as a vocational certificate. This does not preclude building linkages across the segments

but these will be dependent on a particular qualification and set of institutional arrangements rather than by virtue of the qualifications location on the NQF.

Some of the above clarity has evolved over time; certain changes were made in the course of the discussions leading up to the MQA Act, while others were made as a result learning garnered during implementation. In particular, documents suggest that the Scottish Qualifications Authority (SQA) initially recommended a framework with three segments or streams:

- Academic (essentially schooling though in certain documents tertiary was also implied in this segment)
- Vocational (provider-based)
- Work-based

Figure 1: Structure of the NQF

LEVEL	PRIMARY / SECONDARY EDUCATION	TVET / WORKPLACE	TERTIARY EDUCATION	LEVE		
10			Doctorate	10		
9			Masters Degrees eg MA, MSc, M.Phil Postgraduate Certificates, Postgraduate Diplomas	9		
8			Bachelor with Honours, Conversion Programmes	8		
7			Bachelor (ord. Degree)	7		
6		Diploma	Diploma	6		
5	HSC / GCE 'A' Level /BAC / IBAC	Certificate	Certificate	5		
4				4		
3	SC / GCE 'O' Level			3		
2				2		
1	Certificate of Primary Education					

Source: MQA (undated).

When the NQF was legislated the concept of three segments was retained, the nature of these segments diverged from the initial conception. The key change was that the revised framework integrated vocational and workplace qualifications into one segment and introduced tertiary education as a discrete segment. Interviewees did not consider this a radical departure from the original conception. The reasons for this change were not outlined in the documents, although it was suggested that the changes took account of the way institutions were already organized. Interviewees also suggested that the changes took into account the imperative to create greater levels of synchronization between TVET, private and workplace providers which were offering occupational training.

NQF: Defining responsibilities for the framework

The Mauritius Qualifications Authority (MQA) is responsible for the coordination of the NQF and for ensuring agreement across key structures within the segments regarding number of levels, level descriptors and the definition of a qualification.

Responsibility for the segments is allocated to different structures which are granted a fair amount of autonomy in terms of how different activities are carried out. The body responsible for each of the three segments is defined below:

The Ministry of Education is responsible for primary and secondary schooling with regards to: the registration of schools, curricula development, and the quality assurance of schools. Examination and certification takes place through the Mauritian Examinations Syndicate (MES).

The MQA is responsible for TVET/workplace provision (over and above its role of coordination of the NQF) including: the registration of providers, programme approval as well as the generation of qualifications and standards. The examination and certification of TVET/workplace training takes place through the Mauritian Examinations Syndicate (MES) or the relevant international body.

The Tertiary Education Commission (TEC) is responsible for the tertiary sector including: the registration of providers, programme approval and moderating quality assurance systems – both institutional and in terms of examination and certification. The TEC does not generate qualifications; rather it focuses on establishing the equivalence of qualifications in alignment with the levels of the NQF.

The roles described above changed after the MQA Act (2001) and are now in accordance with the Education and Training (Miscellaneous Provisions) Act 2005. This Act repealed certain bodies that were considered to be unnecessary (and therefore reduced overlaps in the system) and allowed for clearer demarcation of responsibilities between the Tertiary Education Commission (TEC), the Mauritius Qualifications Authority (MQA) and the Ministry of Education i.e. as described above, the TEC became explicitly responsible for all matters related to the tertiary segment, the MQA for the TVET/workplace segment and the Ministry of Education for primary and secondary education.

Interviewees explained that these changes were made because of ambiguity about the scope of the MQA (between 2001 and 2005). The role of the MQA regarding responsibility for coordinating the location of qualifications on the NQF in terms of its defined levels (10) and agreed-upon segments (schooling, TVET/workplace and tertiary) has remained consistent. However, there was uncertainty about the responsibilities of the MQA regarding the generation of qualifications and the registration and quality assurance of providers. Interviewees indicated that there were overlaps between the TEC and the MQA and uncertainty as to what was required for each sector leading to inefficiencies. Interviewees observed that these challenges were exacerbated by the fact that the MQA was established under the Minster for Training and Human Resource Development while the Tertiary Education Commission was under the Minister of Education.

Practical implementation of the NQF

Flowing from the above, it can be seen that while the Mauritian NQF has a defined structure on which all qualifications (regardless of segment) are defined, key bodies are given latitude with regards to how other processes relating are implemented, particularly responsibilities such as: the registration of providers (in terms of defined criteria), the approval of programmes, the generation of qualifications, and assessment and certification. This section considers the way in which these responsibilities were given practical expression within the NQF.

Standards and qualifications

With regards to the development of standards and qualifications it was found that within the NQF the relevant bodies have taken quite different routes.

In schooling, the amended Education Act (Education and Training [Miscellaneous Provisions] Act, 2005) states that the Ministry of Education is responsible for the "recognition and equivalence of qualifications obtained in or outside Mauritius in the primary and secondary education sector." In terms of actual qualifications, it was found that students in government schools are required to complete the O- and A-level examinations. These are carried out by the University of Cambridge through University of Cambridge International Examinations.

In the tertiary sector it was agreed that there were already rigorous processes for the generation of qualifications and the quality assurance thereof and that this provider-driven approach to qualifications at the tertiary level should continue. The focus of the Tertiary Education Commission (TEC) should therefore be to participate in the process of determining the level descriptors and the core qualification types would be pegged on the framework (as in figure 1). It was proposed that there would not be a need to generate new qualifications as part of the NQF project - rather existing qualifications would be located on the NQF at the level that was considered appropriate. Where there was a perceived need for a new qualification in the tertiary segment, tertiary institutions would retain responsibility for generating the programmes – and would submit them to the TEC for approval, after which the qualification would be pegged on a particular level of the NQF.

In terms of TVET/workplace training it was found that the Education and Training (Miscellaneous Provisions) Act, 2005 gave the MQA responsibility "to recognize and evaluate qualifications, other than those obtained in the primary, secondary and post-secondary educational sectors, for the purpose of establishing their equivalence" (Government of Mauritius, 2005, p. 4).

This meant that the MQA became responsible for approving programmes against existing qualifications such as the National Training Certificates (NTC) as well as international qualifications.

What is unique about this segment is that the MQA was given responsibility for generating new qualifications and standards that would be consistent with changing technology and needs; as one interviewee from the MQA put it: "The qualification that is being developed by the MQA has a certain international recognition, people who immigrate – they ask for recognition of their qualification and we must validate

the qualification – therefore there is this advantage of having a qualification that is more easily acceptable than other countries."

The decision to generate new qualifications in the TVET/workplace segment was purportedly because this was the sector with the greatest concerns about the multiplicity of non-award programmes (and certificated programmes, often issued by workplaces or in some cases international bodies) that did not permit learners to progress to further learning or to attain employment (as the awards are not known or recognized).

Interviewees explained that to support the imperative for qualifications capable of accommodating the different needs of industry and being internationally recognized, particular format for qualifications was agreed. It was decided that qualifications consist of unit standards which vary in terms of the total credits that are required. The unit standards specify the different elements that are required to achieve the identified area of competence and provide the associated performance criteria but exclude any reference to the curricula. There was a range of views as to whether it was appropriate to generate qualifications and standards using this format.

On the positive side, an interviewee from the MQA commented that this format means that: "There is the advantage of having a qualification on the NQF as you can get credit accumulation, you can gradually earn and get credits towards a qualification". Other interviewees stated that much in-house training utilizes international curricula which can be adjusted to the required outcomes. In this context they argue it is preferable to have qualifications which can accommodate these alternative curricula rather than prescribed curricula which would exclude these providers.

However, others argued that it would have been better to refine the curricula rather than generate qualifications outside of the curriculum process because the latter will not be practicable as workplaces do not have the capacity to generate curricula and will therefore not be able to use these standards.

Moving to the actual process of generating qualifications, the MQA was required by legislation to establish Industry Training Advisory Committees (ITAC). These committees were to include representatives from the private and public sectors "to generate qualifications and standards at various levels of the NQF at the technical and vocational level" (MQA, 2007). It was anticipated that these qualifications would replace the existing National Technical Certificates (NTC) as well as creating qualifications and standards in areas that had previously not had formal qualifications.

This process led to considerable debate. Some argued that the emphasis on an alternative collective process was based in part on a view that the Industrial and Vocational Training Board (IVTB) process was not sufficiently credible and this had limited the development of curricula that take account of requisite competencies for the workplace. It was argued that the new process would provide an opportunity for industry to play a central role to ensure that qualifications were acceptable and that learners would develop the competencies required by industry.

From the perspective of the Malaysian Qualifications Authority (MQA), the objective of increased industry involvement in qualification generation had been achieved: "the ITAC process means that industry has developed the qualification. If the training provider offers it they know that these people will get a job because it was done by industry people".

This perspective resonated with interviewees from the Industry Training Advisory Committees (ITAC), some of whom are from companies: they commented that the new qualifications will address the needs of the industry and the only issue is that they have not yet been communicated to workplaces.

However, employer and union interviewees expressed a contrary view. They indicated that they have not had very much involvement in these processes and suggest that many of the new qualifications are very removed from their context because they do not sufficiently take their learners or the changing context into account.

Other interviewees, for example some from private providers and other employer interviewees, stated that while they have been involved in the process it has been very time consuming and lengthy and that this impacted on the extent to which they can offer the process their full commitment. One interviewee observed that, "I have been to 47 meetings, there are a few qualifications, and it has been two years!"

Other employer and union interviewees found it difficult to comment because they had not seen the new qualifications and were not even aware that the process was taking place. In fact interviewees from one of the unions were not even aware that work on an NQF was taking place; this despite the MQA communications programme.

In terms of progress in the generation of qualifications, the MQA reported that up to 66 qualifications have been generated. However the website and the Annual Report (MQA, 2007) reflect just over 20 qualifications as well as 476 unit standards. The qualifications available for public review include qualifications in the fields of: Information and Communication Technology; Printing; Tourism and Hospitality Management; Jewellery; Building Construction and Civil Works; Adult Literacy, and Health and Social Care. In addition, the Annual Report notes that an Industry Training Advisory Committee has also been established for Textile and Apparel.

Interviewees commented that the discrepancy between the number of qualifications generated and the ones that are available is due to the MQA website not being fully utilized. However this means that the public (in particular prospective learners, employers and providers) cannot ascertain which qualifications have been generated. This is a particular concern in the light of comments made by employers and unions suggesting very little knowledge of the qualification generation process or the new qualifications.

Further, as will be discussed in the final section of this report – it appears as if the new qualifications that have been generated have not yet been used. The implications of this for a system that was initiated eight years ago will also be explored as part of this final discussion.

Registration and quality assurance of providers

The Ministry of Education is responsible for the "formulation and publication of policies and criteria for the registration of primary and secondary schools.⁶ This includes responsibility for all quality assurance arrangements related to schools and for ensuring that institutions adhere to relevant norms and standards. Interviewees confirmed these processes and stated that the Ministry ensures these things happen.

The Mauritius Qualifications Authority (MQA) is responsible for the recognition of training institutions offering TVET and workplace training. In terms of section 15, subsection (2) of the Mauritius Qualifications Authority Act 2001, as amended under the Education and Training (Miscellaneous Provisions) Act, 2005, "no owner or manager of a training institution shall operate a training institution unless it has been registered and accredited under this Act".

The MQA therefore takes responsibility for the registration of providers and for the approval of their programmes whether they lead to an award or not. This programme approval takes place against a defined process and criteria. These are published on the MQA website. The process is as follows: (i) the MQA receives an application; (ii) the MQA indicates that it has deployed a team of individuals with subject matter expertise to determine whether the programme meets the defined criteria, taking into account factors such as the nature of the learning programme, the trainers (they must be registered) and the resources that are in place.

However while providers suggest that the criteria against which the MQA evaluates programmes are transparent, this view is not shared by those offering programmes that do not lead to a national award. Interviewees indicated that the bases for decisions are entirely unclear. Moreover, it was argued that the MQA processes are prohibitively expensive leading to some providers selecting to try and remain outside of any system.

The TEC is responsible for the registration and accreditation of all providers of tertiary education. In a related function, the TEC also has responsibility for quality assurance and accreditation mechanisms. Part of this responsibility involves the TEC reviewing quality assurance systems that are in place within an institution and ensuring that these are consistent with their requirements. This requirement is outlined in regulation and as with TVET the Education and Training (Miscellaneous Provisions) Act, 2005 specifies that: "No person shall operate a post-secondary educational institution unless it has been approved by the Minister and has been registered and accredited by the Commission under this Act" (p. 8).

The TEC indicates that the purpose of registration "is to ascertain that a postsecondary educational institution is adequately equipped to fulfil its mission. As such, it must demonstrate that it has the necessary infrastructure on an appropriate site and that it has the necessary wherewithal to offer and sustain the programmes it is proposing to offer for a pre-determined period" (TEC, 2005b).

With regards to programme approval, when a programme is submitted for review the Tertiary Education Commission (TEC) considers it in terms of the following criteria:

⁶ Under the terms of the Education and Training (Miscellaneous Provisions) Act, 2005.

- Aims and Objectives
- Student Recruitment, Selection and Admission
- Programme Design, Approval and Review
- The Teaching and Learning Environment
- Staff Resources and Ancillary
- Learning Resources
- Programme Organization and Delivery
- Teaching and Learning
- Student Support
- Monitoring and Assessment
- Output, Outcomes and Quality Control
- External Examiners
- Collaborative Provisions
- Industrial Links/Work-based Experience

The purpose of the review is to ensure that the proposed programme is:

- relevant to the socio-economic needs of Mauritius;
- of an international standard;
- recognized nationally, regionally and internationally;
- delivered in a satisfactory manner, ensuring that resources, both human and material, meet quality control procedures administered by the TEC.

Interviewees from the TEC outlined the process followed when reviewing a qualification. When a provider wishes to offer a tertiary level programme they are required to submit the programme and the related qualification to the TEC for approval. The TEC will refer the qualification to a relevant Mauritian public body i.e. to an institution that delivers similar programmes. This body will make recommendations as to whether the programme meets the defined criteria and can be offered against the identified qualification. This process is followed to ensure that the individuals evaluating programmes have subject matter expertise. Interviewees suggested that the approach allows for a substantive evaluation and avoids a technocratic evaluation which focuses more on form than content. However, one interviewee noted concerns about the validity of utilizing a provider to play this role, arguing a public provider may be biased and/or not have an interest in creating opportunities for other providers to enter the arena.

Interestingly, regarding programmes offered by international institutions, the TEC considers the status of the programme in the country in which the institution is based as well as its national relevance. It was explained that this is an issue that they have really had to grapple with as many of the courses, for example teacher education, have sections within the programme that are quite inconsistent with the legislative and contextual realities for teachers in Mauritius. The TEC indicates that they ensure that these are changed prior to the approval of a particular programme.

Assessment and certification

Different arrangements are in place in the different streams regarding assessment and certification. Considerable changes are underway and these are flagged where relevant.

Schooling as indicated is the responsibility of the Ministry of Education. For public schools this function is carried out by the Mauritius Examinations Syndicate (MES) and the University of Cambridge Local Examinations Syndicate.

At TVET level the arrangements are slightly more complex and are about to change again: this section provides a synopsis of current practice and then highlights some of the key changes that are being proposed. The Industrial and Vocational Training Board (IVTB) is responsible for awarding National Training Certificates for the various NTC programmes. This is done together with the MES which, as indicated, has responsibility for the setting of examinations and for the moderation of the practical assessment and the practical implementation of the theoretical assessment. Regarding the Technical School Management Trust Fund (TSMTF), polytechnics have partnerships with international institutions which take different levels of responsibility for assessment (sometimes together with the MES) and subsequently take responsibility for the awarding of the qualifications (again sometimes with the MES and in some cases with both the MES and the TSMTF).

At the time of this research, legislation had been drafted to address perceived overlaps between the Industrial and Vocational Training Board (IVTB) and the Technical School Management Trust Fund (TSMTF). Interviewees indicated that this merged body will take responsibility for the awarding of TVET qualifications offered by the public and private sectors within the TVET/workplace segment. This is seen as critical as a major impediment to the implementation of the new qualifications is the absence of a body that can award these qualifications.

However it is noted that at this stage the focus of the discussion regarding certification is only with respect to qualifications – there is not yet a decision regarding the certification of unit standards-based programmes. This raises a concern in terms of the extent to which the credit accumulation that is envisaged for this sector will be possible. Further, many private providers offer non-award programmes and it is not clear whether these will be adapted to meet the unit standards to allow for this assessment process, even if it is agreed upon. This raises a further question as to whether the NQF will in reality address the large number of non-award bearing programmes that are in place.

This issue is discussed in more detail in the concluding section of this report.

The extent to which the Mauritius Examinations Syndicate (MES) has a role in this new system is yet to be determined and interviewees suggested that it would be fall to the new merged provider which could decide whether it required additional capacity, in which case the assistance of the MES could be requested. In addition, the MES would continue to play an assessment role for certain international bodies such as the City and Guilds of London Institute where agreements are already in place with the MES.

Tertiary level institutions have been delegated authority for awarding certificates. This assumes that the institutions are registered and accredited and have a rigorous internal and external assessment process in place. International institutions are able to award certificates in terms of procedures agreed upon in their own country and the TEC only recognizes certificates (for equivalence) that are awarded by institutions that have this authority.

In summary

This section provides a brief synopsis of the issues emerging with regards to the implementation of the Mauritius Qualifications Framework (MQF) to date. These issues are flagged here as a basis for the final section of this report which considers the extent to which the NQF is on track towards achieving its objectives.

Importantly, the NQF in Mauritius takes two distinct forms. Allais (2009) distinguishes between organizing frameworks which attempt to make relationships between existing qualifications more explicit, and outcomes-based frameworks which provide the basis for the development of new outcomes-based qualifications which are separate from educational institutions and curricula, and can be used to certify prior learning. This distinction seems to be useful when trying to understand the Mauritian qualifications framework, as both types seem to be in operation.

The NQF operates as an organizing framework: this involved the MQA working with key bodies to reach agreement on level descriptors and the definition of a qualification and coordinating the process of locating qualifications on a level of the NQF. It is argued that this creates a basis for understanding the level at which a programme is pitched, however it is emphasized that this does not create a basis for establishing equivalence. The latter still relies on the key bodies undertaking a review of the particular programme to establish equivalence. This means that while the NQF provides a basis for organizing the qualifications there is still a reliance on agreements with providers regarding questions of access and mobility.

The NQF operates as an outcomes-based framework in the TVET/workplace segment. In this segment the MQA is responsible for establishing representative committees to generate new qualifications. These qualifications are made up of unit standards which specify the outcomes and assessment criteria that the student must meet in order to achieve the qualification. While providers are members of these committees, the process is quite removed from the curricula and the qualifications do not guide teaching, learning or assessment.

It was found that thus far approximately 66 qualifications have been generated, though far fewer than are publicly available (or known about). Further, none of the qualifications thus generated have been used yet. This is explained by the absence of an awarding body for new qualifications, although it is not clear why a plan could not have been put in place with the Mauritius Examinations Syndicate (MES) to achieve this.

It has also been explained that there are now plans in place to ensure that there is an awarding body for qualifications. However, it is not yet clear how short courses leading to unit standards will be assessed. There are also a large number of short courses which are considered to be non-award programmes for which there are no

plans to relate to unit standards. The policy in this regard does not appear to be clear and in reality many employers suggest that there is a need for non-award short courses that can be offered in a flexible manner and that the challenge is to ensure that these can be approved more quickly so that they can access the levy monies. This raises a question about the extent to which the generation of new qualifications can address the challenges that were initially raised as a rationale for outcomes-based education; that is the large number of non-award programmes and the limited ability of learners to accumulate credits and receive recognition for these.

4. Utility of the NQF

Taking into account the manner in which the NQF is operating in Mauritius and the issues emerging, this section provides an indication of the extent to which the NQF has utility in terms of the original objectives that were set out it. These objectives are to:

- Promote access, motivation and achievement in education and training, strengthening international competitiveness.
- Promote lifelong learning by helping people to understand clear progression routes.
- Avoid duplication and overlap of qualifications while making sure all learning needs are covered.
- Promote public and professional confidence in the integrity and relevance of national awards.

It is noted that the NQF has not yet been fully implemented, and this is a very real finding in and of itself. It is therefore difficult to evaluate its impact. However, an initial indication of the extent to which interviewees believe that the NQF appears likely to address its objectives is provided, together with an analysis as to why it has not yet been fully implemented after so many years.

4.1 Promote access, motivation and achievement in education and training, strengthening international competitiveness

The NQF has been implemented in so far as qualifications are now pegged on the different levels of the NQF. This has assisted institutions to explain their qualifications to each other both locally and internationally. This in turn has enabled institutions to create recognition arrangements which allow students that have completed diploma programmes in the vocational stream to enter academic programmes.

However, while interviewees state that the location of the qualifications on the NQF has benefited this process, they also point out that this takes place on an institution by institution basis and is based on a review of specific programmes rather than on a set of arrangements derived from the NQF.

Similarly, while equivalence arrangements are seen as important, these are considered on a qualification by qualification basis linked to the content of each of the programmes rather than the level on the NQF.

The other area where it was anticipated that the NQF would play a role was with regards to the recognition of short courses: interviewees stated that they had anticipated the NQF would ensure that students who had completed short courses would receive recognition for this learning and would ultimately be able to attain a full qualification (through credit accumulation). However in reality there has not yet been any work completed in reconciling short courses with the standards that have been generated. Nor does there appear to be clarity regarding how this reconciliation process will take place. There is also no agreement in place as to who will assess and certificate unit standards and what the policies will be in this regard. In addition, interviewees, for example from the unions, suggested that the process of getting a short course approved is time consuming and expensive and that this makes the process prohibitive. Further, as indicated, many employers suggest that the nature of industry and the rapid pace of change imply that there should not be a situation in which all short courses are benchmarked against standards, as industry requires the flexibility to offer programmes that meet new and specific needs. Interviewees indicated that the emphasis should rather be on ensuring that such programmes can be rapidly approved so that they can access the levy.

The one area where interviewees indicated that the NQF has played a role with regards to access is the work that has been done, and is anticipated, on the Recognition for Prior Learning (RPL). The Mauritius Qualifications Authority (MQA) has supported two RPL pilots: one in tourism and the other in construction. Interviewees from the MQA and other constituencies are of the view that these have been successful and that applicants have achieved the full qualification while others have been informed as to the areas in which they require top-up training.

A few points related to this RPL process should be noted. Firstly, the numbers were found to be very low (less than 50 learners in total) and it was reported that the costs were quite high. It was also found that the RPL process took place against the NTC qualifications (that is the IVTB qualifications) and not the new qualifications. Further, employer and union interviewees expressed a real concern that if RPL took place against the new qualifications people may not be successful as they will not be able to meet the academic requirements built into the qualifications.

Interviewees suggested that the NQF has not yet played any other direct role in promoting access: rather they suggest that the key mechanism for facilitating access is the skills levy which is administered by the National Empowerment Foundation. This is based on enabling unemployed individuals to access skills training to enter sectors of the economy in which there is anticipated growth. Interviewees indicated that in order for a programme to be funded by the levy, it must be approved by the MQA: however it does not need to be benchmarked against the new qualifications or even against award-bearing programmes. This suggests that this key mechanism is not currently aligned with the NQF. While it may be that in future the levy could be linked to qualifications on the NQF, this may not be for some time as there is still no clarity about the manner in which unit standards will be assessed and recognized in the system. Further, as emphasized, employers consistently indicate the wish to support a certain percentage of short courses and not only award bearing programmes as they believe that this allows them a greater level of flexibility.

There is also no evidence at this stage as to the way in which the NQF supports the strengthening of international competitiveness. The recent Education and Human Resource Strategy Plan (2008) emphasizes the need to ensure that the system of education is able to meet the needs of "modern day Mauritius". This statement suggests that this scenario is not yet the case and therefore that the skills required to be internationally competitive are not in place. Interestingly, the Plan does not suggest that the NQF will be responsible for giving effect to this goal, focusing instead on the need to increase provision at the different levels.

However, one interviewee who is both the chairperson of the Information Communications and Technology (ICT) and on the Mauritian Board of Investments believes that the qualifications that have been generated for the Business Process Outsourcing sector will enable a larger number of providers, rather than just the Industrial and Vocational Training Board (IVTB), to take responsibility for provision and that assessment against these standards will ensure that there is a consistent standard. He suggests that this will make a critical contribution to enabling Mauritius to compete in this sector and that in recognition of this the government is providing considerable sums of money to support the programme. Although that there have been real delays in implementing the programme and there is still uncertainty as to who will certificate the programme, it is anticipated that once the IVTB and the Technical School Management Trust Fund (TSMTF) merge these arrangements will be clarified. The length of time that this will take remains uncertain though, and interviewees cannot explain why an alternative arrangement cannot be made.

In other cases employers state that they simply by-passed the NQF process and instead generated new programmes with the IVTB which they both offer and certificate.

4.2 Promote lifelong learning by helping people to understand clear progression routes

This objective relates directly to the previous one, and similarly there appears to be little evidence that the NQF is having an impact on lifelong learning. This is because the NQF does not appear to promote movement across the segments (indeed previously it was noted that many believe this is not even the intention of the NQF). The Education and Human Resource Strategy Plan (2008) cites that the aim of the strategy plan is to change the mindset of the population and inculcate a new school 'culture', which will be accompanied by standardized assessment procedures and standardized tests. They suggest that these changes are intended to inspire confidence and respect in the schooling system and that this needs to be coupled with the transformation of the education system as a whole:

The promotion of life long learning in terms of quantity, quality, efficiency and equitable distribution of learning opportunities as well as the quest for more and better flexible and integrative structures requires the concerted effort by all stakeholders in, among other things, designing and developing a qualification framework that responds to national specification, but has the ability to also encompass regional and international prerequisites. (Education and Human Resource Strategy Plan 2008 – 20, Ministry of Education, Culture and Human Resources, 2008, p. 10)

Analysis offered in the Strategy Plan highlights that there is still very little articulation between the academic and vocational education sectors. This lack of articulation is noted despite the fact that the MQA was established in 2002 with the explicit mandate of establishing the NQF which has articulation as its key expressed purpose. Thus while the strategy suggests there is a need for an NQF to play this role, it does not indicate that the NQF has been able to address these concerns so far.

Even within the vocational segment there appears to be little evidence that the NQF itself promotes mobility and life long learning. While qualifications may be pegged at particular levels on the NQF, interviewees, in particular provider interviewees, state that there appears to be little evidence that this shapes decisions regarding access. Rather, these decisions are made in terms of each particular programme.

Similarly, the Tertiary Education Commission (TEC) explains that pegging a qualification on a level on the NQF is not the same as determining the equivalence of qualifications. This is done through a comparative review of the syllabi to ensure they address similar content. This is particularly important in the professions where decisions are made in terms of whether the individual can practice under a certain piece of regulation.

Interviewees also consistently raised a concern about the absence of career planning: there are divergent views as to whether the NQF and specifically the allocation of qualifications to particular levels on the NQF will assist with this. Interviewees from the construction union had not seen the new qualifications, but noted reluctance amongst employers to facilitate such progression as there are pay implications. Employers also state that they are not aware of the qualifications but suggest that employees would not be able to progress up a formal qualification ladder given their lack of literacy (a point agreed by the unions) and also indicate that this would encourage poaching of staff by other employers.

Regarding students who are not yet in the workplace, it was suggested that the NQF assists students to understand the level at which a qualification is pegged but that this does not inform them as to whether they will be able to progress in a particular direction. Nor can they consult the Mauritius Qualifications Authority (MQA) or the Tertiary Education Commission (TEC) website to establish these pathways, as the lists of programmes that are accredited on the NQF are not consistently mapped (except in terms of broad level indicators).

However, there is an argument – put forward by both the TEC and the MQA – that this information will be publicly available in the future. It was indicated by one interviewee from the National Empowerment Foundation that they will be supporting programmes to facilitate career guidance and that these guidance instructors will be trained in terms of the NQF so that young people can be supported to access programmes that lead to national certificates.

4.3 Avoid duplication and overlap of qualifications while making sure all learning needs are covered

This objective lies at the heart of the NQF which was developed to address the "jungle of qualifications". Yet it does not appear as if there are fewer qualifications now then there were when the NQF was instituted: though it is suggested that the

relationship between many of these qualifications is now clearer. This was particularly emphasized with regards to diplomas as interviewees stated that there are different types of diploma, and that the allocation of these programmes to levels on the NQF helps to make sense of them in relation to each other.

Further, interviewees from the Industrial and Vocational Training Board (IVTB) suggested that they do utilize the new qualifications as a benchmark to review their own qualifications and curricula and to establish areas in the new qualifications that they are not covering and that should be included into their curricula.

When the IVTB and the Technical School Management Trust Fund (MTSTF) merge they will begin to offer new qualifications instead of the National Training Certificate (NTC) qualifications; however, this does not appear to be well understood by all IVTB centres and certainly does not appear to be the case for the polytechnics. While some IVTBs state that they will phase out NTC qualifications and begin to use the new qualifications, others seemed quite unaware of the processes taking place. This will not impact on the provision that is offered by the private providers as many of these indicate that they will continue to offer either short courses or internationally linked courses. They also indicate that there is little clarity as to the way in which short courses will relate to the NQF.

Interestingly in the tourism sector, unions state that training is working and that there are clear pathways for students as well as employees. Further, the training is offered by public and private providers at different levels of the NQF. There appears to be a shared understanding of the changes that will be taking place amongst providers (although this was not the case for the unions who had not heard of the NQF and had no idea that changes were planned). Interviewees from the private and public providers were aware of the new qualifications, had been involved in generating the standards and qualifications and felt that they were appropriate. One interviewee hoped that these new qualifications, used across the sector, would ensure that more practical training was included. He was of the view that the move towards offering qualifications up the NQF ladder had in some cases replaced practical components with theory, reducing the extent students' employability. However all interviewees stated that there are so few providers in the sector that in reality this would not change provision in any substantive way as the sector knows what each provider offers and tailors this in terms of their needs already,

4.4 Promote public and professional confidence in the integrity and relevance of national awards

As indicated, there are lists of accredited programmes which are available on the MQA website. However, there is little knowledge of these lists and they do not provide the level of detail required. The Tertiary Education Commission (TEC) indicated that the availability of lists is still discussion but pointed to concerns that indicating levels may lead to confusion when programmes change. This means that such information is not yet publicly available unless specifically requested. Generally, interviewees appeared to be unaware of the lists or how to use them, although government officials indicated that when they had a query relating to the status of a particular qualification (against their requirements) and they requested the information from the TEC or the MQA they were provided with the relevant information and this enabled them to establish whether there was equivalence.

A specific example of where the TEC and the MQA are used to determine equivalence is with regards to employment in the public sector. It was explained that schemes of service for the public sector specify the qualifications required for any job. These qualification requirements are worked out with the trade unions and are in accordance with the Employment Rights Act 2008 and the Equal Opportunities Act 2008. Within this context, it was indicated that the TEC and the MQA play a critical role in establishing whether the candidate is eligible for appointment in terms of the status of their qualification.

It has been emphasized throughout this report that while in reality the framework exists and qualifications are pegged on different levels of the NQF, the focus of activities are still based on a review of the qualification and programme by the relevant body (as in the example provided above) and there is no automatic assumption of access or equivalence by virtue of a qualification's location on the NQF.

The new qualifications remain untested, and their impact on the sectors in which they are located remains unclear: this, despite the length of time for which the NQF and the MQA have been in existence.

While interviewees from certain sectors indicate that they are aware of the new qualifications and are confident that they will be implemented in the next few years, administrative issues continue to bedevil the system and prevent the take up of the new qualifications. For example, in the Business Process Outsourcing example, qualifications have been generated and there is employer and government buy-in, but there appears to be no ability to resolve the question of who awards the qualification. By contrast, in other sectors such as the ports, the IVTB appears to have been able to generate a new programme, get it approved and make an arrangement with the MES to award the qualification – yet these activities have all happened outside of the NQF.

The biggest concern regarding public confidence is the fact that most stakeholders appear to be unaware of the developments related to the NQF or think that they are taking place in a way that excludes industry. This last point is of particular concern given that industry involvement was the stated purpose of the NQF. An interviewee from the Mauritius Employer Federation stated that industry does not have 50 per cent representation on the MQA and is unable to influence this structure in terms of their needs. The Mauritius Employer Federation suggests that the qualifications are largely based on international standards and have not been contextualized for the needs of employers or employees in Mauritius. The Mauritius Employer Federation cites the issue of literacy already raised in this report as well as specific industry realities which may be different in Mauritius than in the countries in which the standards have been generated. Other employers and unions either have no knowledge of the NQF or believe that it is a costly and time-consuming process which does not actually improve the quality of training. This latter point is one that is reflected upon in the concluding section of this report.

5. Conclusion

The report has highlighted that the design of the NQF in Mauritius is one of a broad structure with three segments each with responsibility for quality.

The manner in which different processes are undertaken within segments differs based on the traditions and existing ways of operating. This means that all three segments have taken the form of an 'organizing framework' while TVET has attempted to developed an 'outcomes-based framework' (Allais, 2009).

Regarding the NQF as an organizing framework, it is noted that the NQF project has not tried to change all aspects of the delivery of education and training. Rather, it has focused on establishing relationships between structures working in the segments and on determining relationships between different programmes and qualifications. It is suggested that in doing this, particularly at a higher education level, the task of determining equivalence between qualifications is made easier. It is also suggested that qualifications that were offered but that do not comply with minimum criteria for a qualification have now been excluded from the NQF and can no longer be offered as an award programme. This helps to make sense of the myriad of qualifications within the tertiary sector. Further, interviewees note that this work could in the future assist individuals offering career guidance (once there is additional information available on the NQF).

In terms of the role of the NQF as an outcome-based framework within the TVET segment, it has been observed that this has increased the expectations of the Mauritius Qualifications Authority in this segment.

Interviewees stress that the generation of new qualifications will be used as a way of achieving the NQF objectives for TVET and as a means of creating a benchmark against which other qualifications can be measured. The new qualifications are also considered important as a way of enabling what were non–award programmes to provide training against registered unit standards so that learners receive recognition.

However, the new qualifications are not yet being offered or used. Instead qualifications offered by the IVTB are still being utilized as the benchmark for establishing equivalence on the NQF (for the TVET segment). Where private providers wish to have national recognition they are already seeking quality assurance arrangements through the IVTB and the MES. Alternatively these providers are continuing to offer international qualifications or non-award programmes.

The MQA perspective is that this lack of take up is primarily because of the absence of an awarding body for these qualifications and it is argued that the pending merger of the Industrial and Vocational Training Board (IVTB) and the Technical School Management Trust Fund (MTSTF) will resolve this issue and qualifications will be utilized.

It will be critical to monitor the usage of the qualifications, particularly as other interviewees suggest that the Mauritius Examinations Syndicate (MES) has always been able to play this role and it seems unclear why they have not already been requested to do so if this was the only obstacle to implementation. Instead, it is

suggested that the lack of implementation may in part relate to the absence of clear arrangements regarding the awarding of the qualification but may also relate to an absence of any shared commitment to the implementation of the NQF.

The tourism union suggests that there has not been a problem with provision in their sector, and that they had not heard of the NQF. Employers and providers in this sector state though they are willing to use the new qualifications and providers suggest that these new qualifications may assist to locate different programmes in relation to each other and in this way enable different providers to offer programmes that complement each other.

In the construction sector, unions had also not seen the qualifications and both unions and employers seemed doubtful that these would be provided to employees: they indicated that low literacy levels would mitigate against this and time concerns given work pressure and the cost implications of increased wages if employees actually complete the training.

Employers in ICT report that technology changes too quickly for formal standards to ever represent a solution to their immediate training needs and that this is only useful in terms of qualifications that provide a foundation of learning for their new recruits. As emphasized throughout this report, interviewees argue that there continues to be real need for non-award programmes. This raises the question of whether the need to ensure that all learning leads to credits is even a desirable objective. These cases all highlight that there is continued uncertainty as to whether all stakeholders are aware of NQF-related developments, and whether they believe that it is desirable to translate all programmes into credit bearing programmes.

Further, the ILO NQF Research Discussion Document (ILO, 2009, p. 8) focuses on the institutional context and government documents highlight the importance of "improving the quality (and relevance) as well as quantity of education supplied in the country" in relation to broader social and economic.

Yet these institutional issues and the imperative to improve the quality of education and training are left out of discussions relating to the NQF. Despite this, or maybe because of this, one interviewee from the IVTB indicated that while new qualifications are used as a benchmark for reviewing their programmes, they prefer to offer programmes against their own qualifications as these programmes have been generated in a comprehensive manner and include a set of objectives, entry requirements, mode of training, duration, curriculum structure, learning strategy and scheme of assessment. They argue that the new qualifications do not offer any guidance as to how to provide the programme.

Of even more concern is the number of interviewees who hold the view that that the new qualifications suggest that one teaches something and then moves on once individuals have acquired the standard, in contrast to an approach that continually recycles principles and knowledge. This could suggest that providers may use these new qualifications in a way that makes fragments learning and consequently undermines rather than improves quality.

Finally, the report has emphasized that there are imperatives that the NQF cannot address: the NQF cannot encourage learning or the provision of training. This is dependent on effective funding of students. While in Mauritius education up to higher education is free, students still drop out of even school education as they cannot afford not to work. Further, employers state that the levy drives many of their training decisions alongside the basic needs of the industry: the extent to which there is an NQF is less relevant to them.

These last points emphasize a number of critical issues emerging from this case study. First, that the NQF on its own cannot achieve the complex objectives that are set out for such systems and that it is vital that a more realistic view is taken of what it can and cannot assist with. This would ensure that complementary strategies are put in place and resourced. Secondly, that there is a need for a clear process of integrating qualifications within the institutional context and of exploring the relationship between the qualifications and provision. Thirdly, there is a need for leadership and communication to ensure that stakeholders and others understand the changes and can set in place the steps that are required to ensure that they are able to take advantage of the changes where they could result in a positive impact.

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