# Experience of Designing and Implementing the National Vocational Qualifications Framework of Sri Lanka

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## 1. Introduction

Sri Lanka's Technical and Vocational Education and training (TVET) sector comprise of public training networks and individual training institutions and training institutions operated by the private and Non-Governmental sector organizations. All four major training networks and several other TVET institutions have been brought under the purview of the Ministry of Youth Affairs and Skills Development since 2010. The Department of Technical Education and Training (DTET) is the oldest network providing TVET which had its first Technical College established in 1893 in Colombo. This network has now grown to 38 Technical Colleges. National Apprentice and Industrial Training Authority (NAITA), National Youth Services Council (NYSC) and Vocational Training Authority (VTA) came into operation from 1968 to 1995. VTA has become the largest network with over 270 Training Centres island wide mainly focusing its training on rural youth. NAITA offers industry based apprentice training while operating 3 national level and over 40 regional training centres. In addition to the above networks, some government departments and state corporations have established training centres in their own specializations, mainly focusing on the training and skill development of their own staff.

Private sector and Non Government Sector have also established over 300 training centres with private sector mainly focusing on training for service sector employment. Private sector training centres offering courses to the public has the profit motive and hence the reason for choosing low capital investment courses catering the rapidly expanding service sector. Non-governmental sector which comprise of Civil Societies or religious organizations are mainly operating in the less developed or conflict affected geographical areas of the country. This sector provides Vocational

Training and as well as livelihood training for the development of communities.

The development of TVET through individual training organizations in the absence of national level planning resulted in variety of courses with no uniformity across institutions and they often lacked the competencies expected by the industry. The emergence of free market economy and the growth of private sector industry necessitated competent workforce to serve in modern technological environments and hence the government decided in 1997 to embark on a major TVET reform. The focus of TVET reform was to develop a system to equip the Sri Lankan workforce with competencies expected by the industry and in achieving this objective to establish courses with labour market orientation and offer unified qualifications according to a qualification framework. Tertiary and Vocational Education Commission (TVEC) which is the policy making, planning and regulatory body

Sri Lanka's Key Economic indicators - 2010				
Mid 2010 population	20.653 million			
Growth of population	1.0%			
Labour force	8.108 million			
Unemployment rate	4.9%			
Per capita GDP	2399 US\$			
School admissions	332,000			
University admissions	21,547			

was to lead the formulation and implementation process of the reforms. The National Vocational Qualifications Framework (NVQF) was officially launched in August 2004.

# 2. Initial concepts in designing NVQF

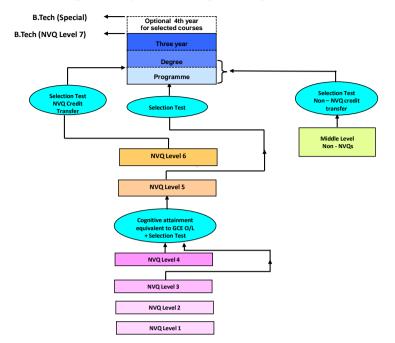
The initial concepts in designing NVQF were as follows.

- i. A vocational qualification system that could assure quality and certify the competencies and offer unified qualifications across all training providers, both public and private,
- ii. Upward and lateral mobility within the vocational qualifications without any disadvantage to a person who has missed part of general education in the schools,
- iii. Progressive acquisition of competencies as a person obtains higher qualifications so that he/she would be able to perform range of activities in the chosen field.
- iv. Learning effort at middle technical and degree levels to be quantified through a credit system so that the comparison of vocational qualifications with other qualification systems would be possible.

The NVQF is to cover qualifications at craft, middle technical and degree levels based on the industry identified competency standards. The number of levels in the qualifications framework was decided to provide sufficient spread of qualifications at each category. The seven levels of qualifications were identified with each level described by the processes to be carried out, level of responsibility for the processes and the learning demand to achieve the competency. Sri Lanka has adopted the level descriptors of the New Zealand NQF.

Level No.	Qualification	Generalised Description
Level 1	National Certificate	Level 1 recognizes the acquisitions of entry level competencies
Level 2	National Certificate	Levels 2, 3 and 4 recognize increasing levels of competencies. Level 4 qualification provides for
Level 4		full craftsmanship/ workmanship.
Level 5	National Diploma	Levels 5 and 6 recognize the increasing levels of
Level 6		competencies of technicians including supervision and process management.
Level 7	Bachelors Degree	Level 7 recognizes the vocational/technological competencies at Bachelors Degree level

Table 1.	Levels of	qualifications	in NVQF
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## Linkages to Diploma & Degree Programmmes

#### Figure 1. Qualification upgrading pathways in NVQF

The private sector was expected to play a greater role in TVET reform and implementation as they are the major employer for TVET graduates. The major inputs expected from the private sector were as follows:

- Provide guidance in policy making and planning in TVET development and in quality assurance.
- Advice on the envisaged development of industry sectors and consequent manpower demands to be met by the training systems.
- Identify the competency needs in respective fields for the setting up of competency standards.
- Actively engage in the provision of training in accordance with the revised system either through their training centres or by providing on the job training to trainees of other organisations.

#### 3. Critical aspects of designing NVQF

#### i. Identification of occupations and fields for development of competency standards

Identification of occupations in the order of priority for the development of competency standards was done based on the labour market demand assessments. Labour Market Analysis unit of TVEC made use of data from Department of Census and Statistics, Vocational Education and Training Plans prepared by TVEC for industry subsectors, newspaper employment advertisement surveys by TVEC and labour migration data for foreign employment.

#### ii. Development of competency standards

Development of Competency Standards is an industry led process to identify the specific competencies needed to perform an occupation or a job in the industry. In Sri Lanka where organized industry groups or trade groups are not available in many subsectors, competency standards development was performed as a government facilitated process. NAITA that has strong links with the industry was assigned this task to formulate National Industry Technical Advisory Committees (NITACs) for different industry subsectors and develop competency standards through them. Occupational analysis approach was used at certificate levels covering NVQ 1 -4 and functional analysis approach for diploma levels, NVQ 5 & 6.

#### iii. Development of course curricula

The competency profile developed in the process of competency standard development was used for the development of competency based curricula by the National Institute of Technical Education of Sri Lanka (NITESL) which was the body for technical teacher training and curriculum development. Curricula for diploma courses in levels 5 and 6 are to cover broad technical and employability competencies and the learning effort was quantified by a credit system. The credit system adopted was European Credit Transfer System (ECTS) with 60 credits for level 5 and 120 credits for level 6.

#### iv. Monitoring mechanism for quality assurance in course delivery

All TVET providers should register with the Tertiary and Vocational Education Commission (TVEC) according to the provisions of the Tertiary and Vocational Education Act No 20 of 1990. Availability of course curricula, qualified trainers and training equipment and facilities are checked in the registration process. However, the award of NVQs from training institutions is through accredited courses where each course is assessed for course accreditation according to NVQ standards. Course accreditation assures that the trainees acquire the specified competencies in a systematic manner and necessary records and evidences of achievements are maintained. Further, education and training institutions that conduct NVQ 5 & 6 courses must cover all training related functions by a comprehensive Quality Management System.

#### v. Award of qualifications

Competency units are clustered according to the job functions to form qualifications at the certificate levels. NVQs are awarded for trainees completing accredited courses after conducting competency based assessments by Registered Assessors. Registered Assessors are technically competent personnel in the respective occupations or fields and have successfully completed a five day course in assessment techniques. The registry of assessors is maintained in TVEC.

NVQs are also offered through Recognition of Prior Learning (RPL) for those who have acquired respective competencies by working in the industry. This helps the skill enhancement of the workforce for higher productivity and for workers to enter the education and training system to acquire lateral or higher qualifications.

# 4. Implementation of NVQ

The development and implementation of NVQ was supported by the Asian Development Bank sponsored Skills Development Project and the formal launch of NVQ was in August 2004. The implementation was in two stages; in stage one, implementing NVQ 1 - 4 certificate courses covering 45 competency standards and in stage two, implementing NVQ 5 & 6 diploma courses and level 7 degree courses while expanding number of competency standards and courses at certificate level. All government training networks and large number of private and NGO training institutions participated in this reform process.

As at November 2011, there are 105 competency standards developed at certificate level, 17 standards at diploma level and seven courses of study at level 7. Nine Colleges of Technology established in the nine provinces of the country by upgrading leading Technical Colleges and the University of Vocational Technology established, outside the conventional university system, to provide qualification upgrading pathways up to the degree level in the TVET sector. The number of accredited courses in the public sector is 609 and that of the private and NGO sector is 292 and the number of NVQ certificates issued is over 50,000.

The main contributory factors for the successful development and implementation of NVQ can be summarized as follows;

- Priority given by the government to the TVET reform process and the strong political commitment.
- Reform process led by a local team of professionals from the TVET sector, technically assisted by ADB project consultants. Tertiary and Vocational Education Commission was the focal point. Continuous innovation, development, problem solving, monitoring and issuing of policy directions and operational guidelines were the key to success.
- Engagement of the private sector industry in policy making, planning and standard setting to ensure the industry relevance of courses and qualifications and thereby winning the confidence of the industry for NVQ.
- Acceptance of NVQ framework as the basis to restructure the government salary structure and the schemes of recruitment.

# 5. Certain good practices in implementing NVQ

# I. Establishment of NVQ Steering Committee and NVQ administration system

NVQ steering Committee was established in 2004 with the chairmanship of the Director General, TVEC and the relevant officials of the ministry, heads of training networks, senior officials of training networks in charge of planning and training, Director of the ADB sponsored project and senior project consultants (when available) were the members. The steering committee which meets once a month is the forum to make policy recommendations to TVEC Governing Board and to take decisions on implementation of NVQ related activities and the monitoring of progress. Policy level decisions are made public by the issue of NVQ Circulars by the TVEC.

#### II. Staff training for CBT delivery and quality assurance measures

Implementation of a major TVET reform is only possible by educating and training staff at various levels. Training programmes were implemented to educate staff on the NVQ system,

competency based delivery of training, course accreditation, competency based assessments etc. Selected staff members were given foreign training programmes in countries such as United Kingdom and Australia to experience the NVQ operations first hand. These training programmes, both local and foreign, while giving the technical know-how to staff members to deliver and manage NVQ courses helped to manage the initial resistance to change. Managing the inevitable resistance to change is a vital process in any major reform.

#### III. Funding mechanisms to both public and private sectors

ADB sponsored projects from 2000 to 2011 provided funding for systems development and upgrading of infrastructure and equipment facilities in the majority of public sector institutions. Several other projects from other donor agencies also contributed to the development framework. These inputs were vital to deliver the courses at the required standards with quality assurance.

TVEC has the legal mandate to provide funding to enhance training delivery in industry sectors identified by the VET plans to the public sector and also to the private sector. These public sector grants are in addition to the direct grants received by the respective institutes from the treasury. TVEC used the grants scheme focusing course accreditation leading to the award of NVQ. The grant scheme became a major vehicle to propagate NVQ in the private and NGO sector. As at today, the single training centre that has issued the largest number of NVQ certificates is a NGO operated centre assisted by the grant scheme.

TVEC also utilized its grants to establish the Accredited Training Providers (Private Sector) Association (ATPA) which is a voluntary body to self-regulate the quality of training and to support the private training providers to implement NVQ.

# IV. Establishment of clear qualification upgrading pathways

There was no clearly identified qualification upgrading pathways prior to the reforms in the TVET sector. This was a main hindrance to attract secondary school leavers to the sector as they did not see avenues for career progression. The NVQF provided clear qualification upgrading pathways and the second ADB project was focused on building necessary facilities to conduct diploma and degree level courses. Establishment of the University of Vocational Technology in the TVET sector is a milestone in reinforcing the confidence in the minds of youth.

# V. Career guidance and social marketing

Citizens of Asia place great importance in higher education and the aspiration of large majority of youth is to earn a university degree. However, the reality is otherwise. While all are not capable of pursuing higher education or not capable of affording, the economic and social development of a country requires competent persons to engage in occupations and sectors at various levels. These skill needs are provided through TVET and therefore, social marketing and career guidance to school children, teachers, parents, employers and youth in general is a very important component in TVET. Ministry, organizations under its purview, projects, ATPA etc conducts career guidance and social marketing programmes with varying success and much more need to be done in this area.

# 6. Conclusion

Sri Lanka in its path to rapid economic and social development has placed great importance in developing its workforce to serve in diverse industry sectors. The National Vocational Qualifications Framework assists in achieving quality assured skills development and offer unified qualifications that are understood by the industry. Labour market for Asia's workforce has expanded beyond the boundaries of their respective countries and NVQFs can facilitate mutual or regional recognition of qualifications. Countries in Asia and the Pacific are in different stages of development and implementation of NVQFs and strong regional effort is needed to achieve greater harmony among NVQFs.

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