Benchmarking of qualifications frameworks:

A report on potential comparability between the Bangladesh technical and vocational qualifications framework and qualifications frameworks of other countries of origin and destination of migrant workers

ILO Country Office for Bangladesh

Foreword and acknowledgements

This report, 'Benchmarking of qualifications frameworks: A report on potential comparability between the Bangladesh technical and vocational qualifications framework and qualifications frameworks of other countries of origin and destination of migrant workers' was commissioned by the ILO programme for 'Promoting Decent Work through Improved Migration Policy and its Application in Bangladesh'. This programme is funded by the Swiss Agency for Development and Cooperation. This report was commissioned by the ILO for the realisation of the one of the programme outputs as well as to ensure that the work concerning accreditation and recognition of qualifications is pursued systemically and using a qualitative approach.

This report benchmarks a number of frameworks against the Bangladesh technical and vocational qualifications framework with an aim to better understand the potential for comparability. In doing so, it also brings out the trend of moving from the technical and vocational qualifications framework to broader-based national qualifications frameworks.

The recommendations, including for mutual recognition, are representing the views of the external team of skills experts of the DEFT Advisory and Research Pvt Ltd. This report was developed under the overall guidance of ILO programme for Promoting Decent Work through Improved Migration Policy and its Application in Bangladesh', and the report was written by the external team of the DEFT Advisory and Research Pvt. Ltd. led by Partha S Banerjee. Valuable contributions were also received from Begum Shamsun Nahar, Director-general, Bureau of Manpower Employment and Training and other officials of the Bureau and the Ministry of Expatriates' Welfare. Technical support from within the ILO was provided by Paul Comyn, Skills and Employability Specialist, Nisha, Chief Technical Advisor, Decent Work for Migrant Workers, and Gabriel Bordado, Technical Advisor, Bangladesh Skills for Employment and Productivity.

In addition, we would wish to acknowledge Partha S Banerjee and his team-members involved in the development of this report. This report will give the basis for future work on the national qualifications framework to be undertaken by a forthcoming ILO initiative and will inform the potential work that the Government of Bangladesh may choose to pursue regarding mutual recognition of qualifications. This work is to be seen as an ILO work in progress which would get updated in the near future.

- *Promoting Decent Work through Improved Migration Policy and its Application in Bangladesh*
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Contents

List of Tables

A.   Introduction

1.   The Government of Bangladesh initiated a number of reforms to the Technical and Vocational Education and Training (TVET) system through its own initiatives and with the help of development partners. Reforms range from new legislation and policies to the establishment of a National Technical and Vocational Qualifications Framework, and a Quality Assurance System and new competency based training courses. The reforms also involve closer cooperation with industry including the establishment of Industry Skills Councils. Reformed TVET is expected to contribute to national development through more employment and productivity at work, as well as larger numbers of skilled workers going abroad [1].

2.   The National Training and Vocational Qualifications Framework (NTVQF) was initiated in 2008 as one of the most important building blocks of the TVET Reform Project, funded by the European Commission (EC) and implemented by the International Labour Organization (ILO) in collaboration with the Government of Bangladesh. The project is working towards reforming technical and vocational education and training in Bangladesh [2].

3.   The National Skills Development Council (NSDC) is the apex national body in Bangladesh for TVET. The mandate of the NSDC involves implementing a national policy for skills development, overseeing key reforms, coordinating activities, and monitoring the implementation of TVET. The Bureau of Manpower, Employment, and Training (BMET) has a wing that acts as a major training provider related to overseas employment. The Bangladesh Technical Education Board (BTEB) holds the jurisdiction to organize, supervise, regulate, control, and develop technical and vocational education across Bangladesh [3].

4.   The NTVQF is intended to cover the existing workforce and those entering the workforce. The framework allows for the recognition of skills workers have acquired in the informal sector, and includes post-secondary qualifications up to diploma level. These new qualifications are to be offered in formal education and training, workplace training and all training provided by public and private organizations, whether officially recognized or not [4].

5.   The NTVQF consists of six levels plus two prevocational levels, making it an eight-level framework (Table 1). The descriptors for each of the six main levels are knowledge; skills and responsibility (please refer Appendix,

6.   Table 39 for level descriptors). The table also illustrates the relationship of the NTVQF to the existing qualifications structure.

Table 1: National Technical and Vocational Qualifications Framework (NTVQF)

NTVQF Levels	Pre-vocational education	Vocational Education	Technical Education	Current Qualification Structure	Job Classification
NTVQF 6			Diploma in engineering or equivalent	4 Year Diploma	Middle level manager
NTVQF 5		National Skill Certificate 5 (NSC 5)		NSS Master	Highly skilled worker/supervisor
NTVQF 4		National Skill Certificate 4 (NSC 4)		NSS 1 / HSC (Voc / BM) Year 11 & 12	Skilled worker
NTVQF 3		National Skill Certificate 3 (NSC 3)		NSS 2 / SSC (Voc) Year 10	Basic-Skilled worker
NTVQF 2		National Skill Certificate 2 (NSC 2)		NSS 3 / SSC (Voc) Year 9	Basic-Skilled worker
NTVQF 1		National Skill Certificate 1 (NSC 1)		NSS Basic / Basic Trade Course	Basic worker
Pre-Voc. 2	National Pre-Vocational certificate NPVC 2			None / Less than 8 years of school	Pre-Vocation Trainee (2)
Pre-Voc. 1	National Pre-Vocation certificate NPVC 1				Pre-Vocation Trainee (1)

7.   About 8.3 million Bangladeshi migrant workers are engaged in remunerated activities in more than 157 countries around the world. In recent years, the yearly migration from Bangladesh is about 600,000 to 700,000 people [3]. As a result, Bangladesh economy significantly benefits from the remittances sent back to the country by migrant workers. However, it is estimated that only 35 percent of the migrant workers are engaged as skilled workers [3]. The higher proportion of less-skilled migrant workers from Bangladesh does not command remunerative jobs in other countries. This results in lower remittance flows from this segment of migrant workers. The recognition of migrant workers' skills and (if necessary) up-skilling them to destination countries qualification benchmarks thus becomes a priority for not only aligning the programme to ILOs' fair migration agenda, but also achieving higher remittance inflows into Bangladesh.

B.   Our methodology

8.   The methodologies for comparing qualification frameworks have evolved over time. Some of the more widely and internationally accepted methods have been enlisted below[1].

9.   **Credential evaluation:** This is the simplest yet effective way for a country needing to integrate a significant number of persons, either immigrants or workers or students, in a short span of time. This comparative method relies on in-house expertise and international references (generally for formal education and institutional training) to offer a professional opinion. However, this method based solely on the study of a credential, cannot always ascertain the actual skills or knowledge of specific applicants.

10.   **Recognition by prior agreement:** This evaluation method is generally adopted for recognizing skills within bi-lateral, multilateral and trade / regional agreement frameworks. Usually the main purpose is to enable bi-lateral and multi-lateral movement of skilled workers between countries and/or regions, such as Lisbon Convention in Europe.

11.   **Benchmarking:** This is a popular method wherein the level of any given qualification framework is compared with an identified benchmarked qualification framework. A benchmarking exercise is then used to determine the level of a qualification and mapping involves the analysis of qualification content to identify subject knowledge, skills and competencies. 'Referencing' is another methodology which is closely related to benchmarking for the recognition of qualifications which is generally accepted.

12.   **Recognition of qualifications for social issues:** It is based on the recognition factors through which qualifications function as effective discriminators of who is eligible for employment, and also for prescribed employment benefits. It is used as a recognition of qualifications tool for social uses. Possibly, this is more of an implicit way of analysis and is the least developed among the methods.

13.   In this study, the standardized 'Benchmarking' method (including referencing) has been used because it improves transparency, demonstrates competency, facilitates cross-border

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[1] James Keevy and Coleen Jaftha,
http://www.academia.edu/4392465/Referencing_of_qualifications_frameworks_a_new_mode_of_recognition_to_take_note_of

mobility and gives access to social goods. The level of a given qualification (Bangladesh in this case) was compared with identified benchmarked qualification frameworks of some other countries. In this case, the benchmarking exercise was done to determine the level of a qualification and the mapping involved the analysis of qualification content to identify subject knowledge, skills and competencies. The extent of matching between details of two level descriptors (Bangladesh and reference country), was classified under following three categories:

- Low matching – there may be elements where there is a correspondence but there are a number of issues / contradictions
- Medium matching – there are elements where there is a correspondence but there are a small number of issues / contradictions
- High matching – where there are no issues / contradictions. The language / terms used although not the same, mean the same or similar

14.   Few illustrative examples of the application of this benchmarking methodology in our study have been discussed below. More details are set out in subsequent sections of the report and in the Annexures.

15.   **Australia:** A comparison was made between the individual level descriptors of NTVQF and AQF at various levels. There was medium kind of matching of Level 2 of NTVQF with Level 1 of AQF and of Level 5 of NTVQF with Level 4 of AQF, whereas high matching has been noticed between of Level 3 of NTVQF with Level 2 of AQF and of Level 4 of NTVQF with Level 3 of AQF. On analysis, low matching has been observed between of Level 6 of NTVQF with Level 5 of AQF

16.   **Bahrain:** The NQF (Bahrain) encompasses the qualifications from all sectors, school, vocational education institutes, work-based learning and higher education. It has 3 strands and 5 sub-strands. It is wide and covers all domains of educational and vocational education system. On the other hand NTVQF of Bangladesh has only 6 levels of NTVQF. An attempt was made to find the best match between NQF of Bahrain and NTVQF of Bangladesh by comparing individual level descriptors.

17.   **Caribbean**: The CARICOM Qualifications Framework (CQF) was developed jointly by all the member states of CARICOM and is honoured by all. It has been standardized against European, Scottish, British and Australian qualification framework. While NTVQF of Bangladesh has 6 levels with respective level descriptors, CQF has five characteristics and provides seven

generic level descriptors. Comparison has been made between the level descriptors of NTVQF of Bangladesh and that of CQF to arrive at the best match.

18.   **Indonesia:** The IQTF has a set of eight standards and has nine levels, starting from Operators to Technicians / Analyst to Expert. The NTVQF of Bangladesh has 6 levels for comparison with 9 levels of IQTF. However, the best possible match was made between the level descriptors of both the qualification frameworks.

19.   **Ireland:** The National Framework Qualification of Ireland has 10 levels with appropriate level descriptors. These level descriptors are further broken down into eight knowledge, skills and competence sub strands. They were compared against 6 levels of NTVQF of Bangladesh to find the best match.

20.   **Netherlands:** The Dutch Qualifications Framework (NLQF) has systematically classified all the Dutch qualifications starting from Level 1 basic education to the Master's degree at level 7 and a Doctorate's degree at level 8. Besides these eight levels there is as an Entry Level too. They were compared against 6 levels of NTVQF of Bangladesh for the best possible match of respective level descriptors.

21.   **Vietnam:** There were 5 levels of qualifications available for Vietnam National Occupancy Skills Standard (NOSS) against 6 levels of NTVQF of Bangladesh. During the analysis, high level of matching was found between the level descriptors of NTVQF of Bangladesh and Vietnam National Occupancy Skills Standard.

22.   **South Africa:** South African Qualification Authority (SAQA) has specified the qualification framework of South Africa with 10 categories and 10 levels. Efforts were made to compare them against the 6 levels of NTVQF of Bangladesh.

23.   Details of comparison of individual levels and corresponding level descriptors are available in the Annexures to this report.

C. Comparing Bangladesh NTVQF with international qualification frameworks

24.   One of the major challenges related to the task of winning recognition status for the skills of Bangladeshi migrant workers involves achieving common skills assessment and certification systems. These quality assurance mechanisms should be understood and shared by both the origin and destination countries. To make overseas employment equitable for Bangladeshi migrant workers, it is necessary to provide a means to make their skills and qualifications recognized across jurisdictions. Skill gaps between Bangladesh and the destination countries must be appropriately defined using competency standards whose equivalence is either established or can be objectively compared [3].

25.   Most of the countries now have their own qualification framework anchored on a quality assurance system. Such quality-assured framework can be a basis for facilitating the movement of natural persons including workers particularly between sending and receiving counties as well as between countries within a specific region.

26.   The model of competence-based education adopted in the Bangladesh NTVQF system appears to be in-line with the well-recognized Australian and the UK approaches. Both these focus on workplace functional analysis [5]. The NTVQF is supported by quality assurance mechanism so that it will serve as responsive mechanism for qualifying workers.

27.   Experts working on the NTVQF project claim that the framework draws on similar frameworks in Sri Lanka, the Maldives (in the South Asian Association for Regional Cooperation), Vanuatu (similar to the Sri Lankan framework) and Malaysia. In addition, because of the growing significance of the European Qualifications Framework, the level descriptors for the Bangladesh framework have drawn substantially from the EQF, with some modifications in terminology [5].

28.   Therefore, the NTVQF can become the basis for qualifying migrant workers by:
• benchmarking NTVQF with other international qualification frameworks, and
• working out a mutual recognition agreements with receiving countries that will facilitate the recruitment of qualified Bangladesh workers

29.   An initial mapping of the Bangladesh NTVQF levels against the qualifications frameworks in the key countries of destination for Bangladeshi workers has been completed [6]. This work takes forward the earlier study and has mapped the NTVQF with some other countries. The qualifications framework mapping has been done on by referencing levels and level descriptors of the different frameworks to identify broad equivalency among the international framework.

30.   The international qualifications frameworks were examined and mapped in terms of the following:

- Quality Assurance System
- Competency Based Curriculum development process
- Teaching-Learning, Assessment Resources
- Role of the Industry Bodies;
- Review of various modalities for TVET/skills training.

31.   The following list of countries / regions were considered for mapping the qualification frameworks in this work.

- Africa and SADC: South Africa and Kenya
- Europe: Ireland, Netherland, Scotland, and Denmark
- GCC: Bahrain
- Caribbean: Caribbean and Barbados
- ASEAN region: Indonesia, and Vietnam
- Pacific: Australia, and New Zealand

Australia

32.   Australian education and training system is wide and diverse. In order to standardize the nationally consistent qualification system, the Australian Qualifications Framework (AQF), a national policy for regulated qualifications in Australian education and training was first introduced in the year of 1995. In the second version, it was revised during the period 2011-13. Implementation of AQF Second Edition, commenced with effect from 1st July 2011. Effective 1st January 2015, it has been strictly enforced.

33.   The AQF is the national policy of Australian Government for the purpose of regulated qualifications in Australian educational and training systems. It incorporates the qualifications from each education and training sector into a single comprehensive national qualifications framework. The AQF spans across the country's higher education, vocational education and training institutes and schools.

Scope and range

34.   The AQF is also broad in dimension and complex in nature. It is a framework which incorporates the qualifications from each of Australian education and training sector into a single comprehensive national qualifications framework. It takes care of the current education and training system of Australia, as well as that of future years. In a nutshell it contributes to the Australian economic performance by supporting contemporary, relevant and nationally consistent qualification outcomes which build confidence in qualifications. It provides an Australian regulatory and quality assurance for education and training. It helps individual to obtain recognition of his/her prior experience and learning and to make progress through further education and training.

35.   The key feature is that AQF supports and enhances the national and international mobility of graduates and work force through increased recognition of the value and comparability of Australian qualifications. Another dimension is that AQF enables the alignment of the worker with international qualifications frameworks. AQF provides support for the development and maintenance of career path to enhancement of qualifications and assist workers to move forward.

36.　　It provides a seamless mobility among various education and training segments and also between the said sectors and the labour market, both local and international. AQF necessarily provides 'credentials consistency', at various levels of its framework along with its structure and descriptors qualification specifications. Reversely, in the international market, the AQF contributes to the recognition of Australian qualifications.

Architecture

37.　　Table 2 presents the ten levels of AQF

Table 2: AQF levels and qualifications

AQF level	Qualification type
Level 1	Certificate I
Level 2	Certificate II
Level 3	Certificate III
Level 4	Certificate IV
Level 5	Diploma
Level 6	Advanced diploma
	Associate degree
Level 7	Bachelor degree
Level 8	Bachelor honours degree
	Vocational graduate certificate
	Vocational graduate diploma
	Graduate certificate
	Graduate diploma
Level 9	Master's degree
Level 10	Doctoral degree

38.　　Table 3 presents the AQF qualifications by education sector

Table 3: AQF qualifications

Schools sector	Vocational Education and Training (VET) sector	Higher education sector
Senior Secondary Certificate of Education (2 years)	Vocational graduate diploma (1–2 years)	Doctoral degree (3–4 years)
	Vocational graduate certificate (0.5–1 year)	Master's degree (1–2 years)
	Advanced diploma (1.5–2 years)	Graduate diploma (1–2 years)
	Diploma (1–2 years)	Graduate certificate (0.5–1 year)
	Certificate IV (0.5–2 years)	Bachelor degree (honours) (1 year)
	Certificate III (1–2 years)	Bachelor degree (3–4 years)
	Certificate II (0.5–1 year)	Associate degree (1.5–2 years)
	Certificate I (0.5–1 year)	Diploma (1–2 years)

39.   For the purpose for migration of skilled personnel from Bangladesh, the following Australian authorities play key roles:

- The Australian Government Department of Immigration and Border Protection's Australian Skills Recognition Information area assists skilled workers from outside Australia who are seeking to migrate to Australia or work temporarily in Australia

- Trades Recognition Australia (TRA) is a skills assessment service provider specialising in assessments for people with trade skills gained overseas or in Australia, for the purpose of migration and skills recognition.

- The Australian Government Department of Education and Training's Qualifications Recognitions area provides a service to individuals seeking to have their qualifications assessed for equivalence to Australian qualifications.

Level comparison with NTVQF

40.   A study was made to compare the various parameters of individual levels of Bangladesh NTVQF with equivalent levels of Australian AQF. The level descriptors were compared and following are the findings (Table 4).

Table 4: Bangladesh NTVQF comparison with Australia AQF

Bangladesh		Australia		
NTVQF	**Academic Comparison**	**AQF**	**Academic Comparison**	**Summary of conclusions drawn from supporting sheets**
		Level 10	Ph. D.	
		Level 9	Masters degree (extended), Master degree (Coursework) & Master degree (Research)	
		Level 8	Graduate diploma, Graduate Certificate & Bachelor honours degree	
		Level 7	Bachelor degree	
		Level 6	Associate degree & Advanced diploma	
Level 6	4 Year Diploma	Level 5	Diploma	Low matching between NTVQF Level 6 and AQF Level 5
Level 5	NSS Master	Level 4	Certificate IV	Medium matching between NTVQF Level 5 and AQF Level 4
Level 4	NSS 1 / HSC (Voc / BM) Year 11 & 12	Level 3	Certificate III	High matching between NTVQF Level 4 and AQF Level 3
Level 3	NSS 2 / SSC (Voc) Year 10	Level 2	Certificate II	High matching between NTVQF Level 3 and AQF Level 2
Level 2	NSS 3 / SSC (Voc) Year 9	Level 1	Certificate I	Medium matching between NTVQF Level 2 and AQF Level 1
Level 1	NSS Basic / Basic Trade Course			
Pre-Voc 2	None / Less than 8 years of school			
Pre-Voc 1				

Bahrain

41.   Bahrain education and training system was complex. In order to bring uniformity and standardize the system, the National Qualifications Framework (NQF) of Bahrain was developed. It was done in two phases. During the Phase 1 (January 2010 - November 2011), the architecture, policies and level descriptors for the framework were established. Phase 2 was commenced in March 2012 for a period of 2 years and was concluded in June 2014. The target of Phase 2 were the development of the NQF including testing and trialling the procedures for quality assurance, qualifications approval and mapping qualifications to the NQF.NQF (Bahrain) has been developed as a part of the Educational Reform, VISION 2030 of Bahrain.

Scope and range

42.   The NQF (Bahrain) was developed as a continuous learning framework encompassing the qualifications from all sectors, school, vocational education institutes, work-based learning and higher education. It also takes care of the futuristic requirements of the framework.

Architecture

43.   The NQF (Bahrain) consists of 10 well defined levels and level descriptors have three strands and five sub-strands (Table 5).

Table 5: Bahrain NQF qualifications

Level 10	Doctoral degrees
Level 9	BVQ 5, Master degree, Post graduate Diplomas
Level 8	Bachelor's degree, Honor's degree
Level 7	BVQ 4, Higher Diplomas
Level 6	Diplomas
Level 5	BVQ 3, Advance Graduation Qualifications, Higher Certificate
Level 4	BVQ 2, School Graduation Qualifications, Certificate II
Level 3	BVQ 1, Intermediate, Certificate 1
Level 2	Access 1
Level 1	Access 2

44.   Following are the three strands of NFQ (Bahrain):

- Knowledge
- Skill
- Competence

45.   Strands and respective sub-strands are given below (Table 6).

Table 6: Description of Bahrain NQF Standards

Knowledge Skills Competence		Skill		Competence
Theoretical understanding	Practical Application: subject / discipline specific	Generic Problem Solving and Analytical Skills	Communication, ICT and Numeracy	Autonomy, Responsibility and Context

Level comparison with NTVQF

46.   A comparison has been made between individual level descriptors of Bangladesh NTVQF and equivalents levels of BQF (Bahrain). Following are the findings (Table 7).

Table 7: Bangladesh NTVQF comparison with Bahrain BQF

Bangladesh		Bahrain		
NTVQF	Academic Qualification	BQF	Academic Qualification	Summary of conclusions drawn from supporting sheets
		Level 10	Doctoral degrees	
		Level 9	BVQ 5, Master degree, Post graduate Diplomas	
		Level 8	Bachelor's degree, Honor's degree	
		Level 7	BVQ 4, Higher Diplomas	

		Level 6	Diplomas	
Level 6	4 Year Diploma	Level 5	BVQ 3, Advance Graduation Qualifications, Higher Certificate	Medium matching between NTVQF Level 6 and BQF Level 6
Level 5	NSS Master	Level 4	BVQ 2, School Graduation Qualifications, Certificate II	High matching between NTVQF Level 5 and BQF Level 5
Level 4	NSS 1 / HSC (Voc / BM) Year 11 & 12	Level 3	BVQ 1, Intermediate, Certificate 1	High matching between NTVQF Level 4 and BQF Level 4
Level 3	NSS 2 / SSC (Voc) Year 10	Level 2	Access 2	High matching between NTVQF Level 3 and BQF Level 3
Level 2	NSS 3 / SSC (Voc) Year 9	Level 1	Access 1	Medium matching between NTVQF Level 2 and BQF Level 2
Level 1	NSS Basic / Basic Trade Course			Medium matching between NTVQF Level 1 and BQF Level 1
Pre-Voc 2	None / Less than 8 years of school			
Pre-Voc 1				

Caribbean

47.   The Caribbean Community (CARICOM) was established in line with the Articles 35.1-2 and 46 of the Revised Treaty of Chaguaramas. The objective was to establish the appropriate legislative, administrative and procedural arrangements with respect to the free movement of labour and recognition of Diplomas, Certificates, and other Evidence of Qualifications. The CARICOM Qualifications Framework (CQF) is accepted and valid for all member states of CARICOM.

48.   Its competency based curriculum development process and quality assurance system has been standardized against European (EQF), Scottish, British and Australian (AQF) frameworks etc. The teaching and learning process has 5 characteristics and has been classified into 7 levels with appropriate level descriptors which have been described in terms of knowledge and understanding; application and practice; communication, numeracy and ICT; life skills; and autonomy, accountability and working with others. This provides a scale for measuring the achievements and abilities associated with qualifications that represent outcomes at each of the levels.

49.   The teaching and learning process has entry point which is subdivided into two Access Levels with Access Level 2 equivalent to the Caribbean Primary Exit Assessment (CPEA). While the Level 1 is preliminary entry level, the Level 8 (highest level of achievement) is at Doctoral level. The competency based curriculum development of CQF has defined the relationship between qualifications and learning outcomes; identified various entry and exit points, and routes for progression; maximized the opportunities for credit transfer to assist the learners to plan their progress and has minimized the duplication of learning.

Scope and range

50.   Though CQF is a collective understanding among the members of CARICOM Member States, CQF acts as standardisation of CARICOM qualifications vis-a-vis global standards e.g. European (EQF), Scottish, British and Australian (AQF) frameworks etc.

Architecture

51.   The CQF has five characteristics and provides seven generic level descriptors that act as a reference point for determining expectations of achievements and abilities associated with qualifications that represent outcomes at each level.

52.   The following are the descriptors.

a. Knowledge and Understanding

b. Application and Practice

c. Communication, Numeracy and ICT

d. Life Skills

e. Autonomy, Accountability and Working with Others

53.   The CVQ (Caricom) has 7 levels, details of which are given below (Table 8).

Table 8: Caribbean CVQ qualifications

Level	Description	Qualifications
Level 7	Learner displays ability to create and interpret new knowledge, and the ability to conceptualize, design and implement projects for the generation and application of new knowledge. They will have mastered the skills and techniques of research and advanced academic enquiry	Academic Doctorates e.g. Ph. D. Professional Doctorates e.g. DBA; DM; EdD
Level 6	Learner displays a mastery of knowledge, all of which are from current frontiers of discovery and understanding in an academic or professional discipline. They will have conceptual understanding that will enable them to evaluate critically current research and new knowledge. Their conceptual abilities will support decision-making in complex and unpredictable contexts, involving professional judgment.	Masters degrees; Postgraduate Diplomas; Professional qualifications for accounting, legal and other professions
Level 5	Learner has moved from empirical to conceptual approaches to problem solving. Apply knowledge and skills to difficult and complex problems, requiring initiative and motivation. There is some mastery of academic knowledge as measured by research and development	Baccalaureate; Bachelors degrees; Honours Degrees; Graduate Diploma
Level 4	Learner develops cognitive skills of analysis, synthesis and evaluation to support decision making. Acquires set of occupational skills to apply to specific occupational area.	Associate degree; Higher Diploma; Advanced Diploma
Level 3	Leaner develops knowledge and skills of evaluation and interpretation that will support decision making such as solving problems in the workplace or academic studies	Undergraduate Diploma
Level 2	Learner demonstrates comprehension of underpinning principles of particular occupational or academic area such as learning how and why things are done in particular ways	Advanced Certificate

Level	Description	Qualifications
Level 1	Learner acquires basic knowledge and skills for occupational competence at entry level to a profession or progress to tertiary education at higher levels	Certificate

Level comparison with NTVQF

54.   A comparison between Bangladesh NTVQF and CVQ (CARICOM) is summarised below (Table 9).

Table 9: Bangladesh NTVQF Comparison with Caribbean CVQ

Bangladesh	Caribbean

NTVQF	Academic Qualification	CVQ	Academic Qualification	Summary of conclusions drawn from supporting sheets
		Level 7	Academic Doctorates e.g. Ph. D. Professional Doctorates e.g. DBA; DM; EdD	
		Level 6	Masters degrees; Postgraduate Diplomas; Professional qualifications for accounting, legal and other professions	
Level 6	4 Year Diploma	Level 5	Baccalaureate; Bachelors degrees; Honours Degrees; Graduate Diploma	Low matching between NTVQF Level 6 and Caribbean CVQ Level 5
Level 5	NSS Master	Level 4	Associate degree; Higher Diploma; Advanced Diploma	Low matching between NTVQF Level 5 and Caribbean CVQ Level 4
Level 4	NSS 1 / HSC (Voc / BM) Year 11 & 12	Level 3	Undergraduate Diploma	Low matching between NTVQF Level and Caribbean CVQ Level 3
Level 3	NSS 2 / SSC (Voc) Year 10	Level 2	Advanced Certificate	Medium matching between NTVQF Level 3 and Caribbean CVQ Level 2
Level 2	NSS 3 / SSC (Voc) Year 9		Certificate	Medium matching between NTVQF Level 2 and Caribbean CVQ Level 1
Level 1	NSS Basic / Basic Trade Course	Level 1		
Pre-Voc 2	None / Less than 8 years of school			
Pre-Voc 1				

Indonesia

55.   The Indonesian Quality Training Framework (IQTF) or Indonesian Kerangka Pelatihan Bermutu Indonesia, KPBI was developed by the Ministry of Manpower and Transmigration. The objective was to standardise the national vocational qualifications. As different sectors of economy are covered under the scheme, different ministries of the Government come into play. For example the sector related to mining, petroleum and energy are under the jurisdiction of Ministry of Energy and Mineral Resources. Service sectors of tourism, hospitality etc are under the Ministry of Tourism and Creative Economy.

Scope and range

56.   The IQTF has a set of eight standards which are to be maintained by the training and assessment providers. The following are the IQTF Standards:
  i.   The provider delivers training that meets identified needs;
  ii.   The provider uses structured curriculum based upon competency standards endorsed by Ministry of Manpower and Transmigration (MoMT);
  iii. The provider uses teaching and learning materials appropriate for the nationally endorsed units of competency/qualifications offered;
  iv.   The provider has a management system that supports its current and intended scope of operations;
  v.   The provider employs staff appropriately qualified for their jobs;
  vi.   The provider has access to equipment and facilities to support the nationally endorsed units of competency/qualifications being delivered;
  vii. The provider is financially viable; and,
  viii. The provider facilitates or conducts high quality skills assessment.

Architecture

57.   The IQF has nine levels, starting from Operators to Technicians / Analyst to Expert. On the academic side it starts from Elementary / Junior High School and covers up to to S 3 of formal educational level.

Level comparison with NTVQF

58.   A comparison between Bangladesh NTVQF and Indonesia IQF is given below (Table 10):

Table 10: Bangladesh NTVQF comparison with Indonesia IQF

Bangladesh		Indonesia		
NTVQF	Academic Qualification	IQF	Academic Qualification	Summary of conclusions drawn from supporting sheets
		Level 9		
		Level 8		
		Level 7		
		Level 6		
Level 6	4 Year Diploma	Level 5	Diploma 3 Program	Medium matching between NTVQF Level 6 and IQF Level 5
Level 5	NSS Master	Level 4	Diploma 2 Program	Medium matching between NTVQF Level 5 and IQF Level 4
Level 4	NSS 1 / HSC (Voc / BM) Year 11 & 12	Level 3	Diploma 1 Program	High matching between NTVQF Level 4 and IQF Level 3
Level 3	NSS 2 / SSC (Voc) Year 10	Level 2	Vocational High School / Junior High School (Middle school 12-15 years & High School 12-18 years)	High matching between NTVQF Level 3 and IQF Level 2
Level 2	NSS 3 / SSC (Voc) Year 9	Level 1	Vocational High School / Junior High School (Middle school 12-15 years & High School 12-18 years)	High matching between NTVQF Level 2 and IQF Level 1
Level 1	NSS Basic / Basic Trade Course			
Pre-Voc 2	None / Less than 8 years of school			
Pre-Voc 1				

Ireland

59.   The NQF of Ireland was established in the year of 2003. By this standardised framework of qualification, learning are measured and correlated with the set of standards. This gives a broad platform to all learners for recognition of their expertise to place against uniform scale. This is accepted in the domestic as well as international work fields.

60.   The National Framework Qualification of Ireland has 10 levels with appropriate level descriptors. These level descriptors are broken down into eight knowledge, skills and competence sub strands. The competency based curriculum has been developed by Quality and Qualifications Ireland (QQI) and QQI periodically reviews various modalities of skill training.

61.   QQI of Ireland has also developed the competency based curriculum and assists in all levels of teaching and learning. It works at numerous fronts in order to ensure quality being delivered by the system. A few of the areas are as under:

- To develop Awards & Standards which involves NFQ Standards & Guidelines, Further Education & Training Awards Standards, Higher Education Awards Standards, Revision of Existing / Proposals for New Standrads
- To validate Education & Training Programmes that includes Programme Validation, Initial Access to Programme Validation, Protection of Enrolled Learners (PEL), Application for Validation Levels 1-6 (FET) & 6-10 (HE), Certification of Learners
- To review Providers of Education & Training which specifies Institutional Reviews, Delegation of Authority to Providers to Make Awards and Re-engagement with Legacy Providers
- To Maintain National Framework of Qualifications which contains National Framework of Qualifications (NFQ), Development of NFQ, Alignment of UK Awards and Higher Education Links Scheme (HELS)
- To Authorise Use of International Education Mark that involves International Education Mark (IEM) and English Language Teaching Organisations / Acels
- To Develop Quality Assurance by providing Quality Assurance Guidelines, Monitoring and Dialogue with Providers, Working with Providers on Quality Enhancement

- To Facilitate Qualifications Recognition viz. NARIC Ireland, Recognition of Foreign Qualifications, NARIC Ireland Foreign Qualifications Database and Recognition of Irish Qualifications Abroad

Scope and range

62.   The responsibility of promotion and maintaining Irish NQF has been entrusted with QQI.

Architecture

63.   The Ireland NFQ level descriptor elements are identified as under (Table 11):

Table 11: Description of strands of the Irish NQF

Knowledge	Know-how & Skills	Competence
Breadth	Range	Context
Kind	Selectivity	Role'
		Learning to learn
		Insight

64.   The further division of Ireland NQF strands into following sub strands (

65.   Table 12):

Table 12: Description of sub strands

1	Knowledge Breadth
2	Knowledge Kind
3	Know-how & Skills Range
4	Know-how & Skills Selectivity
5	Competence Context
6	Competence Role
7	Competence Learning to learn
8	Competence Insight

Level comparison with NTVQF

66. A comparison between Bangladesh NTVQF and Ireland NFQ is as under (Table 13).

Table 13: Bangladesh NTVQF comparison with Ireland NFQ

Bangladesh		Ireland		Summary of conclusions drawn from supporting sheets
NTVQF	**Academic Qualification**	**NFQ**	**Academic Qualification**	
		Level 10	Doctoral Degree, Higher Doctorate	
		Level 9	Master's Degree, Post-graduate Diploma	
		Level 8	Honours Bachelor's Degree, Higher Diploma	
		Level 7	Ordinary Bachelor's Degree	
		Level 6	Advanced Certificate, Higher Certificate	
Level 6	4 Year Diploma	Level 5	Level 5 Certificate, Leaving certificate	Medium matching between NTVQF Level 6 and Irish NFQ Level 5
Level 5	NSS Master	Level 4	Level 4 Certificate, Leaving certificate	High matching between NTVQF Level 5 and Irish NFQ Level 4
Level 4	NSS 1 / HSC (Voc / BM) Year 11 & 12	Level 3	Level 3 Certificate, Junior certificate	High matching between NTVQF Level 4 and Irish NFQ Level 3
Level 3	NSS 2 / SSC (Voc) Year 10	Level 2	Level 2 Certificate	Low matching between NTVQF Level 3 and Irish NFQ Level 2
Level 2	NSS 3 / SSC (Voc) Year 9	Level 1	Level 1 Certificate	High matching between NTVQF Level 2 and Irish NFQ Level 1
Level 1	NSS Basic / Basic Trade Course			
Pre-Voc 2				
Pre-Voc 1	None / Less than 8 years of school			

Netherlands

67.   The Dutch Qualifications Framework (NLQF) was established by the Ministry of Education, Culture and Science of the Netherlands. The responsibility of its implementation was given to the National Coordination Point NLQF (NCP) which is an independent body.

68.   All the Dutch qualifications starting from Level 1 basic education to the Master's degree at level 7 and a Doctorate's degree at level 8 have been systematically classified. It will not be out of point to mention that besides these eight levels there is as Entry Level also. In accordance to the classification, Level 1 is the simplest while Level 8 is the most complex one.

69.   In order to ensure the mobility in the labor market, both domestically and internationally, standard and transparency are maintained at all levels. All the qualifications of Netherlands, classified under NLQF, are also appropriately aligned with European Qualification framework (EQF). This has been done by of the Ministry of Education Culture and Sciences. These are continuously and closely monitored by the Ministry of Education Culture and Science, the Ministry of Economic Affairs, Agriculture and Innovation (qualifications concerning food and the natural and living environment) and the Ministry of Healthcare, Welfare and Sports (qualifications for medical specialists) and other Governmental agencies dealing with labour market.

Scope and range

70.   The Netherland NQF or The Dutch National Qualifications Framework (NLQF) – Nederlands kwalificati eraamwerk, is having eight levels and one entry level. The level descriptors are based on Knowledge, Skills, Applying knowledge, Problem solving skills, Learning and Development skills, Information skills, Communication Skills and Responsibility & Independence.

Architecture

71.   The level descriptors of Netherland NQF with eight levels are as under (Table 14).

Table 14 : Level descriptors

Sr.	Context	Description
1	Knowledge	Knowledge is the totality of facts, principles, theories and ways of practice, related to an occupation or a knowledge domain.
2	Skills	Cognitive capabilities (logic, intuitive and creative thinking) and practical capabilities (psychomotor skills in the use of methods, materials, aids and instruments) applied within a given context:
3	Applying knowledge	Reproduce, analyze, integrate, evaluate, combine and apply knowledge in an occupation or a knowledge domain;
4	Problem solving skills	Comprehend, recognize or identify and solve problems;
5	Learning and development skills	Personal development, autonomously or under supervision;
6	Information skills	Obtain, collect, process, combine, analyze and assess information;
7	Communication Skills	Communicate based on context-relevant conventions.
8	Responsibility & Independence	The proven capability to collaborate with others and being responsible for own work or study results or of others.

72.   The level descriptors of Netherland NQF at entry level are as under (Table 15).

Table 15: Entry level descriptors

Sr.	Context	Description
1	Knowledge	Possess basic knowledge of simple facts and ideas related to the living environment.
3	Applying knowledge	Reproduce and apply the knowledge & carry out simple and familiar (professional) tasks automatically
4	Problem solving skills	Recognize and solve simple problems in daily life.
5	Learning and development skills	Work on personal development under supervision.
6	Information skills	Obtain and process information on simple facts and ideas related to the living environment.
7	Communication Skills	Communicate with peers using conventions which are relevant to the context.
8	Responsibility & Independence	Work with peers & have, under supervision, limited responsibility for the results of simple routine tasks or study.

Level comparison with NTVQF

73.   A comparison between Bangladesh NTVQF and Netherlands NLFQ is as under (Table 16).

Table 16: Bangladesh NTVQF comparison with Netherlands NLFQ

Bangladesh		Netherlands		
NTVQF	**Academic Qualification**	**NFQ**	**Academic Qualification**	**Summary of conclusions drawn from supporting sheets**
		Level 8	Doctorate; Designer; Medical specialist	
		Level 7	Master Degree	
		Level 6	Bachelor Degree	
Level 6	4 Year Diploma	Level 5	Associate Degree	High matching between NTVQF Level 6 and Dutch NLQF Level 5
Level 5	NSS Master	Level 4+	Pre-university educations (Vwo); pre-university education for adults (Vavo-vwo)	High matching between NTVQF Level 5 and Dutch NLQF Level 4
		Level 4	VET level 4 (MBO 4); Higher general secondary education (Havo); higher general secondary education for adults (Vavo-Havo)	
Level 4	NSS 1 / HSC (Voc / BM) Year 11 & 12	Level 3	VET level 3 (MBO 3)	High matching between NTVQF Level 4 and Dutch NLQF Level 3
Level 3	NSS 2 / SSC (Voc) Year 10	Level 2	Basic Education 3 (for adults); pre-vocational secondary education - advanced vocational pathway (vmbo kb); prevocational secondary education - combined theoretical pathway (vmbogl); pre-vocational secondary education theoretical pathway (vmbotl; VET level 2 (MBO2)	High matching between NTVQF Level 3 and Dutch NLQF Level 2
Level 2	NSS 3 / SSC (Voc) Year 9	Level 1	Basic Education 2 (for adults); pre-vocational secondary education - basic vocational pathway (vmbo bb); VET level 1 (MBO1)	High matching between NTVQF Level 2 and Dutch NLQF Level 1
Level 1	NSS Basic / Basic Trade Course			
Pre-Voc 2	None / Less than 8 years of school			
Pre-Voc 1				

Vietnam

74.   Vietnam National Occupancy Skills Standard (NOSS) was established according to the decision No. 09/QD-BLDTBXH dated 27 March 2008 of the country. The main objective was to establish a correlation between the vocational qualification and job market (domestic and international). It also aims at providing concerned enterprises with relevant information pertaining to the skills and performance of the labour force. At the same time it was imperative to improve the remunerations of the work force. Also to conduct proper assessment and issuance of the national occupational skills certificates.

Scope and range

75.   The Vietnam NOSS has developed 173 sets for approval by 2012, out of which 123 sets were issued. According to a report, 14 testing centres have been approved by 2012 and 40 test projects have been identified for further testing and certification. There is an ambitious plan for issuance of 400 occupational sets and certification of about 6 million workers.

Architecture

76.   According to Vietnam National Occupancy Skills Standard (NOSS) there are five levels corresponding to five academic qualification standards.

77.   The criteria for NOSS are as under:
- the scope, level of difficulty and complexity of a task
- the degree of flexibility and creativity in task performance
- the level of coordination and responsibility in task performance

Level comparison with NTVQF

78.   A comparison between Bangladesh NTVQF and Vietnam NOSS is given below (Table 17).

Table 17: Bangladesh NTVQF comparison with Vietnam NOSS

Bangladesh		Vietnam		
NTVQF	**Academic Qualification**	**NOSS**	**Academic Qualification**	**Summary of conclusions drawn from supporting sheets**
Level 6	4 Year Diploma			
Level 5	NSS Master	Level 5	Certificate 5	High matching between NTVQF Level 5 and Vietnam NOSS Level 5
Level 4	NSS 1 / HSC (Voc / BM) Year 11 & 12	Level 4	Certificate 4	High matching between NTVQF Level 4 and Vietnam NOSS Level 4
Level 3	NSS 2 / SSC (Voc) Year 10	Level 3	Certificate 3	High matching between NTVQF Level 3 and Vietnam NOSS Level 3
Level 2	NSS 3 / SSC (Voc) Year 9	Level 2	Certificate 2	High matching between NTVQF Level 2 and Vietnam NOSS Level 2
Level 1	NSS Basic / Basic Trade Course	Level 1	Certificate 1	High matching between NTVQF Level 1 and Vietnam NOSS Level 1
Pre-Voc 2	None / Less than 8 years of school			
Pre-Voc 1				

South Africa

79.   South African NQF Act, No 67 of 2008, had paved the way for South African Qualification Authority (SAQA). SAQA has defined the following:

- National Qualifications Framework is a comprehensive system approved by the Minister for the classification, registration, publication and articulation of quality assured national qualifications.

- Sub-framework means one of three coordinated qualifications sub-frameworks which make up the NQF as a single integrated system: The Higher Education Qualifications Sub-Framework, the General and Further Education and Training Sub-Framework and the Occupational Qualifications.

- Level means one of the series of levels of learning achievement arranged in ascending order from one to ten according to which the NQF is organised and to which qualification types are pegged.

- Level descriptor means that statement describing learning achievement at a particular level of the NQF that provides a broad indication of the types of learning outcomes and assessment criteria that are appropriate to a qualification at that level.

Scope and range

80.   The scope was to assess the allocation of existing qualifications and partial qualifications and standardise them from Levels 1 to 10 of the National Qualifications Framework. This is to benefit the workforce seeking employment in the domestic and global labour market. The 10 levels in the National Qualifications Framework of SAQA are meant for classification, registration, publication and also articulation of quality assured national qualifications for education. As a process of standardization, SAQA evaluates the educational qualifications of the candidates who have foreign degrees and match them against the levels of National Qualification Framework of South Africa.

Architecture

81.   According SAQA, there are following ten categories under NQF (Table 18).

Table 18: NQF categories

Category number	Category description
1	Scope of knowledge
2	Knowledge literacy
3	Method and procedure
4	Problem solving
5	Ethics and professional practice
6	Accessing, processing and managing information
7	Producing and communicating of information
8	Context and systems
9	Management of learning
10	Accountability

Level comparison with NTVQF

82.   A comparison between Bangladesh NTVQF and South Africa SAQA is given below (Table 19).

Table 19: Bangladesh NTVQF comparison with South Africa SAQA

Bangladesh		South Africa			
NTVQF	Academic Qualification	SAQA	Academic Qualification	Vocational Qualification	Summary of conclusions drawn from supporting sheets
		Level 10	Doctoral Degree Doctoral Degree (Professional)	-	
		Level 9	Master's Degree Master's Degree (Professional)	-	
		Level 8	Bachelor's Honours Degree Post Graduate Diploma Bachelor's Degree	Occupational Certificate	
		Level 7	Bachelor's Degree Advanced Diploma	Occupational Certificate	
		Level 6	Diploma Advanced Certficate	Occupational Certificate	

Bangladesh		South Africa			
NTVQF	**Academic Qualification**	**SAQA**	**Academic Qualification**	**Vocational Qualification**	**Summary of conclusions drawn from supporting sheets**
Level 6	4 Year Diploma	Level 5	Higher Certificate	Occupational Certificate	Low matching between NTVQF Level 6 and SAQA Level 5
Level 5	NSS Master	Level 4	National Certificate	Occupational Certificate	Low matching between NTVQF Level 5 and SAQA Level 4
Level 4	NSS 1 / HSC (Voc / BM) Year 11 & 12	Level 3	Intermediate Certificate	Occupational Certificate	Low matching between NTVQF Level 4 and SAQA Level 3
Level 3	NSS 2 / SSC (Voc) Year 10	Level 2	Elementary Certificate	Occupational Certificate	Low matching between NTVQF Level 3 and SAQA Level 2
Level 2	NSS 3 / SSC (Voc) Year 9	Level 1	General Certificate	Occupational Certificate	Low matching between NTVQF Level 2 and SAQA Level 1
Level 1	NSS Basic / Basic Trade Course				
Pre-Voc 2	None / Less than 8 years of school				
Pre-Voc 1					

Kenya

83.   President Uhuru Kenyattaof Kenya, has signed on 25th Dec 2014 the Kenya Qualifications Framework Bill No. 29 of 2014. According to Gazette notification of Republic of Kenya viz. KENYA GAZETTE SUPPLEMENT ACTS, Nairobi dated: 31st Dec 2014, establishment of Kenya Qualifications Framework was entrusted to Kenya National Qualifications Authority. The authority was to develop the Kenya Qualifications Framework. The date of Commencement was 14th January, 2015. Details of formation and structure of Kenya Qualifications Framework is awaited in the public domain.

New Zealand

84.   During 1989, New Zealand Qualification Framework (NZQF) was established under section 248 of the Education Act 1989. However, a uniform single framework was proposed on 1st July 2010 under the former section 253 (1) (c) of the Act. It was formally introduced in letter and spirit in the form of act during August 2011 as legislative amendment (the new section 248).

Scope and range

85.   According to legislation NZQF is administered by the New Zealand Qualifications Authority (NZQA). It provides quality assurance regarding qualifications, from senior secondary school level to tertiary education qualifications. This is inclusive of qualifications global candidates.

Architecture

86.   The NZQF descriptors consist of knowledge, skills and attributes / competencies and their applications. In other words, the NZQF:
- Conveys the skills, knowledge and attributes a graduate has gained through completing a qualification
- Requires the development of integrated and coherent qualifications that meet the needs of individuals, groups, industry and the community
- Enables and supports the provision of high-quality education pathways
- Enhances confidence in the quality and international comparability of New Zealand qualifications
- Contributes to Mäori success in education by recognising and advancing mätauranga Mäori
- Represents value for money, is sustainable and robust.

Level comparison with NTVQF

87. A comparison between Bangladesh NTVQF and New Zealand NZQF is given below (Table 20).

Table 20: Bangladesh NTVQF comparison with New Zealand NZQF

Bangladesh		New Zealand		
NTVQF	Academic Qualification	NZQF	Academic Qualification	Summary of conclusions drawn from supporting sheets
		Level 10	Doctoral Degree	
		Level 9	Master's Degree	
		Level 8	Postgraduate Diplomas and Certificates, Bachelor Honors Degree	
		Level 7	Bachelor's Degree, Graduate Diplomas and Certifiates	
		Level 6	Diplomas	
Level 6	4 Year Diploma	Level 5	Diplomas	Low matching between NTVQF Level 6 and NZQF Level 5
Level 5	NSS Master	Level 4	Certificates	High matching between NTVQF Level 5 and NZQF Level 4
Level 4	NSS 1 / HSC (Voc / BM) Year 11 & 12	Level 3	Certificates	High matching between NTVQF Level 4 and NZQF Level 3
Level 3	NSS 2 / SSC (Voc) Year 10	Level 2	Certificates	Low matching between NTVQF Level 3 and SAQA Level 2
Level 2	NSS 3 / SSC (Voc) Year 9	Level 1	Certificates	High matching between NTVQF Level 2 and NZQF Level 1
Level 1	NSS Basic / Basic Trade Course			
Pre-Voc 2	None / Less than 8 years of school			
Pre-Voc 1				

Barbados

88.   Barbados National Qualifications Framework (BNQF) has been developed factoring in various relevant inputs and standards from European Qualifications Framework (EQF), the Transnational Qualifications Framework (TQF) of the Commonwealth of Learning and the CARICOM Qualifications Framework (CQF). The main parameter of BNQF is access. The Barbados National Qualifications Framework is designed to promote the entry of the learners, evaluate their achievement, encourage lifelong learning of the earners and monitor progress at different learning curve.

Scope and range

89.   BNQF has been covering the following ranges:
- Knowledge – both factual as well as theoretical
- Skills - practical and cognitive
- Competence - Autonomy also Responsibility

Architecture

90.   The following are the various levels of BNQF qualifications (Table 21).

Table 21 : BNQF Qualification

Barbados Qualification Levels	
BNQF	**Academic Qualification**
Level 8	Doctoral Degree
Level 7	Master Degree
Level 6	Post Graduate Certificate & Diploma
Level 5	Bachelor's Degree
Level 4	Associate Degree, Advanced Diploma
Level 3	Certificates III, Diploma
Level 2	Certificates II
Level 1	Certificate I

Level comparison with NTVQF

91.   A comparison between Bangladesh NTVQF and Barbados BNQF is given below (Table 22).

Table 22 : Bangladesh NTVQF Comparison with Barbados BNQF

Bangladesh		Barbados		
NTVQF	**Academic Qualification**	**BNQF**	**Academic Qualification**	**Summary of conclusions drawn from supporting sheets**
		Level 8	Doctoral Degree	
		Level 7	Master Degree	
		Level 6	Post Graduate Certificate & Diploma	
Level 6	4 Year Diploma	Level 5	Bachelor's Degree	Low matching between NTVQF Level 6 and BNQF Level 5
Level 5	NSS Master	Level 4	Associate Degree, Advanced Diploma	Low matching between NTVQF Level 5 and BNQF Level 4
Level 4	NSS 1 / HSC (Voc / BM) Year 11 & 12	Level 3	Certificates III, Diploma	High matching between NTVQF Level 4 and NZQF Level 3
Level 3	NSS 2 / SSC (Voc) Year 10	Level 2	Certificates II	Low matching between NTVQF Level 3 and BNQF Level 2
Level 2	NSS 3 / SSC (Voc) Year 9	Level 1	Certificate I	High matching between NTVQF Level 2 and BNQF Level 1
Level 1	NSS Basic / Basic Trade Course			
Pre-Voc 2	None / Less than 8 years of school			
Pre-Voc 1				

Scotland

92.　　The Scottish Credit and Qualifications Framework (SCQF) of Scotland is a credit transfer system of the country which covers all levels of qualifications in Scottish education system.　The SCQF is governed by the Scottish Qualifications Authority. The following educational institutions are under its ambit (

93.　　Table 23).

Table 23: Institutes under SCQF

Scottish Qualifications Certificate
Higher National Certificate
Higher National Diploma
Scottish Vocational Qualification (SVQ)
Degrees of Scottish Higher Education Institutions

Scope and range

94.　　There are twelve (12) different levels in Scottish Credit and Qualifications Framework with five level parameters. Like any other level indicators of qualification framework, these levels indicate the span and broad coverage of a particular qualification. They are as under (Table 24).

Table 24 : Strands of SCQF

Sr.	Level contents
1	Knowledge and understanding (mainly subject based)
2	Practice (applied knowledge and understanding)
3	Generic cognitive skills (e.g. evaluation, critical analysis)
4	Communication, numeracy and IT skills
5	Autonomy, accountability and working with others

Architecture

95.   Following are the 12 levels of SCQF (Table 25)

Table 25 : SCQF qualification levels

Scotland (SCQF)		Vocational qualification
Levels	**Academic Qualification**	
Level 12	Doctorates	
Level 11	Masters	SVQ 5
Level 10	Honours degree, Graduate diploma	
Level 9	Ordinary degree, Graduate certificate	
Level 8	HND, DipHE	SVQ 4
Level 7	HNC, CertHE and Advanced Higher	
Level 6	Higher	SVQ 3
Level 5	National 5, Intermediate 2 and Credit Standard Grade	SVQ 2
Level 4	National 4, Intermediate 1 and General Standard Grade	SVQ 1
Level 3	National 3, Access 3 and Foundation Standard Grade	SVQ 1
Level 2	National 2 and Access 2	
Level 1	National 1 and Access 1	

Level comparison with NTVQF

96.   A comparison between Bangladesh NTVQF and Scotland SCQF is given below (

97.

98.   Table 26).

Table 26: Bangladesh NTVQF Comparison with Scotland SCQF

Bangladesh		Scotland			
NTVQF	**Academic Qualification**	**SCQF**	**Academic Qualification**	**Vocational qualification**	**Summary of conclusions drawn from supporting sheets**
		Level 12	Doctorates		
		Level 11	Masters	SVQ 5	
		Level 10	Honours degree, Graduate diploma		
Bangladesh		**Scotland**			
NTVQF	**Academic Qualification**	**SCQF**	**Academic Qualification**	**Vocational qualification**	**Summary of conclusions drawn from supporting sheets**
		Level 9	Ordinary degree, Graduate certificate		
		Level 8	HND, DipHE	SVQ 4	
		Level 7	HNC, CertHE and Advanced Higher		
		Level 6	Higher	SVQ 3	
Level 6	4 Year Diploma	Level 5	National 5, Intermediate 2 and Credit Standard Grade	SVQ 2	Low matching between NTVQF Level 6 and SCQF Level 5
Level 5	NSS Master	Level 4	National 4, Intermediate 1 and General Standard Grade	SVQ 1	Low matching between NTVQF Level 5 and SCQF Level 4
Level 4	NSS 1 / HSC (Voc / BM) Year 11 & 12	Level 3	National 3, Access 3 and Foundation Standard Grade	SVQ 1	Low matching between NTVQF Level 4 and SCQF Level 3
Level 3	NSS 2 / SSC (Voc) Year 10	Level 2	National 2 and Access 2		Low matching between NTVQF Level 3 and SCQF Level 2
Level 2	NSS 3 / SSC (Voc) Year 9	Level 1	National 1 and Access 1		Low matching between NTVQF Level 2 and SCQF Level 1
Level 1	NSS Basic / Basic Trade Course				
Pre-Voc 2	None / Less than 8 years of school				
Pre-Voc 1					

Denmark

99.   The Danish Qualifications Framework is a National Qualification Framework (NQF) of Denmark which describes and identifies various levels of learning and qualification. It is applicable for national as well as international level. Thus a similar qualification gained abroad can be calibrated and compared with the Danish learning. It makes migration of labour two way traffic.

Scope and range

100.   According to Danish NQF, educational qualifications (degrees and certificates) are classified on the basis of either Full Fit or Best Fit.

101.   Under Full Fit category, for a particular level, the level descriptors are matched against standard sets of knowledge, skills and competence. This is applicable while considering degrees and certificates at descriptor level from 6 to 8 of NQF. For Best Fit type, the parameters of Knowledge, skills and competence fit comparatively better against level descriptors for that particular level. This aspect is considered for qualifications of supplementary qualifications from level 1 to 5 of NQF.

Architecture

102.   There are various tools and techniques for comparing the qualifications and competencies of Danish NFQ against other international standards. Some are European Credit Transfer &Accumulation System (ECTS), Europass comprising of CV, Language Passport, Europass Mobility, Certificate Supplement and Diploma Supplement etc.

Level comparison with NTVQF

103.   A comparison between Bangladesh NTVQF and Danish NQF is given below (Table 27).

Table 27: Bangladesh NTVQF Comparison with Denmark NQF

Bangladesh		Denmark	
NTVQF	**Academic Qualification**	**NQF**	**Summary of conclusions drawn from supporting sheets**
		Level 8	
		Level 7	
		Level 6	
Level 6	4 Year Diploma	Level 5	Low matching between NTVQF Level 6 and NQF Level 5
Level 5	NSS Master	Level 4	High matching between NTVQF Level 5 and NQF Level 4
Level 4	NSS 1 / HSC (Voc / BM) Year 11 & 12	Level 3	High matching between NTVQF Level 4 and NQF Level 3
Level 3	NSS 2 / SSC (Voc) Year 10	Level 2	High matching between NTVQF Level 2 and NQF Level 1
Level 2	NSS 3 / SSC (Voc) Year 9	Level 1	High matching between NTVQF Level 2 and NQF Level 1
Level 1	NSS Basic / Basic Trade Course		
Pre-Voc 2	None / Less than 8 years of school		
Pre-Voc 1			

D. Comparing Bangladesh NTVQF standards with international qualifications

104. To make the skills development system responsive to present and future industry skills needs, the Competency Based Training and Assessment (CBT&A) has been introduced. Under this programme, rigid, traditional, theory-based approaches will be replaced by a flexible mechanism in which the means of achieving and demonstrating practical skills is prioritized.

105. Competency Standards are nationally-recognized, industry-agreed definitions of competency. They define competency in three parts; the knowledge, skills and attitudes workers need to possess (performance), which conditions it is to be done under (conditions) and how well it is to be done (industry standards) [7].

106. Competency standards define the requirements for effective workplace performance in a discrete area of work, work function, activity or process. They are used as the basis for defining learning outcomes and assessment benchmarks within the Vocational Education and Training (VET) sector. Competency standards are expressed in outcome terms. They specify knowledge and skill, and the application of that knowledge and skill, to the standards of performance required in the workplace. They are also referred to as units, units of competency, competencies, and competency specifications [8].

107. They define a range of levels of competency and the capabilities that are assumed to be achieved at these levels. Competency is the ability to apply knowledge and skills to produce a required outcome. It is the ability to perform activities within an occupation; to function as expected for employment; and the ability to do a job under a variety of conditions, including the ability to cope with contingencies [9].

108. Competency standards have been established in a number of countries, including Europe, ASEAN region countries, USA, Canada and Australia. The requirements of these standards vary according to the conditions set by the relevant organization. Competency may be compulsory or voluntary, while the continuation of an individual's recognition of competency may require regular attendance at conferences, courses or training programs, referred to as Continuing Professional Development (CPD) [9].

109.   Bangladesh National Competency Standards for Technical Vocational Education and Training (TVET) are of four types:

- *Generic competencies* are required for all qualification levels in all industry sectors. These are tangible/observable work activities common to all workers
- *Sector specific competencies* are required in a particular sector but not as specialized to the performance of a particular task
- *Occupation specific competencies* are required of workers that are unique in a particular area of work, stream of technology or specialty job within a particular industry or sector
- *Elective competencies* are additional competencies which are useful but not absolutely necessary for enhancing the mobility/employability of a worker

110.   Each National Competency Standards package for a particular job role consist of Units of Competencies (UoCs) categorized under one for the four types i.e. generic, sector specific, occupation specific, and electives. UoCs are described in terms of nominal duration for training hours, UoC level mapped with NTVQF, elements of competency, performance criteria, range of variables, and evidence guide.

111.   Bangladesh National Competency Standards are developed by Standards and Curriculum Development Committees (SCDCs) appointed by the relevant sector Industry Skills Councils (ISCs) [7]. As on date, 122 National Competency Standards have been approved by BTEB and listed in their website [10].

112.   One of the major challenges related to the task of winning recognition status for the skills of Bangladeshi migrant workers involves achieving common skills assessment and certification systems. These quality assurance mechanisms should be understood and shared by both the origin and destination countries. Skill gaps between Bangladesh and the destination countries must be appropriately defined using common competency standards. To make overseas employment equitable for Bangladeshi migrant workers, it is necessary to provide a means to make their skills and qualifications recognizable [3]. The present exercise is an attempt to map the available BTEB competency standards with the international qualification standards.

Our approach for mapping qualification standards

113.   A six step approach was adopted to map the qualification standards of other countries with Bangladesh competency standards. These steps are listed below.

- Step 1: Identifying available BTEB National Competency Standards for selected occupations
- Step 2: Identifying countries with available competency standards for mapping with selected occupations
- Step 3: Understanding Competency Standards of other countries
- Step 4: Identifying competency standards of other countries relevant for mapping with BTEB National Competency Standards
- Step 5: Setting up the criteria for mapping of the competency standards
- Step 6:   Qualification mapping of country's competency standards

Identifying available BTEB National Competency Standards for selected occupations

114.   In Step 1, the competency standards were identified for the priority occupations. Bangladesh National Competency Standards are developed by Standards and Curriculum Development Committees (SCDCs) appointed by the relevant sector Industry Skills Councils (ISCs) [7]. As on date, 122 National Competency Standards have been approved by BTEB and listed in the BTEB website [10]. The priority occupations were identified by ILO and mentioned in the ToR by considering the major occupations of migrant workers in countries of destination. Afterwards, corresponding National Competency Standards were listed from the BTEB approved standards. Table 28 lists out the priority occupations taken up for this study and the available National Competency Standards with BTEB.

Table 28: Priority Occupations under study and available BTEB National Competency Standards

Occupations under study		Available BTEB National Competency Standards		
Sl. No	Occupations (as given in ToR)	Qualification Title	NTVQF Level	Industry Skill Council
1	Restaurant and food services	Food and beverage service	Level 3	Tourism and Hospitality

Occupations under study		Available BTEB National Competency Standards		
Sl. No	Occupations (as given in ToR)	Qualification Title	NTVQF Level	Industry Skill Council
2	Cooks	Cook	Pre-voc level 2	Informal Sector
		Cook	Level 1, 2, 3 and 4	Tourism and Hospitality Sector
3	Carpentry	Carpenter	Level 1	Furniture
4	Industrial electrician	Electrical installation & Maintenance (Civil Construction)	Level 1, 2, and 3	Construction
		Electrician	Level 1, 2, 3 and 4	Transport Equipment Industry
5	Plumber	Plumber	Level 1, 2, and 3	Construction
6	Welder	Welding	Level 1, 2, 3 and 4	Transport Equipment Industry
7	Construction (general construction)	Mason	Level 1, 2, and 3	Construction
8	Domestic worker	House Keeping	Pre-voc level 2	Informal Sector
		House Keeping	Level 3	Tourism and Hospitality
9	Child care, learning and development or caring for children	Care giving	Pre-voc level 2	Informal
10	Elderly-care			
11	Home-based care for the sick/persons with disabilities			

115.   It was observed that multiple ISCs have defined National Competency Standards for a single occupation such as electrician and domestic worker occupations. Also, there were cases where a single National Competency Standard is defined for multiple occupations. It can also be observed that National Competency Standards were not available for all possible NTVQF levels for some occupations.

Identifying countries with available competency standards for mapping with selected occupations

116.   The next step was to identify the countries from which the competency standards for priority job roles can be mapped. The ToR has specified countries / regions to shortlist countries for mapping of competency standards for the identified job roles. The approach for this step was to select the countries for which the qualification frameworks are already mapped in previous studies or in the present study (section). A major limitation for this step was the non-availability of Competency Standards for the identified occupations in some of the countries database. Some of the countries where competency standards could not be mapped are listed in Table 40.

117. Also, the countries where the competency standards are available only a few of the occupations under study could be mapped due to non-availability of competency standards and / or significant mismatch between qualification levels / sectors / units of competencies.

118. A total of seven countries were identified with competency standards available in public domain for some of the occupations under study. The following section discusses them.

Understanding Competency Standards of other countries

119. ***Australia:*** Competency Standards in Australia are known as Training Packages. A Training Package for a particular job role / occupation is a set of nationally endorsed standards, qualifications and guidelines used to recognise and assess the skills and knowledge people need to perform effectively in the workplace. Training packages are developed by Industry Skills Councils (ISCs) to meet the training needs of an industry, or a group of industries.

120. Each training packages is made up of three components [11]:
- Units of competency: define the skills and knowledge to operate effectively and how they need to be applied to perform effectively in a workplace context.
- Qualifications framework: groups of units of competency ranging from Certificate I to Graduate Diploma level.
- Assessment guidelines: the industry's preferred approach to assessment, including the qualifications required by assessors, the design of assessment processes and how assessments should be conducted.

121. *Training.gov.au* is the main database of vocational education and training information in Australia. It is the official national register of information on training packages, qualifications, courses, units of competency and registered training organisations (RTOs) [12].

122. ***Barbados:*** Competency Standards in Barbados are termed as Occupational Standards of Competence. Occupational Standards are detailed written descriptions of what an employee is expected to know and do in his/her work role. They are benchmarks against which the actual performance of people in occupational roles can be measured or assessed and form the basis of Caribbean/National Vocational Qualifications (C/NVQs) [13].

123.   An Occupational Standards of Competence for a particular job role consists of Mandatory and Optional / Elective units with notional number of training hours. It is structured into the following:

- Element Title: Statement of an outcome which an individual is expected to achieve
- Performance Criteria: Statements which describe critical outcomes that have to be achieved and the standard of performance which is required
- Range Indicator: Description of the range of applications and contents over which the standard is intended to apply
- Underpinning Knowledge Specifies the knowledge and understanding an individual needs for competent performance.

124.   TVET Council Barbados maintains the Qualifications Database. As of now, 49 Occupational Standards of Competence have been developed and listed in the TVET Council website [14].

125.   *India:* The National Occupational Standards (NOSs) specify the standard of performance that an individual must achieve when carrying out a particular activity in the workplace, together with the knowledge and understanding they need to meet that standard consistently. Each NOS defines one key function in a job role. In their essential form, NOSs describe functions, standards of performance and knowledge / understanding. The NOS are laid down by employers (through their Sector Skill Councils).

126.   A set of NOSs related to a specific job role is called Qualification Pack (QP). Qualification Pack for every Job Role is pegged at a NSQF Level. As on date across 31 Sectors, QPs for 1507 Job Roles pegged at NSQF levels 1 to 8 have been defined by the Sector Skill Councils [15].

127.   *New Zealand:* All trade qualifications are aligned with the New Zealand Qualifications Framework (NZQF). All qualifications on the NZQF are assigned one of the ten levels. It is possible for qualifications to include credit achieved at levels above and below the overall level at which the qualification is listed. All qualifications on the NZQF have a credit value. The credit value relates to the amount of learning in the qualification. One credit is equal to ten notional hours of learning [16].

128.   Each qualification contains an outcome statement which describes the knowledge, skills and attributes of a graduate. Conditions relating to specific outcomes include the recommended

Mandatory or Optional standards for each of the Qualification Outcomes (including indicative credit values for each outcome).Different learners will achieve the outcomes in different ways, so outcome statements are an indicator of the minimum achievement expected from a qualification. Each outcome statement includes the following[16]:

- Graduate profiles: that identify the expected learning outcomes of a qualification. This is captured in notions of what a learner will know, understand and be able to do when they achieve the qualification

- Education pathways: that identify other qualifications that a graduate can enrol in after completing this qualification. Where qualifications are stand-alone and do not prepare graduates for further study, the outcome statement should make this clear

- Employment pathways (or contribution to the community): that identify the areas in which a graduate may be qualified to work, or the contribution they may make to their community.

129. The New Zealand Qualification Authority (NZQA) maintains the qualification database including trade qualifications. In the past, NZQA administered many trade and advanced trade certificate qualifications. These have been progressively phased out and replaced by National Certificates and Diplomas and more recently New Zealand Qualifications [17].

130. *Scotland:* Scottish Vocational Qualifications are based on standards of competence that describe a candidate's ability to work in real conditions - having an SVQ is a confirmation that they are competent to the standards on which the SVQ is based. The standards of competence are developed by Sector Skills Councils on behalf of industry. The standards Scottish Vocational Qualifications (SVQs) are based on are the same standards used in England, Wales and Northern Ireland. The main difference being that SVQs take account of Scotland's distinct legal, education, and enterprise systems. SVQs are available at five levels of difficulty (SVQ level 1 is at SCQF level 4, up to SVQ level 5 is at SCQF level 11) [18].

131. SVQs define what has to be achieved, and how, but they don't have to be done in a classroom or on a training programme and many people achieve them while carrying out their normal day-to-day work. There are no formal written exams, people doing SVQs collect and submit evidence, usually from their work. SVQs specify the skills and the knowledge and understanding need to perform the job to the national standards of competence. The evidence collected is assessed against these standards [18].

132.   The Units are derived from National Occupational Standards (NOS) [19]. Each SVQ Unit defines one aspect of a job or a work role, and outlines what it is to be competent in that aspect of the job. To achieve a Unit, candidates have to produce evidence to show they are competent. Performance Criteria and Knowledge and Understanding (K&U) are the two mandatory aspects of SVQ Units [18].

- Performance Criteria describe the level of competence that has to be achieved, and
- K&U describe the knowledge that is needed to understand what the candidates are doing and why.

133.   The Scottish Qualification Authority (SQA) maintains the database for the SVQs [20].

134.   *South Africa:* The Occupational and part qualifications in South Africa come under the Occupational Qualification Sub-framework (OQSF). It is one of three sub-frameworks that comprise the National Qualifications Framework (NQF). OQSF is overseen by the Quality Council for Trades & Occupations (QCTO). The NQF has ten levels. Occupational and part qualifications occupy eight levels, namely levels 1-8 of the NQF [21].

135.   The OQSF recognises credits as a measure of the volume of learning required for an occupational or part qualification. One (1) credit is equated to ten (10) notional hours of learning. An occupational certificate is the formal recognition and certification of learning achievement awarded by the QCTO. Competence in occupational learning is to be demonstrated against the three learning components:

- The knowledge and theory component and standard
- The practical skills standard
- The work experience standard

136.   The South African Qualifications Authority (SAQA) maintains the database for the Occupational and part qualifications [22].

137.   *Sri Lanka:* The Sri Lanka National Competency Standards are industry-determined specifications of performance that set out the skills, knowledge and attitudes required to operate effectively in a specific industry or profession. Competency standards are made up of units of competency, which are themselves made up of elements of competency, together with performance criteria, a range of variables, and an evidence guide. Competency standards are an endorsed component of a training package [23].

138. The combination of units for an industry sector / occupation cover the following five components of competency [23]:

- Task handling
- Task management
- Problem solving / contingency management
- Job / role / work environment handling
- Apply competencies to different environments

139. The competency standards are pegged to National Vocational Qualification (NVQ) Framework levels. The categorization of competency units is presented below.

- For Level 1 – 4 Competency Standards
    - Occupation Specific Competency Units
    - Basic Employability Competency Units
- For Level 5 and 6 Competency Standards
    - Sector Specific Core Competency Units
    - Employability competency Units
    - Elective Competency Units

140. The Tertiary and Vocational Education Commission (TVEC) maintains the database for competency standards. As on date, 114 competency standards for Level 1 – 4 and 43 competency standards for Level 5 and 6 are listed in the TVEC website [24] .

Identifying competency standards of other countries relevant for mapping with BTEB National Competency Standards

141. After short-listing the countries for competency standards mapping, the databases of competency standards of each country was assessed for the occupation mapping. Relevant occupation standards / qualification packs / competency standards were identified to map with the selected BTEB National Competency Standards. Table 29 presents the available country competency mapped in this study with the Bangladesh National Competency Standards.

Table 29: Country and occupations mapped with Bangladesh National Competency Standards

Occupations	Country						
	Australia	**Barbados**	**India**	**New Zealand**	**Scotland**	**South Africa**	**Sri Lanka**

Restaurant and food services		✓		✓	✓		
Cooks				✓	✓		
Carpentry	✓	✓					
Industrial electrician						✓	
Plumber	✓		✓				
Welder			✓		✓	✓	✓
Construction (general construction)			✓		✓	✓	✓
Domestic worker / House keeping		✓	✓	✓			
Care giving							✓

Setting up the criteria for mapping of the competency standards

142.   An assessment of the identified competency standards for mapping was done to set out most common parameters across all countries standards structure. The following parameters were identified:

- National framework level (vocational / occupational / trade qualification framework)
- Number of training hours (or credits converted to number of notional training hours)
- Industry / sector skill councils
- Unit standards groups (the unit standards were matched in terms of unit titles, unit components, scope, content, and training hours)
- Entry level requirements
- Exit level outcomes
- Access to job roles post qualification

Based on the criteria given above the qualifications were assessed as strong, broad, or weakly matching.

Qualification mapping of country's competency standards

143.   The comparison of the identified occupations / job roles is presented below.

Restaurant and food services

144.   The available BTEB National Competency Standard for restaurant and food services occupation was National Skill Certificate in Food and Beverage Service (NTVQF Level 3). The best matching international qualifications were mapped with the available BTEB standard. The qualification mapping for restaurant and food services occupation is presented in

145.   Table 30.

Table 30: Qualification mapping for restaurant and food services occupation

Particulars	Country			
	Bangladesh	**Barbados**	**New Zealand**	**Scotland**
Qualification title	National Skill Certificate in Food and Beverage Service (NTVQF Level 3)	Food and Drink Service	New Zealand Certificate in Food and Beverage Service (Level 3)	SVQ1 in Food and Beverage Service at SCQF Level 4
Qualification code	not available	not available	Qualification Reference 2104	G9V9 21
Qualification framework and level	NTVQF level 3	NVQ level 1	NZQF (trade qualifications) level 3	SVQ level 1
Number of training hours	1762 hours	Not mentioned	1150 hours	540 hours
Industry / Sector skill council	Tourism and hospitality sector	Tourism and hospitality sector	Tourism and hospitality sector	Tourism and hospitality sector
Unit standard group	three groups (generic, sector specific, and occupation specific)	two groups (mandatory, and optional)	eight strands (Café Services, Bar Services, Restaurant Services, Buffet Services, Functions Services, Barista, and Quick Service Restaurants Services)	two groups (mandatory, and elective)

Overall Observation		The qualification standards *weakly match* with the NVQ (trade) qualification. Less than 50% of the unit titles / training hours can be mapped with the NVQ qualification.	The qualification standards *broadly match* with the NZQF (trade) qualification. More than 50% of the unit titles / training hours can be mapped with the NZQF qualification.	The qualification standards *broadly match* with the SVQ qualification. More than 50% of the unit titles / training hours can be mapped with the SVQ qualification.

146. Some key observations are:

- BTEB standards training hours are on the higher side when compared to other international standards. It is due to the fact that BTEB standards include an additional component of on job training. There are 592 on the job training hours required for different components of BTEB standards. International qualification does not specify on the job training hours.

- Only level 1 qualification for the job role was available with Barbados NVQ. It is divided into mandatory and optional units. To obtain the qualification, the candidate has to complete three (3) mandatory standard units and any four (4) of the optional standard units. The training hours or credits for each standard unit are not mentioned in the qualification document.

- In the case of New Zealand qualification, the job role was available for other NZQF (trade) level also. However, level 3 qualification was the closest match. There are eight strands of unit standards for New Zealand NZQF (trade) qualifications which define various service types for the qualification. There is credit system for achieving competency in a unit standard and each credit roughly accounts for 10 notional hours of training.

- Higher levels of qualification standards were available for Scottish SVQ. The closest match with the available BTEB standard was with Scottish SVQ level 1. There are mandatory and elective standard units for the qualification. To obtain the qualification, the candidate has to complete all the mandatory standard units (4) and any three (3) of the optional standard units. There is credit system for achieving competency in a unit standard and each credit roughly accounts for 10 notional hours of training.

Cook

147.   BTEB National Competency Standard for Cook was available from level 1 to 4. A level 4 competency for Cook incorporates all the lower level unit standards. Therefore, to get the maximum mapping with the international qualifications level 4 competency standard was used. The best matching international qualifications were mapped with the selected level 4 BTEB standard. The qualification mapping for Cook (level 4) is presented in Table 31.

Table 31: Qualification mapping for cook

Particulars	Country		
	Bangladesh	**New Zealand**	**Scotland**
Qualification title	Cook	New Zealand Certificate in Cookery (Level 4)	Level 2 SVQ Professional Cookery: Preparation and Cooking
Qualification code	not available	Qualification Reference 2101	G82J 22
Qualification framework and level	NTVQF level 4	NZQF (trade qualifications) level 4	SVQ level 2
No. of training hours	1386 hours	1180 hours	not available
Industry / Sector skill council	Tourism and hospitality sector	Tourism and hospitality sector	Tourism and hospitality sector
Unit standard group	three groups (generic, sector specific, and occupation specific)	not available	two groups (mandatory, and optional)
Overall Observation		The qualification standards *strongly match* with the NZQF (trade) qualification. More than 70% of the unit titles / training hours can be mapped with the NZQF qualification.	The qualification standards *broadly match* with the SVQ qualification. More than 50% of the unit titles / training hours can be mapped with the SVQ qualification.

148.   Some key observations are:

- There are 216 on the job training hours required for different components of BTEB standards for cook (level 4). International qualification does not specify on the job training hours.

- In the case of New Zealand qualification, qualification standard for level 4 was the closest match with BTEB standards. There is credit system for achieving competency in a unit standard and each credit roughly accounts for 10 notional hours of training.

- Higher levels of qualification standards were available for Scottish SVQ. The closest match with the selected BTEB standard was with Scottish SVQ level 2. There are mandatory and elective standard units for the qualification. To obtain the qualification, the candidate must complete a total of fourteen (14) standards units including ten (10) mandatory units.

Carpentry

149.   The only available BTEB National Competency Standard for carpentry occupation was for NTVQF Level 1. The best matching international qualifications were mapped with the available BTEB standard. The qualification mapping for carpentry occupation is presented in Table 32.

Table 32: Qualification mapping for carpentry

Particulars	Country			
	Bangladesh	**Australia**	**Barbados**	**Scotland**
Qualification title	Carpentry (NTVQF Level 1)	Certificate II in Furniture Making	Level I in Furniture Making	SVQ 2 in Furniture Making
Qualification code	not available	MSF20313	CCLMF10103	GA3G 22
Qualification framework and level	NTVQF level 3	AQF level 2	NVQ level 1	SVQ level 2
No. of training hours	360 hours	3240 hours* (minimum)	990 hours	670 hours
Industry / Sector skill council	Furniture	MSF Furnishing / Manufacturing Industry	Light manufacturing (Furnishing)	Furniture making
Unit standard group	three groups (generic, sector specific, and occupation specific)	two groups (core, and elective)	two groups (mandatory, and elective)	two groups (mandatory, and optional)
Overall Observation		The qualification standards *broadly match* with the AQF (trade) qualification. More than 70% of the unit titles / training hours can be mapped with the AQF qualification. There are however more units defined for the AQF qualification (electives).	The qualification standards *broadly match* with the NVQ (trade) qualification. More than 70% of the unit titles / training hours can be mapped with the NVQ qualification. There are however more units defined for the NVQ qualification (electives).	The qualification standards *broadly match* with the SVQ qualification. About 50% of the unit titles / training hours can be mapped with the NVQ qualification.

150. Some key observations are:

- BTEB standards training hours are on the lower side when compared to other international standards. It is due to the fact that international standards include optional / elective training. Also, one of the limitations for this occupation mapping was the non-availability of higher level competency standards for carpentry.

- The Australia AQF qualification was of a higher level as compared to BTEB standard and lower level qualification was not available. Also, the translated training hours for AQF qualification was on a higher side due to the large number of elective units. To be awarded the AQF Certificate II in Furniture Making, competency must be achieved in thirteen (13) units of competency including five (5) units of core competency and eight (8) units of elective.

- In the case of Barbados qualification, the job role was available for higher NVQ level also. However, level 1 qualification was the closest match. Similar to AQF standard, Barbados qualification have a large number of elective units. All mandatory units need to be completed to obtain the qualification. There are no criteria for minimum number of elective units.

- Higher levels of qualification standards were available for Scottish SVQ. The closest match with the available BTEB standard was with Scottish SVQ level 2. There are mandatory and elective standard units for the qualification. To obtain the qualification, the candidate has to complete all the mandatory standard units (4) and any two (2) of the optional standard units. There is credit system for achieving competency in a unit standard and each credit roughly accounts for 10 notional hours of training.

Electrician

151. Two separate Industry Skill Councils (ISCs) have developed competency standards for electrician occupation. The qualification mapping for electrician occupation is done with the closest matching South Africa NQF Occupational Qualifications. The mapping is presented in Table 33.

Table 33: Qualification mapping for electrician

Particulars	Country	
	Bangladesh	**South Africa**
Qualification title	Electrical installation & Maintenance (Civil Construction)	Electrician
Qualification code	not available	91761
Qualification framework and level	NTVQF level 3	NQF Occupational Qualifications (OQSF) level 4
No. of training hours	900 hours	3600 hours
Industry / Sector skill council	Construction sector	Construction sector
Unit standard group	three groups (generic, sector specific, and occupation specific)	three groups (knowledge, practical skills, and work experience)
Overall Observation		The qualification standards *broadly match* with the NQF Occupational Qualifications (OQSF). More than 50% of the unit titles / training hours can be mapped with the NQF Occupational Qualifications (OQSF) qualification.

152.   Some key observations are:

- Two ISCs: Construction and Transport Equipment Industry have separately developed National Competency Standards for industry electrician occupation. Construction ISC has developed standards from NTVQF level 1 to 3. Similarly, Transport Equipment Industry ISC has developed standards from NTVQF level 1 to 4. Both set of standards are specific to their industries. Therefore, it was difficult to match the given standards with the available international standards which mostly pertain to utility or O&M sector.

- BTEB standards training hours are on the lower side when compared to other international standard. It is due to the fact that international standard includes work experience also. Also, one of the limitations for this occupation mapping was the non-availability of higher level competency standards for electrician.

Plumber

153.   The BTEB National Competency Standard for plumber occupation was available for NTVQF level 1, 2 and 3. A level 3 competency for plumber incorporates all the lower level unit standards. Therefore, to get the maximum mapping with the international qualifications level 3 competency standard was used. The best matching international qualifications were mapped with the available BTEB standard. The qualification mapping for plumber occupation is presented in Table 34.

Table 34: Qualification mapping for plumber

Particulars	Country		
	Bangladesh	**Australia**	**India**
Qualification title	Plumbing	Certificate III in Plumbing	Plumber (General)
Qualification code	CONPLM020312A	CPC32413	PSC / Q0104
Qualification framework and level	NTVQF level 3	AQF level 3	NSQF level 3
No. of training hours	900 hours	more than 3000 hours	8-12 weeks
Industry / Sector skill council	Construction sector	Construction sector	Plumbing
Unit standard group	three groups (generic, sector specific, and occupation specific)	three groups (fundamental, core, and elective)	
Overall Observation		The qualification standards *weakly match* with the AQF qualification. Less than 50% of the unit titles / training hours can be mapped with the AQF qualification.	The qualification standards *weakly match* with the NSQF qualification. Less than 50% of the unit titles / training hours can be mapped with the NSQF qualification.

154.   Some key observations are:

- BTEB standards training hours are on the lower side when compared to other international standards. It is due to the fact that international standards include optional / elective training. Also, one of the limitations for this occupation mapping was the non-availability of higher level competency standards for plumber.

- The Australia AQF qualification was of a higher level as compared to BTEB standard and lower level qualification was not available. Also, the translated training hours for AQF qualification was on a higher side due to the large number of elective units. There are six (6) streams of unit standards out of which two (2) are mandatory and four (4) are electives.

- In the case of Indian NSQF qualifications, there is an entire Sector Skill Council for the plumbing occupation. There are qualification packs for different specialized plumbing occupations. For the present study the mapping was done with the closest matching general plumbing NSQF qualification package.

Welder

The BTEB National Competency Standard for welder occupation was available for NTVQF level 1, 2, 3 and 4. A level 4 competency for welder incorporates all the lower level unit standards. Therefore, to get the maximum mapping with the international qualifications level 4 competency standard was used. The best matching international qualifications were mapped with the available BTEB standard. The qualification mapping for welder occupation is presented in

155.   Table 35.

Table 35: Qualification mapping for welder

Particulars	Country				
	Bangladesh	**India**	**Scotland**	**South Africa**	**Sri Lanka**
Qualification title	Welding	Metal Inert Gas / Metal Active Gas / Gas Metal Arc Welder (MIG/MAG/GMAW)	Fabrication and Welding Engineering (Manual Welding)	Welder	Welder
Qualification code	not available	CSC/ Q 0209	GC7A22	94100	D28S002.1
Qualification framework and level	NTVQF level 4	NSQF level 4	SVQ level 2	NQF Occupational Qualifications (OQSF) level 4	NVQ level 4
No. of training hours	1180 hours	not available	1740 hours	1540 hours	
Industry / Sector skill council	Transport Equipment Industry	Capital goods	Engineering industry	Field 06 - Manufacturing, Engineering and Technology	Manufacturing
Unit standard group	four groups (generic, sector specific, occupation specific, and specialized electives)		two groups (mandatory, and optional)	three group (knowledge , practical skills, and work experience)	
Overall Observation		The qualification standards *weakly match* with the NSQF qualification. Less than 50% of the unit titles / training hours can be mapped with the NSQF qualification.	The qualification standards *weakly match* with the SVQ qualification. More than 50% of the unit titles / training hours can be mapped with the SVQ qualification.	The qualification standards *broadly match* with the NQF (OSQF) qualification. More than 70% of the unit titles / training hours can be mapped with the NQF (OSQF) qualification.	The qualification standards *weakly match* with the NVQ qualification. More than 50% of the unit titles / training hours can be mapped with the NVQ qualification.

156. Some key observations are:

- BTEB standard for welder occupation has an additional group of unit standards as specialised electives. There are three specialised electives, each for a different welding technology i.e. Shielded Metal Arc Welding (SMAW), Gas Metal Arc Welding (GMAW or MIG), and Gas Tungsten Arc Welding (GTAW or TIG). To obtain a BTEB qualification for welder occupation a candidate has to complete all (3) mandatory unit groups and at least one (1) of the specialised electives.

- In the case of Indian NSQF standards for welder occupation, separate qualification packs are defined for each of the specialised technology i.e. Shielded Metal Arc Welding (SMAW), Gas Metal Arc Welding (GMAW or MIG), and Gas Tungsten Arc Welding (GTAW or TIG). A BTEB standard with all mandatory units and considering one elective unit group at a time thus can be mapped with the Indian NSQF standard.

- The Scotland SVQ qualification was of a higher level as compared to BTEB standard. Similar to Indian NSQF standard there are different standards for different welding technologies.

- The required number of training hours for SA NQF qualification is on the higher side. However, the SA NQF qualification includes work experience. Additionally, the SA NQF qualification has defined all the welding technologies i.e. Shielded Metal Arc Welding (SMAW), Gas Metal Arc Welding (GMAW or MIG), and Gas Tungsten Arc Welding (GTAW or TIG) within the mandatory coursework. Therefore a SA NQF level 4 qualified welder will specialize in all three technologies unlike other county qualifications including Bangladesh where specialization is required in only one of the technology.

- There is only one qualification standard is available in the Sri Lanka NVQ for welder occupation. Similar to SA NQF it defines all the welding technologies within the mandatory coursework.

Mason: Construction (general construction)

157. The BTEB National Competency Standard for mason occupation was available for NTVQF level 1, 2, and 3. A level 3 competency for mason incorporates all the lower level unit standards. Therefore, to get the maximum mapping with the international qualifications level 3 competency standard was used. The best matching international qualifications were mapped with the available BTEB standard. The qualification mapping for Mason: Construction (general construction) occupation is presented in

158. Table 36.

Table 36: Qualification mapping for mason

Particulars	Country				
	Bangladesh	**India**	**Scotland**	**South Africa**	**Sri Lanka**
Qualification title	National Skills Certificate-III in Masonry	Mason (General)	National Progression Award (NPA)	Refractory Mason	Construction Craftsman (Masonry)
Qualification code	CONMAS030312	CON / Q0103	G8H445	2292	F45S005
Qualification framework and level	NTVQF level 3	NSQF level 3	SVQ level 2	NQF Occupational Qualifications (OQSF) level 3	NVQ level 4
No. of training hours	900 hours	8 to 12 weeks	630 hours	1250 hours	not available
Industry / Sector skill council	Construction sector	Construction sector	Construction sector	Field 12 - Physical Planning and Construction	Construction sector
Unit standard group	three groups (generic, sector specific, and occupation specific)		two groups (mandatory and specialist)	three groups (fundamental, core, and elective)	

Overall Observation		The qualification standards *broadly match* with the NSQF qualification. More than 50% of the unit titles / training hours can be mapped with the NSQF qualifications.	The qualification standards *broadly match* with the SVQ qualification. More than 50% of the unit titles / training hours can be mapped with the SVQ qualification.	The qualification standards *broadly match* with the NQF Occupational Qualifications (OQSF). More than 50% of the unit titles / training hours can be mapped with the NQF Occupational Qualifications (OQSF) qualification.	The qualification standards *weakly match* with the NVQ qualification. Less than 50% of the unit titles / training hours can be mapped with the NVQ qualification.

159. Some key observations are:

- In the case of India NSQF, qualification packs for other specialised mason qualification such as Mason Tiling, Mason Concrete, and Mason Marble are available at the same NSQF level. For the present study matching was done with Mason (general) qualification.

- The Scotland SVQ qualification has both mandatory and specialist unit standards defined. All mandatory units (3) need to be completed to obtain the qualification. In addition, a minimum number of elective units (1) is also required to be completed to obtain the qualification.

- Only one qualification was available for mason occupation with SAQA NQF qualifications. Also, the available qualification was specific to Refractory Mason occupation and not a general construction sector mason. The number of training hours defined to obtain the SA NQF qualification was on the higher side as compared to BTEB standard.

- There is only one qualification standard is available in the Sri Lanka NVQ for mason occupation.

Domestic worker / House keeping

160.   There was no qualification standard available for domestic worker (informal sector) among the countries selected for qualification. However international qualifications for housekeeping in the tourism and hospitality sector were available for mapping. The available BTEB National Competency Standard for housekeeping (tourism and hospitality) occupation was for NTVQF Level 1, 2 and 3. A level 3 competency for housekeeping incorporates all the lower level unit standards. Therefore, to get the maximum mapping with the international qualifications level 3 competency standard was used. The best matching international qualifications were mapped with the available BTEB standard. The qualification mapping for housekeeping occupation is presented in Table 37.

Table 37: Qualification mapping for Domestic worker / House keeping

Particulars	Country			
	Bangladesh	**Barbados**	**India**	**New Zealand**
Qualification title	House Keeping	House Keeping	Room Attendant	New Zealand Certificate in Accommodation (Level 3)
Qualification code	not available	A009 01	THC / Q0202	Qualification Reference 2103
Qualification framework and level	NTVQF level 3	NVQ level 1	NSQF level 4	NZQF (trade qualifications) level 3
No. of training hours	1492 hours	not available	not available	900 hours
Industry / Sector skill council	Tourism and hospitality	Hospitality and tourism	Tourism and hospitality sector	Food, Hospitality and Personal Services
Unit standard group	three groups (generic, sector specific, and occupation specific)	two groups (mandatory, and elective)		three strands (housekeeping, portering and reception)
Overall Observation		The qualification standards *weakly match* with the NVQ qualification. Less than 50% of the unit titles / training hours can be mapped with the NVQ qualification.	The qualification standards *broadly match* with the NSQF qualification. About 50% of the unit titles / training hours can be mapped with the NSQF qualification.	The qualification standards *weakly match* with the NZQF (trade) qualification. Less than 50% of the unit titles / training hours can be mapped with the NZQF qualification.

161. Some key observations are:

- BTEB standards include on the job training component with the unit standards. A total of 592 training hours are specified as on the job training.

- In the case of Barbados qualification, the job role was available for higher NVQ level also. However, level 1 qualification was the closest match. The Barbados NVQ qualification includes both mandatory and optional units. To be awarded the NVQ qualification, competency must be achieved in five (5) mandatory units and any one (1) of the optional units.

- Higher levels of qualification standards as well as specialized qualifications in the housekeeping occupation were available in the India NSQF qualification packs. The closest match with the available BTEB standard was with NSQF level 4.

- Higher levels of qualification standards were available in the New Zealand NZQF (trade) qualifications. The closest match with the available BTEB standard was with NZQF (trade) level 3.

Care giving

162.   The only available BTEB National Competency Standard for care giving occupation was for NTVQF Pre-Voc level 2. Only one matching qualifications was available within the set of selected countries of mapping. The qualification mapping for care giving occupation is presented in Table 38.

Table 38: Qualification mapping for care giving

Particulars	Country	
	Bangladesh	**Sri Lanka**
Qualification title	Care giving	care giver
Qualification code	not available	N85S010.0
Qualification framework and level	NTVQF Pre-Voc level 2	NVQ level 4
No. of training hours	1180 hours	not available
Industry / Sector skill council	Informal	Health and social work
Unit standard group	three groups (generic, sector specific, and occupation specific)	
Overall Observation		The qualification standards *broadly match* with the NVQ qualification. More than 50% of the unit titles / training hours can be mapped with the NVQ qualification.

E.   Regional collective agenda on labour migration

163.   In some ways the labour markets of South and South East Asia are comparable, and the imperatives in the regional cooperation agenda within their respective blocks have some commonality. As is seen now, most countries in South East Asia are positioning TVET in the mainstream of education systems and setting it as a priority in their education agenda in view of the fact that this type of education plays an important role in the socio-economic development of the participating nations [25]. And as a result, new national and regional initiatives in TVET have been created in response to various changes in social, political, and technological landscapes.

164.   Some of the selected initiatives include addressing TVET quality and qualification frameworks. At a national level, all countries are raising the bar to benchmark their TVET quality. Quality assurance mechanisms via proper guidelines and accreditation have been established in most countries. Many countries in the region have also recently adopted National Qualification Frameworks in response to student and labour mobility as well as to encourage the implementation of life-long learning and the Education For All (EFA) agenda [25]. Additionally, to facilitate this integration, many multi-national organisations have begun initiatives to accommodate student and labour mobility, such as the development of mutual recognition of certificates, qualification frameworks, etc.

165.   All countries have their own way of assuring TVET quality. The development of a Regional TVET Quality Assurance Framework will facilitate in promoting continuous improvement of TVET within the country and enhance cooperation and mutual understanding between member countries. This will eventually improve connectivity, integration, education and labour mobility.

166.   Quality Assurance is necessary and sufficient condition for transnational recognition of accreditation decisions between signatory countries. For the European Union (EU), the educational quality assurance has been done through Bologna Process (1999), which is an intergovernmental process signed and honoured by all EU nations. The Bologna Process aims at uniformity and standardization in higher education system covering all levels viz. Bachelors, Masters and Doctoral; and provides a platform for effective quality assurance. The common methodological descriptor is accepted by all the participating countries. They are applied for both of internal and external quality assurance processes. As quality of education is assured and mutual recognition system is acknowledged by signing countries, qualified candidates can migrate from one nation to another without any major hindrances.

167.   The European Qualification Framework (EQF) consists of 8 reference levels which have been defined in terms of learning outcomes viz. knowledge, skills and competence. EU member countries have developed their own qualification frameworks in line with standard EQF. Qualification framework of individual countries can not only be compared with EQF but also be compared with that of any EU member country within the mutually recognized framework. A comparison of qualification frameworks under EU among EQF, Denmark and Ireland is given below:

EQF	Denmark	Ireland
Level 8	Level 8	Level 10
Level 7	Level 7	Level 9
Level 6	Level 6	Level 7 & 8
Level 5	Level 5	Level 6
Level 4	Level 4	Level 5
Level 3	Level 3	Level 4
Level 2	Level 1 & 2	Level 3
Level 1		Level 1 & 2

Another similar example of comparison among EQF, Netherlands and Scotland is furnished below:

EQF	Netherlands	Scotland
Level 8	Level 8	Level 12
Level 7	Level 7	Level 11
Level 6	Level 6	Level 9 & 10
Level 5	Level 5	Level 7 & 8
Level 4	Level 4	Level 6
Level 3	Level 3	Level 5
Level 2	Level 2	Level 4
Level 1	Level 1	Level 1, 2 & 3

168.   The development of ASEAN Regional Qualifications Framework (ARQF) is step in this direction. The AQRF, being a voluntary engagement of the participating countries, aims to accommodate different types of NQFs that are at different stages of development. The AQRF, a common reference framework, shall function as a 'translation device' to enable comparison of qualifications across participating ASAEN countries [26].

169.   A similar initiative within South Asian block could be worth formulating and developing. The overall standards setting processes, to facilitate regional trade in goods, have been set in motion within SAARC through the South Asian Regional Standards Organisation (SARSO) Agreement [27]. To support the facilitation of skill recognition and labour mobility, it is vital to start with a smaller quality assurance system among a smaller set of South Asian countries which have their TVET frameworks in place and competency standards defined for some key job roles. Such a mutual recognition system would serve as a testing ground for developing a comprehensive South Asian regional skills recognition and labour mobility system.

170.   The focus his study has mapped the competency stands for three SAARC nations: Bangladesh, India, and Sri Lanka. The occupation mapping for these countries has been done for the following occupations: plumber, welder, mason, domestic worker and care giving. The competency standards for these occupations could be mapped broadly with each other.

F. Key Recommendations

171. The key recommendations emanating from this study are grouped into two heads, namely: (i) way forward on developing and operationalizing *Mutual Recognition Agreements*, between Bangladesh and few countries on specific job roles, and (ii) further the SAARC agenda of *Labour Migration* by instituting a pilot on an existing sub-regional forum having a provision for regional scale up in near future.

Mutual Recognition Agreements

172. It is recommended that Bangladesh to enter into Mutual Recognition Agreement (MRA) with other countries wherein agreement has been arrived with respect to matching job roles. Both vocational and general educational qualifications would be recognized by the MRA signatory countries. The recognition would be based on quality assurance mechanisms of educational outcomes that are acceptable, understood and shared by Bangladesh and the destination countries.

173. Based on the findings from this study, few countries (or a sub-set of them) can be considered by Bangladesh for initiating pilot MRA negotiations regarding specific job roles:
   i. Bangladesh – Australia: For job roles – Carpentry and Plumber
   ii. Bangladesh – Barbados: For job roles – Restaurant and food services, Carpentry and Domestic worker / Housekeeping
   iii. Bangladesh – New Zealand: For job roles – Restaurant and food services, Cooks and Domestic worker / Housekeeping
   iv. Bangladesh – Scotland: For job roles – Restaurant and food services, Cooks, Welder and Construction (general construction)
   v. Bangladesh – South Africa: For job roles – Industrial electrician, Welder and Construction (general construction)
   vi. Bangladesh – Sri Lanka: For job roles – Welder and Construction (general construction) and care giving

Pilot project between Bangladesh, Bhutan, India, Nepal (BBIN)

174. At the eighteenth SAARC summit held on 27 – 28 November 2014 at Kathmandu, Nepal, the Leaders agreed to collaborate and cooperate on safe, orderly and responsible management

of labour migration from South Asia to ensure safety, security and wellbeing of their migrant workers in the destination countries outside the region. This was in line with the regional collective agenda on Labour Migration. Pursuant to this, the SAARC countries or any of its sub-region (to start with) can begin collaborating with each other to standardize competency standards for the selected job roles. This can be followed by attempting an initial mutual recognition system for these job roles within an existing SAARC sub-region, such as BBIN.

175.   It is this recommended that a sub-regional pilot certification programme for two/three job roles be conceptualized for the BBIN countries. Depending upon the outcomes of this exercise and lessons learnt, a larger rollout programme could be developed and adapted by all SAARC member countries. The following steps are the proposed to structure such a BBIN pilot initiative:

i.   Constituting forum of authorities / regulators who would be the Steering Group for such an initiative. The institutional framework and arrangements would be set out.

ii.   Designate few institutes, at least one in each of these four participating countries, which will work together to develop a common curriculum, equipment needs and pedagogical standards at a sub-regional level.

iii.   Accreditation of assessment institutions and pool of sub-regionally certified assessors in each of the four countries, who will have the capability and authorization to test and issue sub-regional certification to the candidates in selected job roles.

iv.   For the pilot project, it is proposed that 500 – 600 candidates be targeted for only two job roles for awarding BBIN sub-regional certification. The allocation of number of candidates to each participating countries by each job role can be decided through mutual consultation in the Steering Group.

176.   Based on this study, the following four job roles can be considered for further deliberations to arrive at a shortlist of two job roles for the BBIN pilot project:

i.   Housekeeping (Bangladesh) and Room Attendant (India)

ii.   National Skills Certificate-III in Masonry (Bangladesh) and Mason – General

iii.   Welding (Bangladesh) and Metal Inert Gas / Metal Active Gas / Gas Metal Arc Welder (India)

iv.   Plumbing (Bangladesh) and Plumber – General (India)

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Appendix

Table 39: NTVQF Level Descriptors

NTVQF Level	Knowledge	Skill	Responsibility
NTVQF 6	Comprehensive actual and theoretical knowledge within a specific study area with an awareness of the limits of that knowledge.	Specialized and restricted range of cognitive and practical skills required to provide leadership in the development of creative solutions to defined problems	Mange a team or teams in workplace activities where there is unpredictable change
			Identify and design learning programs to develop performance of team members
NTVQF 5	Very broad knowledge of the underlying, concepts, principles, and processes in a specific study area	Very broad range of cognitive and practical skills required to generate solutions to specific problems in one or more study areas.	Take overall responsibility for completion of tasks in work or study
			Apply past experiences in solving similar problems
NTVQF 4	Broad knowledge of the underlying, concepts, principles, and processes in a specific study area	Range of cognitive and practical skills required to accomplish tasks and solve problems by selecting and applying the full range of methods, tools, materials and information	Take responsibility, within reason, for completion of tasks in work or study
			Apply past experiences in solving similar problems
NTVQF 3	Moderately broad knowledge in a specific study area.	Basic cognitive and practical skills required to use relevant information in order to carry out tasks and to solve routine problems using simple rules and tools	Work or study under supervision with some autonomy
NTVQF 2	Basic underpinning knowledge in a specific study area.	Basic skills required to carry out simple tasks	Work or study under indirect supervision in a structured context
NTVQF 1	Elementary understanding of the underpinning knowledge in a specific study area.	Limited range of skills required to carry out simple tasks	Work or study under direct supervision in a structured context
Pre-Voc 2	Limited general knowledge	Very limited range of skills and use of tools required to carry out simple tasks	Work or study under direct supervision in a well-defined, structured context.
Pre-Voc 1	Extremely limited general knowledge	Minimal range of skills required to carry out simple tasks	Simple work or study exercises, under direct supervision in a clear, well defined structured context

Table 40: Countries where competency standards could not be mapped

Sl. No.	Country	Issue	Reference
1	Indonesia	National Working Competency Standards (SKKNI) are not given in English	http://indonesiaskills.net/index.php/skkni
2	Malaysia	National Occupational Skills Standard (NOSS) are not available, only the list of NOSS is available for download	http://www.dsd.gov.my/index.php/en/profil/bahagian3/bahagian-national-occupational-skills-standard-noss
3	Philippine	Philippine Standard Occupational Classification (PSOC) is available, couldn't locate the NOS / competency packs	http://www.nscb.gov.ph/publication/csd/csd_psoc.asp
4	Singapore	The resources from Singapore Workforce Development Agency (WDA) is not available in public domain	http://www.wda.gov.sg/content/wdawebsite.html?parent=topnavhome
5	UAE	The available Endorsed National Vocational Qualifications under Vocational Education and Training Awards Council (VETAC) do not match with the job roles considered for the study	http://www.nqa.gov.ae/En/VET/VETAC/Pages/qualificationsaccredited.aspx
6	Bahrain	Could not locate any relevant website	
7	Oman	The occupation standards are not available	http://www.ostc-oman.org/?action=static&page=os
8	UK	National Occupational Standards (NOS) are available as separate units with no QF levels assigned, qualifications packs / suites for job roles are not available (in the individual sector skill councils)	http://nos.ukces.org.uk/Pages/Search.aspx ; http://www.sscnasscom.com/ssc-list/list-international-sector-skill-councils/
9	Netherland	Could not locate National occupation standards in the individual Sector Skill council websites; most of the web pages are not translating into English effectively	http://www.sscnasscom.com/ssc-list/list-international-sector-skill-councils/
10	Canada	Could not locate National occupation standards in the individual Sector Skill council websites	http://www.sscnasscom.com/ssc-list/list-international-sector-skill-councils/
11	Uganda	The occupation standards are not available in public domain	http://dituganda.org/wp-content/uploads/2012/11/ATPs.pdf

Sl. No.	Country	Issue	Reference
12	Italy	National occupation Standards are given but does not define various competencies	https://ec.europa.eu/esco/portal/concept?lang=en&concept=http%3A%2F%2Fdata.europa.eu%2Fesco%2Fqualification%2F366670&conceptScheme=http%3A%2F%2Fdata.europa.eu%2Fesco%2FConceptScheme%2FESCO_Qualifications
13	France	National Working Competency Standards are not given in English	http://www.rncp.cncp.gouv.fr/grand-public/rechercheExperte
14	Denmark	National Working Competency Standards are not given in English	https://www.ug.dk/
15	Fiji	Could not locate any relevant website	
16	Kenya	the framework is being currently developed	http://uil.unesco.org/fileadmin/keydocuments/LifelongLearning/en/Kenya.pdf
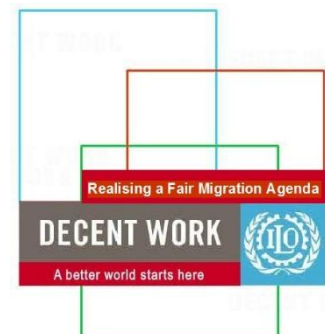
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