

INDIA

India has set itself the target of skilling 500 million people by 2022. To this end, in 2009, the government adopted the National Skills Development Policy (NSDP), which aims to guide the skills development strategies and initiatives of all stakeholders (MoLE, 2009). The NSDP is central to the creation of the National Skills Qualifications Framework (NSQF).

A unified NSQF has been developed by the Ministry of Labour and Employment (MoLE) and the Ministry of Human Resource Development (MHRD) over the course of 2012 and 2013. This has been done with the help of the India-EU Skills Development Project. The India-EU Skills Development Project aims to increase the capacity of policy makers and key counterparts, develop a NSQF and support the creation of Labour Market Information Systems (LMIS). The overall objective of this exercise is to improve the quality and relevance of training provision and the number of certified skilled workers in various sectors of employment in India (India-EU Skills Development Project, 2013). The unified framework is currently being disseminated by the Planning Commission of India for wider consultation.

1. CHALLENGES THE NQF WOULD NEED TO ADDRESS

India's labour market situation is often described as a paradox. There are many millions of people in the labour market and graduating from schools and colleges, yet the supply of skilled workers remains inadequate. Government Industrial Training Institutes have become a dead-end pathway, TVET has often been of poor quality until now, and general education has frequently led to poor employability of secondary school and higher education graduates.

Since India has set its sights on becoming an important source of talent for national and global businesses, the country's great challenge is therefore to ensure that its workforce possesses skills appropriate to the needs of both its internal economy and the global economy.

At present only 12 per cent of young people aged 18 to 24 are enrolled in higher education. India thus falls not only well below the OECD average of 80 per cent on this count, but also below the global average of 23 per cent (Odisha HRD, 2011). National policies aim to enrol 30 per cent of Indian youth in higher education by 2020 (Indiainfoline, 2011). The Government of India is currently seeking to create alternative pathways to post-secondary and higher education. It also aims to create job opportunities for 150 million students who will not have access to higher education by 2020.

Only 10 per cent of Indian workers have acquired vocational skills. Of these, 8 per cent have done so on the job. This means that less than 2 per cent have acquired recognised vocational qualifications. The 13-30 age group in the Indian population is currently growing by 28 million people each year, yet there are only about 2.5 million vocational training places available in the country (MHRD, 2011). Inadequate training of TVET teachers is a significant barrier at present. The share of TVET in

education in India needs to be increased if the country is to meet its huge skill needs. At present it is difficult for people with informally-acquired skills to move from to formal programmes, because there are limited mechanisms for recognising knowledge and skills acquired outside formal institutional settings.

The informal economy (which in India is termed the unorganised sector), both rural and urban, employs up to 94 per cent of the national workforce; yet most training programmes cater to the organised sector (NCEUS Report, 2009).¹ Another challenge is that India has a strong culture of on-the-job learning but a severe lack of in-service continuing formal training. Only 17 per cent of manufacturing establishments in India provide in-service continuing professional training (Tan and Savchenko, 2005).

India therefore urgently needs to find ways of bridging the traditional divide between education and training and working life. In today's climate of rapid change such a strict divide can no longer be sustained. Learning must be made more relevant to the workplace, and must continue to take place during employment (Singh, 2012).

2. MAIN POLICY OBJECTIVES

The government intends the NSQF to help achieve the following objectives:

- mapping all recognised qualifications in India into one framework;
- bringing about a paradigm shift in qualifications, teaching and learning, and shifting the focus towards learning outcomes;
- clarifying the roles of employers and education and training providers in the governance of education and training, TVET in particular;
- improving the link between demand for skills in the labour market and supply of skills through education, by linking the people working on each side and giving industry insiders a voice in educational policy;
- making better provision for credit transfer and the recognition of prior learning;
- allowing more flexibility and greater vertical and horizontal mobility for learners throughout India's education and training system;
- benchmarking knowledge and skills to international standards.

3. INVOLVEMENT OF STAKEHOLDERS AND LEGAL ARRANGEMENTS

The government has established a National Skills Development Agency (NSDA) under the umbrella of the Finance Ministry with the task of overseeing collaboration and coordination in the development of the NSQF and associated activities and policies. This agency subsumes the Prime Minister's National Council on Skills Development (NCS), the Board of the National Skills Development Corporation Board (NSDC) and the Office of the Adviser to the Prime Minister on Skills Development (the latter in fact forms the nucleus for staffing the NSDA). The NSDA will coordinate the skills development efforts of the government and the private sector in order to achieve the skilling targets of the government's 12th Five-Year Plan 2013–2017 (Planning Commission, 2013).

The NSDA will operationalise the NSQF to ensure that quality and standards meet sector specific requirements (ibid.). The NSDA will coordinate the various public and private TVET initiatives and schemes currently in operation. As a preliminary step, the NSDA has launched an evaluation survey to give a better picture of the current situation in India with regard to TVET. This will help highlight good practices which can then be built on in future policy making (ibid.).

¹ ILO's definition of the informal economy comprises three categories: (i) small or microenterprises, (ii) household-based activities carried out by family members, and (iii) independent service activities including domestic helpers, cleaners, street vendors, shoe-shiners and so on (ILO, 1998, p. 168).

In the MHRD's areas of responsibility, a number of major reforms are either starting or already underway. These include curriculum reform, the community colleges initiative, and a reform of the polytechnic approach to curriculum development. Inter-ministerial cooperation and engagement with stakeholders is growing, and ways are being sought to incentivise private schools to engage with TVET (Kumar, 2013).

The National Skills Development Corporation (NSDC) is mandated with the constitution and notification of the Sector Skill Councils (SSC), which define the National Occupational Standards (NOS) for the respective skills sectors. The SSCs are responsible for engaging with central and statelevel implementing agencies as regards the development of curriculum packages, the training of vocational teachers, and the assessment of skills imparted.

While the MHRD coordinates the efforts of different players in the vocational education at the secondary school level, the Ministry of Labour and Employment (MoLE) is responsible for vocational training and skills development outside the general school education sector. The MoLE subsumes the Directorate General for Employment and Training (DGE&T) and the National Council for Vocational Training (NCVT). Major changes are envisaged in the NCVT. It is to be made an autonomous statutory body which will have the remit of:

- establishing trade testing and certification centres;
- promoting the application of technology both for improving the quality of training and for evaluating, publishing and certifying results, etc.;
- developing LMIS (Planning Commission, 2013)

Awarding bodies, such as school boards (including Open Schools for distance education), boards of technical education, the Central Board of Secondary Education (CBSE), the All-India Council for Technical Education (AICTE) and the University Grants Commission (UGC), are expected to ensure that the curriculum is designed and delivered in consultation with industry and trade associations and that it conforms to national standards in the NSQF.

4. LEVELS AND DESCRIPTORS AND THE USE OF LEARNING OUTCOMES

The NSQF is organized as a series of levels of competency/skills arranged in ascending order from Recognition of Prior Learning (RPL) 1 and 2 through to levels 1 to 10 (Table 1). NSQF levels are defined in terms of learning outcomes. These are the competences which the learners must possess regardless of whether they were acquired through formal, informal or non-formal education and training. Levels are described by level descriptors which delineate the knowledge, skills and competences required at the level in question.

Qualifications are made up of occupational standards for specific learning units. This allows learners, educators, training providers and employers to gain information about the broad equivalence of qualifications across different skill sectors. The competence frameworks are expected to align curricula with the skills needs of industry. The NSQF also aims to include a range of qualifications that are currently being provided through TVET programmes run by more than 17 different ministries (MHRD, 2011). A further objective is to enhance flexibility in the provision of vocational courses by developing a 'modular' competency-based curriculum in collaboration with industry. The MHRD is involving industry representatives in preparing the NVEQF and in developing a strategy to compensate for the acute shortage of labour at levels 2 and 3 (Press Information of India, 2010).

Table 1. Qualifications by levels across the NSQF

		Case I	Case II	
Level	Certificate	Equivalence	Equivalence	Certifying Body
10	NCC 8	Degree	Doctorate	University and SSC [^]
9	NCC 7	PG Diploma	Masters Degree	University and SSC [^]
8	NCC 6			University and SSC [^]
7	NCC 5	Advanced Diploma *	Bachelors Degree**	*Board of Technical Education and SSC [^]
6	NCC 4			**University and SSC [^]
5	NCC 3	Diploma*	Grade XII**	*Board of Technical Education, and SSC [^] **School Board and SSC [^]
4	NCC 2			
3	NCC 1			
2	NCWP 2	Grade X	Grade X	School Board and SSC [^]
1	NCWP 1	Grade IX	Grade IX	School Board and SSC [^]
RPL	RPL 2	Grade VIII	Grade VIII	NIOS /State Open Schools and SSC [^]
	RPL 1	Grade V	Grade V	NIOS /State Open Schools and SSC [^]

RPL= Recognition of Prior Learning; NCWP = National Certificate for Work Preparation; NCC = National Competency Certificate; ^ = Joint certification with industry (Sector Skill Councils) would entail assessment for skills by SSC/industry. * = present Polytechnic Diploma where entry is after Class 8. ** = Advanced Diploma corresponds to the third year of the present Polytechnic Diploma.

Source: MHRD, 2012.

5. PROGRESSION PATHWAYS AND RECOGNITION AND VALIDATION OF NON-FORMAL AND INFORMAL LEARNING

The NSQF will open up several entry and exit points between TVET and general education and will facilitate movement between the two. The NSQF will emphasise industry participation in vocational education, with a specific focus on creating opportunities for students who are unable to enter colleges and universities. Vocational education courses will be designed, assessed and certified in consultation with industry stakeholders and employers. Industry stakeholders will be encouraged to partner with educational institutions so that vocational students can work on their premises. While theoretical knowledge will be imparted in educational institutions, skills will be imparted by 'skill knowledge providers' (SKP) with accreditation from multiple agencies. Workshops will be set up for a cluster of schools, polytechnics and other government institutions, and, where possible, in industry.

The NSQF will be used to facilitate seamless transition from VE secondary level (Class X –XII) to undergraduate level, namely the Bachelor of Vocational Studies at colleges and universities. In order to ensure compatibility between academic and vocational courses, the University Grants Commission (UGC) created a task force in 2006 to standardise knowledge and skills imparted by educational institutions and industrial training programmes.

Vocational training is the responsibility of the MoLE, which has been in the forefront of developing courses for school leavers through a network of more than 5,000 Industrial Training Institutes (ITIs) located all over the country. The NSQF will improve the progression pathways between formal TVET programmes in schools and ITIs. It will also improve progression opportunities to polytechnics, colleges of engineering and higher education more generally and ultimately to employment. Studies (IAMR, 2010; Teamlease, 2007) have shown that the biggest challenge is to improve the progression possibilities of those currently engaged in non-degree courses within ITIs. These students currently have limited progression possibilities (TeamLease, 2007). Strengthening linkages between the skills sector and vocational education will call for greater cooperation between MoLE and MHRD.

The NSQF levels will also be linked to the Skill Development Initiative (SDI) through Modular Employable Skills (MES). This is currently a competency-based training (CBT) pathway providing the minimum skill sets needed for gainful employment. The programme targets workers, young people not in school, the unemployed, former child labourers and ITI dropouts (DGE&T, 2008).

Skills recognition and certification initiatives will provide an important pathway for the 90 per cent of Indians who work in the so-called unorganised sector (NCEUS Report, 2009). However, the process of skills recognition in the informal economy will need to be supported by RPL infrastructure which is affordable, reliable and efficient. There will be challenges in identifying where skills exist, documenting those skills and communicating with the potential candidates, as well as in administering the process. Methods such as portfolio review, written and oral exams, and demonstrations (of what one knows and can do) will need to be employed. An open and transparent examinations system will need to be created which relates to a national qualifications framework, so as to benefit those people who have acquired their knowledge and skills outside the formal education system. Guidance and information campaigns will be needed to guide learners through the process (Singh, 2011).

The National Institute for Open Schooling (NIOS), which offers distance learning courses for out-of-school youth and adults, will align non-formal learning courses to suit the requirements of NSQF levels and will offer bridge or foundation courses to enable seamless progression from one level to another. The recognition of prior learning is an important component of this process. The objectives of RPL will be twofold: (i) recognition of prior learning or qualifications acquired outside the formal education system; and (ii) recognition of credits obtained through formal learning. The NIOS will conduct RPL assessment both at the lowest levels and at community colleges and polytechnics, which offer qualifications such as associate diplomas (MHRD, 2012). In order to conform to the NSQF and to facilitate RPL, community colleges will offer training programmes and courses that are modular, credit-based, career-oriented, flexible as regards entry and exit, and, most importantly, relevant for local employers (Planning Commission, 2013).

An indicative credit framework has also been proposed (MHRD, 2012). A credit framework has the dual objective of achieving both a skill certificate and an academic general education certificate of equivalent level for each job role and level of learning. School boards, technical boards and universities are being encouraged to switch to credit-based curricula and to establish equivalencies between vocational and general education (MHRD, 2012).

6. REFERENCING TO REGIONAL FRAMEWORKS

Given that India is expected to have a workforce surplus of 56 million by 2020 as against a shortage of 47 million in Western countries, the India–EU Skills Development Project will support labour force mobility in the ever-changing global employment market.

The current 10 level structure of the NSQF puts India at a disadvantage on the international stage since its level 10 corresponds to level 7 of 8 of the European Qualifications Framework (Castejon, 2013). It will therefore need to be reviewed.

7. IMPORTANT LESSONS AND FUTURE PLANS

India's development of the NSQF in the context of its skills development policy has underlined the importance of continually improving both the quality of education and training and its relevance to the labour market and population. The NSQF is at the centre of the biggest ever nation-wide skills transformation, with simultaneous emphasis being placed on increasing the volume of opportunities, improving access, and enhancing the quality of provision through activities and partnership across the sub-sectors.

Progress has been made towards clarifying the functions and design of the NSQF. The MHRD and MoLE have reached agreement, encouraged and supported by the Office of the Advisor to the Prime Minister on Skills, the India-EU Skills Development Project and the NSDC. Wider consultation is planned to take place shortly, led by the Planning Commission. The formation of the NSDA as a gatekeeper of national and sectoral qualifications is an important step. The NSDA will open the door for much-needed recognition of prior learning, so that all learning can be recognised regardless of the way it has been acquired (Castejon, 2013).

India intends to build on the wealth of expertise in vocational education and training already present in the country rather than starting anew. India has expertise in the area of assessment, which is at the core of the qualifications framework. It also already benefits from the work of the National Council for Vocational Training, the All India Council for Technical Education and the University Grants Commission, all of which have been functioning as awarding bodies for some time. New awarding bodies will be established only if the quantitative targets of the 12th Plan make this necessary.

Partnership with industry and with all levels of governance (notably, with the 28 states) in a country as large as India is important for successful reform. The NSQF provides a forum for this partnership through the sector skills councils. Within the NSQF, India will pay greater attention to creating a balance between public and private sector provision. It hopes to achieve this by developing national standards in training delivery common to public and private stakeholders (ibid.). The shift from learning input to learning outcomes in training delivery will be an important move towards quality assurance (ibid.). Research will be undertaken to broaden the notion of skills beyond technical and practical skills to include notions such as communication skills and personal skills or attributes (Castejon, 2013).

The road ahead is to understand the NSQF as a useful tool among a range of policies, instruments and activities, rather than to see it as a stand-alone policy. Dialogue across sectors is only starting; all stakeholders still have a lot to learn from each other. An update of the National Policy on Skills Development is envisaged in order to voice a coordinated vision of TVET for the future (India-EU Skills Development Project, 2013).

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