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Reconfiguring India's Qualifications Architecture: TVET Reform from the National Skills Qualification Framework to the National Credit Framework

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Abstract

Under what institutional conditions do qualifications frameworks become trusted mechanisms for progression, mobility, and labour-market signalling? This paper starts with this question, and then examines the evolution of India's qualifications architecture through the trajectory of the National Skills Qualification Framework (NSQF) and the emergence of the National Credit Framework (NCrF). More specifically, it addresses the question: why did the NSQF fall short of becoming a trusted qualifications framework, and to what extent can the NCrF overcome these limitations to create an integrated and credible qualifications system? The NSQF, introduced in 2013 as a learning-outcomes-based framework, sought to improve progression, portability, and comparability across education and training. However, its implementation became concentrated on short-duration skilling programmes and fragmented institutional arrangements, resulting in weak assessment credibility, limited labour-market recognition, and constrained learner progression. Drawing on policy documents, implementation evidence, and comparative institutional analysis, the paper argues that these shortcomings were structural rather than technical: qualifications frameworks cannot generate trust or mobility without robust institutions for assessment, certification, quality assurance, and recognition. Against this backdrop, the NCrF (2023), introduced under the National Education Policy 2020, represents a second-generation reform. By integrating school education, higher education, technical and vocational education and training (TVET), and experiential learning within a unified credit architecture, it has become the organising framework of India's qualifications system. The paper shows that India has effectively moved from a single-framework model centred on the NSQF to a more complex architecture incorporating the NHEQF, NSEQF, and NCrF. It further argues that the alignment of the NSQF and NCrF has transformed India's qualifications structure from what is commonly described as an eight-level framework into a 13-level progression system through the introduction of intermediary levels between Levels 2 and 7, with important implications for progression, comparability, and learner mobility. Drawing on international experience, the paper concludes that successful qualifications reform depends less on framework design than on trusted certification, visible progression pathways, and employer recognition. India's next phase of reform must therefore shift from training expansion to assessment-based trust, progression-oriented qualifications, and stronger integration with domestic and international labour markets.

JEL classification

I21, I25, J24, O15

Keywords

India, National Credit Framework, qualifications frameworks, TVET, learner mobility, skills certification, New Education Policy, European Qualification Framework, Skills

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1. Introduction

Under what institutional conditions do qualifications frameworks become trusted mechanisms for progression, mobility, and labour-market signalling? This paper starts with this question, and then examines the evolution of India's qualifications architecture through the trajectory of the National Skills Qualification Framework (NSQF) and the emergence of the National Credit Framework (NCrF). More specifically, it addresses the question: why did the NSQF fall short of becoming a trusted qualifications framework, and to what extent can the NCrF overcome these limitations to create an integrated and credible qualifications system?

Conceptually, globally, qualifications are meant to be more than certificates – they function as signals of competence to employers, gateways for learner progression, and benchmarks for regulatory standards. However, in India, qualifications also shape legitimacy and access across deeply segmented pathways.

India's education and training ecosystem has long been characterized by fragmentation across ministries, uneven institutional quality, a persistent divide between academic and vocational pathways, and a labour market in which significant body of competencies is acquired outside formal institutions. In such a context, the design of a national qualifications architecture has ambitions that exceed technical classification. It is expected to address historical status hierarchies, create permeability across sectors, improve employability, recognize prior learning, and support lifelong learning. These ambitions help explain why qualifications frameworks(QFs) have been attractive as policy instruments in India—but they also explain why such frameworks are often asked to do more than they can deliver on their own. (Allais, 2010, 2014)

Existing literature on QFs has focused predominantly on technical design, comparability, and learning-outcomes architectures. Comparatively less attention has been given to institutional sequencing, governance capacity, assessment credibility, and labour-market recognition. These become particularly important in high-informality economies such as India, where qualifications systems operate within fragmented institutional and labour-market environments.

India's experience with the NSQF reveals the constraints of framework-led reform when the deeper institutional foundations of a qualifications system remain underdeveloped., Notified in 2013, the NSQF introduced a competency and level-based hierarchical framework for qualifications. Conceptually, it promised vertical and horizontal mobility, improved transparency, and a common language for skills. In practice, however, the framework emerged during a period in which policy choices to rapidly expand short-term training(STT) programmes were made. These STTs operated with their own set of initiatives, interests and incentives. They introduced qualification packs(QPs)[1], uneven assessment practices, and a fragmented ecosystem of delivery and certification. The result was not failure, but partial reform whose conceptual coherence outpaced its institutional consolidation.

[1] QPs could be seen as a complete job profile, consisting of a series of distinct national occupation standards (NOSs), which could signify training curriculum design, certification and assessment.

This paper therefore argues that qualifications frameworks are not autonomous governance instruments; their effectiveness depends on the wider institutional ecology within which they are embedded. The limitations of the National Skills Qualification Framework (NSQF) were thus structural rather than merely technical. The framework was expected to perform functions—credibility, progression, recognition, and portability—that depended on the wider qualifications system within which it operated. The emergence of National Credit Framework (NCrF) creates a renewed opportunity, but only if reforms now shift from framework expansion to institutional consolidation.

The institutional problems become clearer when the TVET context is known. India has expanded in mass schooling but it has not been accompanied by a proportionate strengthening of formal vocational pathways. In comparison to the European Union countries and China, where approximately 50% of secondary students study in vocational streams(CEDEFOP, 2021; Ministry of Education of China, 2006), OECD data reveals that only 1.9% of students aged 15–19 are enrolled in Indian vocational programmes, reflecting limited integration of vocational streams within schooling. India's NEP 2020 set a target for vocational education, it said 'By 2025, 50% learners will be exposed to vocational education'. However, vocational education remains an optional subject within the academic curriculum rather than a dedicated vocational pathway, as found in many European countries and China. As a result, progress in mainstreaming vocational education has been limited.

The divergence between educational expansion and vocational institutionalization is central to understanding the governance deficits of Indian TVET. Historically, workforce skills in India have been produced predominantly through informal mechanisms rather than through formal certification systems. While school education expanded through a relatively coherent public policy framework centered on access, enrolment, and social inclusion, TVET evolved through a fragmented institutional architecture spanning multiple ministries, overlapping regulatory bodies, scheme-based interventions, and uneven public–private partnerships. Consequently, TVET did not consolidate as an integrated subsystem within the broader education order. Instead, it remained administratively dispersed, socially stigmatized, and often treated as a residual pathway for those excluded from the academic mainstream. The persistence of low formal training incidence, despite repeated policy interventions, reflects not merely a capacity deficit but a problem of institutional coherence, social legitimacy, and weak labour market linkage. From this standpoint, the predominance of informal skill formation should be understood not as a temporary developmental lag, but as a structurally embedded feature.

The introduction of the NCrF in 2023 represents a second-generation reform. Unlike NSQF, NCrF seeks to create a unified credit architecture across school education, higher education, TVET, and experiential learning. This marks a shift from a sub-skills framework to a more integrated architecture for lifelong learning and learner mobility. The NCrF is—and can be further developed as—a more coherent and well-structured framework within formal education than within the TVET domain. In contrast, its effectiveness in TVET will depend largely on how ecosystem actors engage with and leverage it, knowing well that they start from a structurally disadvantaged position.

The central challenge remains unchanged: can India build a qualifications system (including for Technical Vocational Education & Training) where credentials are credible, portable, and meaningful in the labour market?

The paper begins by clarifying terminological fragmentations and its implications for Indian skills policy. Section 2 defines the key concepts used– qualifications systems, qualifications frameworks, and credit frameworks. Section 3 examines the global evolution of QFs. Section 4 returns to India, and traces NSQF's evolution and its implementation. Section 5 analyses the bottlenecks for Indian qualifications system – credible assessment, recognition of prior learning, governance, use and visibility. Section 6 presents the National Credit Framework- the meta-framework linking all Indian QFs, its emergence, opportunities and risks. Finally, based on the preceding analysis we present a strategic reform agenda for building a more coherent and credible national qualifications system.

In terms of the analytical approach and methodology, the paper adopts a qualitative comparative institutional approach. It draws on policy documents, regulatory notifications, public implementation data, and institutional records related to India's TVET ecosystem. A comparative perspective is used to situate India's experience alongside global qualifications systems.

2. Terminological Fragmentation and Policy Effects

Skills, vocational education, vocational training, vocational education and training, and related terms are often used interchangeably in the Indian TVET policy discourse. They are not the same. Their usage as proxies of each other in government documents is a source of confusion and has far reaching effects. We explain here exactly how it is used in India.

'Skills' in policy discourse is its generic use and spans across all qualifications - schools, vocational and higher education. UNESCO (2013) groups skills into three tiers: foundational skills (literacy, numeracy, problem-solving), transferable skills (communication, teamwork, English, computer skills), and domain knowledge (technical expertise). These build on one another and are applied according to context to shape a job profile.

In terms of institutional set up in India, there is no one central ministry that oversees Skilling; however, Foundational skills are part of the Ministry of Education(MoE) (as in most countries). Ministry of Skill Development and Entrepreneurship(MSDE) ***coordinates*** *vocational skills. Its role is mis-understood to be much larger than it is enabled to do. There are regulators such School Boards, National Council of Vocational Education and Training(NCVET), All India Council of Technical Education(AICTE) for higher technical education (at post-higher secondary level), University Grants Commission(UGC) (to oversee general academic higher education), and also domain regulators like Indian Nursing Council(INC), etc. UGC and AICTE are under legislative process for merger to create a single higher education regulator. The term 'skills' has become so expansive in policy discourse that it risks signifying everything—and therefore nothing. It should be avoided in granular policy discussions.*

Vocational education (VE) is typically employment-oriented training in schools. The regulators are School Boards under the MoE.

Vocational training(VT), Vocational Education and Training(VET) is the technical training in Industrial Training Institutions(ITI) (regulator-NCVET, overseen by MSDE), polytechnics(regulator-AICTE, overseen by MoE), training centres (public scheme-based; regulator-NCVET, overseen by MSDE).

In this paper, 'TVET' is the umbrella term used for India's fragmented ecosystem of TVET. For clarity, this includes Initial VET (IVET) and Continuous VET (CVET) as used in literature. The Indian ecosystem spans several ministries, regulators, and institutional forms.

The terminological overlap above is not merely semantic, but has governance relevance. NSQF is the uniting layer for TVET and is the responsibility of NCVET. But since NSQF in schools is regulated by the school boards, NCVET has no enforcing role, but only a referral aligning role. Effectively, '*vocation education'* as worded in NCVET's name does *not* exist in its everyday function. One may be able to see now, how terminology extends and reinforces policy and institutional fragmentation. The use of 'skills,' 'skill development,' 'vocational education,' and 'training' as overlapping categories has contributed to jurisdictional ambiguity and policy segmentation. We therefore, suggest careful deliberate use.

Another tendency is to conflate qualifications with qualifications frameworks, and qualifications frameworks with the qualifications system as a whole. This distinction is decisive for planners. We try to explain our understanding below.

A qualifications system is the complete institutional ecosystem through which qualifications are designed, approved, delivered, assessed, awarded, quality-assured, recognized, stored, and used. It includes legal mandates, regulatory institutions, ministries, sectoral authorities, awarding bodies, assessment mechanisms, digital qualification registers, learner records, recognition procedures, and interfaces with employers and education institutions. A qualifications system is an operational architecture of trust and recognition.

A qualifications framework is one component of such a system. It is a structured classificatory device that organizes qualifications into levels on the basis of descriptors such as knowledge, skills and autonomy & responsibility. Frameworks make qualifications transparent, comparable, and legible across providers and sectors. They support progression and alignment, but they do not themselves generate credibility. (Allais, 2014).

A credit framework addresses a related but distinct problem. It governs the recognition, accumulation, transfer, and portability of learning. Credits are important for modularity, multiple entry and exit, cross-

institutional movement, and lifelong learning. It enables learners to build learning over time, across institutions, and across forms of learning, provided the rules of recognition are trusted and transparent.[2]

These distinction matters for NSQF/NCrF. Credits only travel when qualifications are known and trusted.

3. Global Evolution of Qualifications Frameworks and Comparative Lessons

Qualifications long predate qualifications frameworks. What frameworks add is a public structure through which they can be compared, aligned, and linked to wider pathways of progression.

The rise of National Qualifications Frameworks (NQFs) occurred within broader transformations in modern education systems (Cedefop, 2015; 2018). They emerged in response to labour mobility, outcomes-based reform, and the growing need to compare learning across institutions, sectors, and borders. Their development also reflects a shift from input-oriented education governance toward frameworks that make claims about what learners know, understand, and can do.

Since the 1980s, QFs have gained prominence through Anglo-Saxon reforms, wake of globalization (1990 onwards) and EU integration(mid-2000s). Some of the earliest and most influential framework developments occurred in countries such as the United Kingdom (1986), New Zealand (1991) Australia (1995), and Scotland (1997). They remained 'work in progress' for decades after their beginnings in the 1980s. (Young, 2011; UNESCO-UNEVOC, n.d.). These were efforts to rationalize fragmented awarding landscapes, make pathways more transparent, and bridge divides between general, vocational, and higher education. The Scottish Framework became a widely cited example because it did not merely classify qualifications; it linked schools, colleges, universities, workplace learning, and professional awards within a single public architecture. Similarly, the Australian Qualifications Framework offered national coherence combined with sectoral clarity. It provided a stable public ladder through which qualifications could be understood and compared. These frameworks did not eliminate institutional diversity; rather, they established stable rules through which diversity could be made coherent and publicly legible.

Germany, unlike the Anglo-Saxon systems, has a longer pedigree, with a history traceable to the 19th century guild system. It evolved alongside the German manufacturing prowess in the first Industrial Revolution. It offers a different but important lesson: labour-market signaling can be strong even where the framework is not the sole source of legitimacy (Raffe, 2012; Mehrotra, 2015). The dual system (used in Germany, Austria, Switzerland), apprenticeship traditions, and employer-embedded occupational standards provide a reminder that frameworks are not substitutes for deep institutional relationships between training and work. In some systems, the framework clarifies trust that already exists; it does not create it from nothing.

[2] The importance of accumulation of credits for India was articulated in 2012, suggesting moving the TVET and general academic school system to a credit-based system. See Mehrotra, Banerjee and Mehrotra (2012).

South Africa(2009), a former UK colony, much like the Indian experience, highlights the difficulty of implementing ambitious framework integration in contexts marked by institutional inequality and systemic fragmentation. It underscores the risk that comprehensive frameworks may overpromise when governance, quality assurance, and provider capacities remain uneven.

A major phase of framework diffusion followed the European Qualifications Framework (EQF) in 2008. As a regional meta-framework, it allowed member states to reference national levels to a common eight-level structure, supporting mobility while also reshaping domestic reform agendas. Its wider significance lies in demonstrating that frameworks often work most clearly as communication devices: they make complex systems more visible and comparable, but are dependent on the institutional quality of the systems they describe.

By 2022, more than 90 countries had adopted national or regional qualifications frameworks, underscoring the extent to which the instrument has become globally normalized((ETF, 2019/2022). Conceptually the effort around QFs is to ensure that qualifications are stable and serve the learners and the employer's needs. The underlying goal is making the system demand based, under pinning the desire to drive employment outcomes. However, QF expansion outpaced evidence on their effectiveness. Comparative scholarship on NQFs has yielded mixed, often critical, assessments (Allais, 2010, 2014).

Comparative Lessons for India

India's scale, federal complexity, informality, and diversity of institutional arrangements make direct transplantation of foreign models neither possible nor desirable. Nevertheless, international experience offers important lessons. The central lesson is that frameworks succeed when they sit atop strong systems of assessment, awarding, labour-market recognition, and public communication. Their effectiveness depend heavily on surrounding institutions. They fail—or underperform—when treated as stand-ins for those institutions. Implementation is slower and more contested than design, since level descriptor tables can be written relatively quickly but building institutional trust takes much longer. (Allais, 2010)

India has been learning these lessons the hard way over the last 15 years, which is unfortunate, because unlike the EU countries (which are well past their demographic dividend and are aging), India desperately needs to seize the advantages that the demographic dividend gives while it lasts. Today, India has only 15 more years (until 2040) before this runs out (Mehrotra and Parida, 2026). Therefore, the time for experimentation has long gone; the urgency for getting a coherent strategy in place is overwhelming.

This means taking up reform frontiers which lie in better system architecture. Frameworks are not self-executing policy instruments (Allais, 2014). They are consequential only when embedded in systems. In India, reforms in education have been few and in vocational skills even fewer. The 2013 NSQF reform came a tad late to the eventual catch up to the 1990s economic liberalization, when a number of policy shifts had happened. In 2020, after 34 years of the Kothari Commission and the first in this century, the

education policy had a makeover through the National Educational Policy (NEP 2020), which eventually led to NCRF later on.

4. NSQF in India — Evolution, Sequencing, and First-Decade Distortion

India's turn to a qualification framework emerged from the long standing mobility problem in TVET. By defining levels through learning outcomes, the framework promised a common language across sectors, support for RPL, and reduced status divides between academic and vocational routes.

The NSQF, notified by the Ministry of Finance in 2013 marked the consolidation of earlier policy efforts, notably the National Vocational Education Qualification Framework (NVEQF), referenced in the Twelfth Five-Year Plan's chapter on skill development (Planning Commission, 2013; Mehrotra, 2013). The framework was renamed from NVEQF to NSQF following a consensus between the then Ministry of Human Resource Development (now Ministry of Education) and the Ministry of Labour and Employment.

NSQF's design logic was both modern and policy-relevant. Conceptually, NSQF organized qualifications into 10 levels, the structure aimed to make progression pathways more transparent and support re-entry into education and training over time and was to serve as a national reference framework, a mobility mechanism, a quality-assurance support instrument, and a device for improving the social legitimacy of vocational learning. However, such mobility depends on complementary systems such as credit accumulation and flexible entry-exit mechanisms, which remained unevenly developed (see Mehrotra, Mehrotra and Banerjee, 2012) and was developed ten years later in 2023.

NSQF is anchored in the National Council for Vocational Education and Training (NCVET), a regulator located in the Ministry of Skill Development and Entrepreneurship(MSDE), and implemented through the National Skills Qualification Committee (NSQC) which includes representation from ministries, regulators, industry bodies, and state governments.

First Decade: Promise, Political Economy, and Distortion

The political economy of existing and upcoming institutions and the sequencing of policy reforms have shaped the qualifications ecosystem. The lack of QFs in school and higher education and the use of generic word 'skills' rather than TVET/vocational made NSQF the de-facto National Qualification Framework (for all kinds of qualifications not just vocational). The efforts, driven by the PM Skill Council (beyond individual Ministry hierarchy), the use of common qualification repository- like the National Qualification Register(NQR) and its design made it look like the common QF for all of education. However, when MSDE was formed in 2015 and NCVET came into being in 2018 than their defined roles made it evident that NSQF was only for TVET. This was substantiated by subsequent development of school and higher education qualification frameworks.

NSQF was examined in the past (see Mehrotra, 2020). The first decade represents partial achievement with significant structural distortion. Its common reference vocabulary helped and was used to align public funds and numerical training goals across ministries and programmes that had previously operated in silos.

Sequencing and Distortion

NSQF rollout coincided with the rapid expansion of short-duration training programmes (with Qualification Packs (QPs)), supported through public funds. Instead of the initial core anchor being long-duration, progression-oriented pathways, the framework became operationally embedded within a high-volume, short-term training ecosystem. Therefore, NSQF qualifications were experienced in practice as discrete certifications linked to narrowly defined job roles rather than as part of a cumulative learning and career progression system. The framework's quick absorption into a policy environment of numerical expansion, programme targets, and diverse certification mechanisms shaped how NSQF was used and understood. (Mehrotra, 2020)

The sequencing of these reforms had implications. First, it narrowed public and institutional understanding of what the framework was for. Second, it shifted the centre of gravity toward a sub segment of the already segmented skilling ecosystem. It's not that NSQF lacked design intelligence. The issue was that its institutionalization occurred through mechanisms that did not always reinforce the long-term credibility of qualifications. (Allais & Wedekind, 2020)

A counterfactual perspective may help here. Had the NSQF first been implemented within long-duration programmes—such as those in industrial training institutes—and its progression pathways allowed to mature, the framework may have developed stronger institutional credibility. Subsequent extension to short-term training could then have been built upon a more robust foundation, potentially avoiding the current fragmentation between certification and substantive skill formation. While such a counterfactual cannot be empirically verified, it highlights a broader lesson: in skills policy, the sequencing of institutional reforms and delivery mechanisms can significantly shape both system outcomes and stakeholder perceptions.

NSQF's early alignment with short-term training significantly constrained its transformative potential, contributing to ongoing challenges around credibility, progression, and integration within the broader education system. Rather than first stabilizing a deep qualifications system and then using a framework to make it more transparent, India attempted the reverse: using the framework as a tool to impose order and comparability on a base of TVET institutions that were fragmented, and now in addition, that base was undergoing rapid expansion of what was a highly heterogeneous training landscape. That imposed limits from the start. The framework's ambitions were larger than the institutional base on which it rested.The result was a kind of qualification inflation (conflating them with job roles) without equivalent trust

formation. Qualifications could be aligned, levels could be assigned[3], and certificates could proliferate, yet the underlying questions remained unresolved: Were assessments comparable? Did employers understand and trust the signals? Could learners actually progress across sectors? Were short-term certificates being over interpreted as proxies for occupational readiness? (Allais & Schöer, 2024)

This is the central distortion of the NSQF decade: the framework's language of coherence was overlaid onto an ecosystem whose incentives still favored fragmentation. This made NSQF's first decade an unfinished work with uneven institutional transition rather than as a settled reform.[4]

Qualification Frameworks after National Education Policy (NEP 2020)

In 2026, India does not have one QF, but three frameworks – National Skills Qualifications Framework (NSQF) , National Higher Education Qualifications Framework (NHEQF) and National School Education Qualification Framework (NSEQF). Most countries have NQFs via legislation. India does not. NQSF and NHEQF came about through government notifications. We do not have a comprehensive National Qualification Framework and perhaps will not have it. We have a new layer for it which is the National Credit Framework (NCrF).

The NSQF—the qualifications framework governing India's TVET sector—has evolved from its original ten-level structure to a formally defined eight-level framework, broadly reflecting the international influence of EQF and its subsequent alignment with the NCrF. However, the conventional description of the NSQF as an eight-level framework obscures an important structural feature. The introduction of intermediary levels (2.5, 3.5, 4.5, 5.5, and 6.5) between Levels 2 and 7 creates thirteen distinct progression stages: 1, 2, 2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, 7, and 8. From the perspective of learner progression and qualification differentiation, the NSQF therefore operates as a de facto 13-level framework. This is unusual in global literature has important implications for progression pathways, level comparability, credit accumulation, and international referencing.

Usage of NSQF courses

From earlier sections, we know the short-term courses(QPs) were the publicly identified NSQF courses. The long-term courses were aligned to NSQF in a non-publicized technical exercise. The instrument for the NSQF implementation were the private-sector dominated sector skills councils (SSCs)(nearly 40 of them, which drafted the QPs), and NSDC[5] functioned to create the dominant narrative of modern qualification design in India in a publicly funded enabling environment. We look distributional use of NSQF levels in practice using PMKVY[6] (Feb 23- Apr 26) below:

Table 1: Levels of NSQF course and RPL /STT bifurcation of PMKVY from 23-02-2023 to 2-04-2026

[3] This was done by Sector Skills Councils (SSCs) incubated by NSDC, just as the short term courses were being proliferated by private vocational training providers – with funding mostly through Govt via NSDC. For this discussion, see Expert Committee Report (2017) to the MSDE (better known as the Sharda Prasad Committee report).

[4] This is the context of the two Comptroller and Auditor General (CAG) Reports on the NSDC, in 2015 and again in 2025, both with similar findings.

[5] NSDC is set up as a not-for-profit company under Section 8 of the Companies Act, 2013 (earlier Section 25 under the 1956 Act). Its ownership structure is: 49% equity is held by the Government of India (through MSDE).

[6] Pradhan Mantri Kaushal Vikas Yojana (PMKVY) is the flagship public funded scheme of Skill India efforts.

	Number			Percentage		
Level	**Overall**	**RPL**	**STT**	**Overall%**	**RPL%**	**STT%**
Not Known	1240	0	1240	0%	0%	0%
2	60908	13347	47561	2%	2%	2%
2.5	1922	167	1755	0%	0%	0%
3	928586	211414	717172	30%	37%	29%
3.5	11822	1609	10213	0%	0%	0%
4	1699417	305400	1394017	55%	53%	56%
4.5	11693	6654	5039	0%	1%	0%
5	286821	32760	254061	9%	6%	10%
5.5	2754	2052	702	0%	0%	0%
6	40455	0	40455	1%	0%	2%
6.5	22	0	22	0%	0%	0%
7	31717	34	31683	1%	0%	1%
Total	**30,77,357**	**573437**	**2503920**	**100%**	**100%**	**100%**

Source: Constructed from Enrolment data of PMKVY scheme from 23-02-2023 to 2-04-2026 from SIDH portal access April 2026

From table 1, we can infer that more than 90% of training happened at only two NSQF levels 3 and 4. There is almost negligible usage in other levels. This raises the question: why is there such a large number of QP courses offered at other levels if they are not used ? The Comptroller and Auditor General of India (CAG, 2025) of India in its Report No. 20 of 2025 on PMKVY also highlighted serious issues in the utilization of NSQF-aligned skill courses. It found that 56.14 lakh candidates were certified across 724 job roles, but around 40% of certifications were concentrated in just 10 job roles. Training was further skewed towards a single job role within sectors due to lack of proper skill-gap analysis.

From table 1, less than 19 percent of training was undertaken for RPL in a country with 90% informal workforce. Additionally, NSQF course usage in schools remains abysmally small. As per UDISE data the number of Secondary & Higher Secondary Schools with Vocational Education was 12,292 schools in 202021 and has gone only up to 18,610 schools 202324 (Ministry of Education, Government of India, n.d.)

The analysis suggests that if some qualifications are used more, trusted more, demanded more, we must improve them to be the best in terms of its outcomes. Many countries use a trust certificate for e.g. Canada has the ‘Red Seal qualifications’ to indicate additional level of trust and mobility options. Something of this nature can be thought particularly when we have empirical evidence of usage as indicated above. At least this can provide credibility for few qualifications if our policy choices have constrained it for the entire ecosystem.

5. The Three Bottlenecks in India's Qualifications Reform

5a. Assessment Credibility – The trust link between Qualifications and Credits

India diverged from global peers in assessments. Its sector led bodies -SSCs handled assessments rather than a central examination board. This is not a common practice worldwide. The diversity of bodies and the decentralization of assessments have impacted the sanctity of NSQF certifications. Hiring figures indicate that they have not been credible. (CAG 2025).

In a learning outcome-oriented model, it can be argued that '*training'* per se is also an input, what determines skills are the assessments for it. They are the decisive site of trust. Assessment credibility determines qualification credibility. So, in the learning outcomes spirit of QFs, credibility of assessments and its international comparison should have primacy. This is exactly where the framework-led reforms in India have encountered its deepest difficulty.

India's qualifications reform under NSQF was constrained by credible, standardized, and trusted assessment architecture. The discourse has focused on training delivery. Improving monitoring and evaluation of training has been highlighted frequently (CAG 2025) but the quality of assessments have received little attention. A qualification that is formally aligned to a national framework but weakly assessed will not carry durable labour-market value. Employers and institutions quickly develop their own parallel filters when formal signals are weak.

The certification awarding body landscape of NCVET demonstrates this point. NCVET has two kinds of awarding bodies - Standard Awarding Bodies(SAB) and Dual Awarding Bodies(DAB). In 2026, there are more than 130 (103 DAB and 51 SAB) awarding bodies for TVET.

Table 2: Awarding bodies under NCVET

Nature	*Number of Dual AB*	Number Standard *AB*
Associations	2	1
Sector Skill Councils(SSCs)	None	36
Defence- e.g DG of Army, Airforce, Navy	20	None
Government	30	None
Joint Venture-State & Private	2	None
Non Profits	6	8

For profit company	7	2
Skill Mission	7	None
State, ITI & Deptt. Board	9	1
University (includes most open universites)	20	3
Total	103	51
Source: Analysis of information on https://ncvet.gov.in/recognition-of-ab-aa/ Accessed in April 2026		

SABs are allowed to do three things – develop NSQF qualifications, train and award certification. The assessment for certification is by recognized assessment agency, not by the awarding body itself.

DABs in addition to what SAB can do, can also do *assessment* for certification. Only government bodies can award/assess/certify the training imparted by third-party-affiliated training centres. This policy makes assessment and awarding role into one function. For public schemes, government bodies develop, train, assess and award qualifications.

Universities, defence and government establishments constitute the largest number of DABs .The SSCs and the associations lead as SABs. *What does the above imply? Is this not a movement for what is known as a supply-led system rather than a demand led system.* The awarding-body landscape remains highly heterogeneous, with non-separation of training, assessment, and certification functions. QF levels lose practical meaning when assessments are not believed by stakeholders. In such conditions, the formal qualifications architecture becomes administratively present but socially thin.

This is why the future of India's qualifications reform depends less on adding descriptors and more on strengthening the institutional ecology of assessment: assessor quality, moderation systems, evidence protocols, external verification, appeals, re-assessment rules, digital auditability, and clarity about what different types of certificates actually certify. Central exam-board or nationally trusted awarding models are needed instead of distributed sectoral assessment without common credibility.[7] Without this, the system risks continuing to generate volume without value.

[7] When assessments are distributed, as in the Germanic TVET system, it is quality-controlled. The primary responsibility lies with: Chambers of commerce and industry (e.g., German Chambers of Commerce and Industry) and the Chambers of Crafts (Handwerkskammer). These are statutory, industry-led bodies, not private companies or schools. The supporting roles are performed by Employers (companies)- continuous workplace evaluation; Vocational schools- assess theoretical knowledge ; and Chambers - conduct and certify final examinations. Assessment is multi-stage and standardized nationwide. First, continuous assessment is done during training (2–3.5 years). This is by: company trainers (practical skills) and vocational schools (theory). This influences readiness but usually does not replace final certification. Second, there is Interim Examination (Zwischenprüfung), midway through training organized by chambers, to check progress and identify gaps. It is often diagnostic, not always counted heavily in final grading (varies by occupation). Then, there is the Final Examination (Abschlussprüfung). This is the most important component, conducted by independent examination boards set up by chambers. The Boards include Employers , Employees (trade union reps), and Vocational teachers, thus ensuring tripartite representation (state–industry–labour).

5b. Informality and Recognition of Prior Learning

India's QF has another challenge that most developed countries that piloted QFs did not have. In fact, no other OECD country has a large informal economy. Even among most developing countries informal economy is certainly nowhere close to that of India (Mehrotra, 2020). There were no good policy borrowing options and provisions for framing this in the NSQF.

The scale and persistence of informality in India's labour market fundamentally complicates conventional qualifications policy. If formal enrolment is treated as the primary route to legitimate qualifications, it is bound not to recognize a major part of the country's real skill formation process.

An older innovation- Recognition of Prior Learning(RPL)- comes to help in this context. It is a standalone idea. Its needs a qualification system not a framework per se. However, the space and systems it needed was not adequately put in place. It is implemented as a programme rather than institutionalized as a pathway. It remains episodic or target-driven, and produces certificates without transforming mobility.

RPL should not be treated as a peripheral inclusion measure but as a core institutional pathway. It is not a component of qualifications reform, but a strategic necessity. It is the bridge through which informal workers can enter the formal architecture of recognition, access progression opportunities, and convert socially unrecognized competence into portable value.When embedded structurally, it can alter the relationship between informal work and formal recognition. It can enable workers to stack credits, enter advanced training, access licensing or occupational mobility, and build records that are legible beyond the immediate site of work.

India requires a more plural architecture—one that can recognize modular, interrupted, workplace-based, and non-linear learning trajectories. NCrF may create a better basis for such recognition if experiential learning is treated seriously rather than symbolically. But this will require robust evidence-based rules, validation methods, and public trust in the meaning of RPL-based awards. India does not simply need a better way to classify formal qualifications. It needs a system that can convert informal capability into recognized and progressive educational and occupational value.

5c. Governance of TVET

Qualifications reform is often presented in technical language, but its outcomes are fundamentally shaped by institutional power. Who makes standards? Who approves qualifications? Who funds awarding bodies? Who regulates sector skill bodies? Who holds the learners record? Who can compel interoperability across ministries and sectors? These are governance questions, and they often determine whether a framework becomes meaningful or symbolic.

As explained earlier, India's qualifications ecosystem spans multiple ministries, regulators, sector bodies, awarding arrangements, and public schemes. NCVET has improved regulatory coherence in vocational education and training, but the wider system remains distributed across bodies such as DGT, NSDC,

sector skill councils, higher education regulators, school systems, state institutions, and numerous public and private providers.

One of the challenges in India has been the gap between standards-setting authority and system-shaping authority. NCVET oversees qualification norms, but lacks over funding and oversight leverage on sector skill councils. QF becomes formally accepted but unevenly followed. Institutions comply in documentation while preserving operational autonomy in practice. The institutional test of a qualifications system and its regulator is not of declared norms, but whether behavior can be shaped across providers, regulators, and labour-market actors.

India's qualifications future requires moving beyond endorsement of coherence. The system needs clearer role differentiation and stronger institutional interfaces. Standards-setting, awarding, provider funding, provider approval, assessment oversight, and digital record management should not be a result of political economy choices but of deep competence, which has to be built over time.

The role of regulator in qualification systems is important. In 2018, NCVET was created by merging two erstwhile institutions -National Skill Development Authority (NSDA)[8] and National Council for Vocational Training (NCVT).[9] The government is considering merging higher education regulators-UGC(general higher education) and the AICTE (for engineering, management regulation), both part of the MoE) to make a Higher Education Council of India (HECI). In comparison to NCVET, these bodies have a very longer and stronger institutional setup. They should also consider provisions to share its knowledge and expertise to the recently formed NCVET, particularly for assessments credibility. Trusting student entry to higher education pathway depends on them considering NCVET as a credible institution. In the long term, it is suggested to take NCVET into its fold to avoid fragmentation. There should be a unified regulator combining NCVET, UGC and AICTE and to anchor QFs and NCrF.

NCVET's budget and funds are also limited in term of global peers. Education regulation works best when funding control and autonomy are balanced. Systems with standards-only regulators struggle to correct poor institutional behavior. Compared to TVET, Higher Education regulators are generally stronger because they also have funding control.

The governance question is also important for NCrF. A cross-sector credit architecture can only function if there are enforceable rules for recognition and interoperable institutional behaviour. If NCrF becomes an additional layer without corresponding governance reform, it risks reproducing the same pattern seen under NSQF: conceptual sophistication paired with uneven system effect.

6. National Credit Framework (NCrF): The meta framework

[8] This had been created after 2012?, which was attempting to construct a Labour Market Information System, and also build up some research capability in the TVET space. It was wound up when it was folded into NCVET.

[9] This institution had been part of the Ministry of Labour structure, where it was located inside the Directorate General of Employment & Training, and essentially regulated the private and public ITI structure.

The NCrF was jointly developed by the principal school, higher education, and vocational regulators, reflecting its intended role as a cross-sector meta-framework in 2023. It is an inclusive single meta-framework to seamlessly integrate the credits earned through school education, higher education and TVET. It enables establishing equivalence and mobility between general education and vocational education so that lifelong learning, recognition of prior learning, multiple entry and exit, and continuous professional development are encouraged, through credit accumulation. For credit-accumulation and integration of all learning, the NCrF embeds and aligns the QFs for higher education, TVET and school education, namely NHEQF, NSQF and National School Education Qualification Framework (NSEQF) respectively. Thus, there would be only one credit framework for all- NCrF. This is the enabling framework, laying down and defining the basic principles for operationalizing the credit system and achieving the objectives of NEP 2020. NCrF would be operationalized through an Academic Bank of Credits (ABC).

NCrF and the shift to a Linked National Architecture

NCrF is the most significant development in India's qualifications architecture since NSQF. Its importance lies not merely in the introduction of credits, but in the possibility of shifting the reform conversation from isolated qualifications to connected learning pathways. The credit framework finally links all qualifications into one.

Unlike NSQF, which primarily functioned as a level-based qualifications framework for TVET, NCrF is broader in scope and ambition. It seeks to create a common credit logic. This is significant because many of the structural limits of NSQF were not simply limits of implementation; they were limits of domain. A framework focused primarily on skills could not by itself integrate the broader educational architecture within which mobility must occur.

If pitfalls of NSQF are avoided, NCrF can function as a meta-framework with a national logic for accumulation, transfer, portability, and recognition. It can support multiple entry and exit, enable learners to combine different forms of learning, and create more realistic pathways between institutional sectors that have historically operated in parallel. It can also create a more coherent basis for integrating micro-credentials, apprenticeships, and experiential learning into visible progression ladders.

However, the promise of NCrF should not be overstated. Will education institutions actually accept credits? Will employers care about credits? What happens if: credits accumulate but do not convert to jobs? Just like levels became aligning devices for qualifications, credits without trust risk becoming accounting devices for qualifications. Credits do not automatically create mobility. They only do so when the underlying learning is recognized and when institutions actually accept transfer. Credit accumulatuion without trust can risks becoming a formal exercise with limited behavioural effect. Universities may continue to privilege their own standards. Employers may ignore credit logic altogether. Providers may proliferate modular offerings without ensuring meaningful progression.

For this reason, NCrF should be treated as a major opportunity rather than a guaranteed solution. It can succeed where NSQF struggled only if it is used to build real interoperability across sectors, not merely a parallel layer of administrative mapping. Its success will depend on governance, digital infrastructure, recognition rules, and above all the credibility of the qualifications and assessments to which credits attach.

7. A Strategic Reform Agenda for India

We now define the reform agenda.

7.1. Visibility and the use of qualifications

A qualification has value only if: it can be found, it can be verified, it can be compared and it can be used by employers and institutions. How will it be found? Qualification Registers are tools for it. India started the National Qualifications Register(NQR) as a qualification repository portal. However, in 2025, NCVET another portal called Kaushalverse was created. The core Indian skills ecosystem – industrial training institutes and the polytechnics are under different regulators NCVET and AICTE and have their qualifications in different portals- 'Bharat skills' and the AICTE webportal respectively, Fragmentation extends to qualification repository too. It is hard for users to find them and it weakens qualifications use.

In NQR too there are inconsistencies in documentation for e.g. a new scheme called 'PM Vishwakarma' was launched, which has new qualifications but it did not specify entry criteria. Such small lapses spiral downward in the qualification ecosystem. Not respecting entry criteria is a deep flaw, that fundamentally weakens qualifications. The NCrF provisions a new portal called Academica Bank of Credit (ABC) as a common portal for credits. It may worthwhile to explore how it can bring together all Indian qualifications. The world has examples that India could follow. Poland's integrated qualification register is repository of all qualifications. For any QF to succeed easy visibility and understanding of it is needed.

Another key issue is the ability of stakeholders to verify credentials. While the government has provisioned digitizing documents by the Digilocker portal, this is only for sharing, not verification. Portals such as Skill India Digital Hub(SIDH), etc., must provide a clear mechanism to check authenticity of credentials. One can learn from the South Africa's National Learner record database(NLRD). It is fair to question what would credentials mean if digital tools to verify them do not exist. Modern qualifications system depend on digital public infrastructure. Courses and credits only become socially useful when they are visible, verifiable, and navigable.

India therefore needs a robust national qualifications information architecture. At minimum, this should include a dynamic and publicly accessible qualifications register that clearly distinguishes among full qualifications, partial qualifications, micro-credentials, apprenticeships, and validated experiential learning awards. Such a register should not be static. It should be integrated with digital credential verification, interoperable learner records, and a secure public trust layer that allows authorized institutions and employers to verify certificates in real time. This is especially important in a system with multiple providers, diverse awarding mechanisms, and growing pressure for mobility across sectors.

The rise of micro-credentials makes this even more urgent.[10] Micro-credentials can be useful instruments for upskilling, reskilling, and targeted competency recognition, especially in rapidly changing labour markets. But if they proliferate without clear placement in a national architecture, they risk deepening fragmentation rather than solving it. India should therefore integrate micro-credentials into NCrF-linked

[10] Micro-credentials are short, skill-focused, competency-based certifications that can be stacked and are often digitally verified. The typical ones would be for a few hours or a few months, as opposed to year(s). All Short term training(STT) QPs under NCVET and implemented by NSDC funded providers would qualify.

progression pathways, with explicit rules about stackability, expiry where relevant, occupational relevance, and conversion into broader qualifications.

The digital infrastructure should not be treated as an afterthought or merely a technology layer. It is now central to the public credibility of qualifications. In many sectors, the difference between a formal qualification and a trusted qualification is the difference between a certificate that exists and a credential that can be verified, understood, and used.

7.2. Use: Labour-Market Signaling, Public Employment Services, and Career Guidance

Qualifications derive value from use. A qualification that is never referenced in hiring, not recognized in progression decisions, and invisible in Public Employment Systems(PES) remains administratively valid but socially weak. For this reason, labour-market signalling must be treated as a central criterion of qualifications reform rather than a downstream consequence. By 2017, NSQF had four goals to be achieved. Around 10 years later, we revisit some of them:

One of them was that '*Government funding would not be available for any training/ educational programme/ course which is not NSQF-compliant'*. The NSQF made possible- Common Norms for funding which consolidates public financing within a unified framework. This objective that has been substantially realized. However, it had an unintended consequence for another parallel policy objective being pursued- the desire to shift from a supply-led to a demand-led skills system under a PPP model. The predominance of public funding weakened employers 'skin in the game' and sidelined employer-led financing mechanisms prevalent in over 60 countries. Efforts to introduce Reimbursable Industry Contributions(RIC) remained largely unrealized. (Mehrotra & Singh, 2018).

NSQF further said:

"b. All government-funded training and educational institutions shall define eligibility criteria for admission to various courses in terms of NSQF levels.

c. The recruitment rules of the Government of India and the public sector enterprises of the central government shall be amended to define eligibility criteria for all positions in terms of NSQF levels.-

d. State Governments shall be encouraged to amend their recruitment rules as well as those of their public sector enterprises to define eligibility criteria for all positions in terms of NSQF levels"

The 2023 NSQF notification effectively abandoned all of the above three core goals. In India, qualifications policy effort has been preoccupied with standards development. Far less attention has been paid to whether qualifications are consistently embedded in employer practices, occupation taxonomies, wage structures, public employment services, or career guidance systems. This is a serious gap. A national qualifications architecture cannot mature if its signals remain internal to the education and training bureaucracy.

A stronger labour-market interface requires several interrelated reforms. Employers need clearer pathways to translate qualifications into hiring relevance. Public employment services (PES)—currently represented

in a limited form by the National Career Service (NCS)—must develop systems capable of matching qualifications with occupations and skill profiles in ways that are transparent to both job seekers and recruiters. QFs should support and co-develop robust career guidance systems that explain not only what a qualification entails, but what it leads to—academically, occupationally, and financially. A strong QF can be foundational for an effective PES that caters to both employed and unemployed individuals. However, progress in building such PES, career guidance systems, and a professional cadre of career advisors has remained limited, with significant implications for employment outcomes of Indian youth.

This is particularly important in a labour market where institutional brand prestige, informal networks, and social capital outweigh formal credentials. Therefore, the burden on public qualifications is higher, not lower. They must demonstrate real signaling value to displace entrenched informal filters.

If India wants qualifications to matter, they must appear where labour-market decisions are actually made: job descriptions, digital recruitment platforms, apprenticeship pathways, sectoral career ladders, wage negotiations, and public employment databases. Without this, even a well-designed framework will struggle to shape economic behaviour.

7.3. Deeper involvement and alignment of core stakeholders

The involvement of social partners—such as trade unions and worker representatives—in India's TVET policymaking is nonexistent. This is in contrast to many European Union contexts, *from which much of India's qualifications framework policy has been drawn* and where social partner engagement is more institutionalized. In India, such representation has largely been confined to the Ministry of Labour and Employment (MoLE), even as the role of labour institutions in skills policy has diminished over the past decade, particularly following the transfer of the Directorate General of Training (DGT) to the new Ministry. At the provincial level these issues are likely to be even more poorly handled.

Given that TVET is intrinsically linked to labour market institutions, there is a clear case for enhancing structured social partner engagement in policymaking. Social partners safeguard worker interests and balance employer influence. Over time, mechanisms such as collective bargaining—for instance, around learning entitlements and training leave—can strengthen skill development outcomes. It is therefore essential to institutionalize their role and develop effective channels for their sustained participation in TVET governance.

Employers primarily represent firm-level interests, and only secondarily reflect broader industry needs; consequently, the translation of employer skill demands into coherent industry-wide signals is neither automatic nor straightforward. While employer inputs are essential, they are often anecdotal, underscoring the need for systematic aggregation of demand-side data—leveraging technology—to better inform qualifications development. Therefore, data from real time sources are paramount.

HR professionals have a key role in propagating the merits of the QF. They must be aware and excited about their participation. Training HR professionals on a regular basis on the QF/NCrF would help. A

survey on how much employers are aware of NSQF would also provide direction. This is significant because NSQF wants them to use qualification levels in employee learning and development. How would they do so, if they do not know about it? Incentives need to be designed for stakeholders' participation. The NQF levels have not been used to specify requirements in employment and recruitment, doing so and the value of it needs better articulation and communication.

Sector skill bodies exist in about 21 countries globally (European Training Foundation [ETF], 2015). Their numbers are: India (36), Australia (10), Latvia (13), Poland (17) and South Africa (21). The sector bodies while technically fulfill NSQF norms are not meaningfully aligned by international industrial and occupational codes (National Industrial codes(NIC) and National Code of Occupations(NCO) in India) that the world uses and we had proposed to the government a few years ago(Sharda Prasad Committee, 2016). There is a need to align Indian sector skill bodies by nationally understood statistical sectoral framework of the Indian economy to track their contributory role in overall employment; Further 36 SSCs are way too many stakeholders, impractical and is an exceptional case in the TVET literature, especially since their jurisdictions overlap. Consolidation as well as rationalization is needed.

Finally, feedback loops from students and employees, the real users of the QF/CrF would be essential. Their voice is crucial and ways to hear them need to be found. At the minimum, anonymous feedback on the courses should be enabled for all TVET students and a common feedback portal should be operationalized.

8. The Seven key steps for TVET reforms

8.1. Shift from Training-Centric to Assessment-Centric Reform-The most critical institutional weakness is the absence of a trusted assessment architecture. Reforms must place assessment at the centre of credibility-building. India should transition away from "Dual Awarding Bodies" (where the same body trains, assesses, and awards) toward a system that mandates a strict separation of these functions to eliminate conflicts of interest and enhance quality. The analysis suggests the need for a central examination authority or similar mechanism to replace the distributed and inconsistent assessment model. There should be a common quality assurance logic across education regulators to reduce duplication and enhance cross-sector trust.

8.2. Governance Consolidation and Regulatory Alignment-Governance remains fragmented across multiple ministries and regulators with uneven authority. Greater institutional coherence is needed. Therefore, creation of a unified body that combines NCVET, UGC, and AICTE to anchor the QFs/NCrF is needed. Regulators must have the power to enforce accountability. Roles across standard-setting, assessment, certification and provider approval should be clearly differentiated to avoid both overlap and concentration of power. NCrF is the integrative framework and should function as a unifying instrument that reduces fragmentation across the qualification system. This will require enforceable credit transfer rules, institutional incentives for acceptance, and clear cross-sector governance.

8.3. Rebalance Toward Durable, Progression-Oriented Qualifications-The NSQF's early years were shaped by an overemphasis on short-term training. While such programmes have a role in entry-level skilling and targeted upskilling, they should not define the system. The focus should shift to longer-

duration, occupation-based, and stackable qualifications that enable lifelong learning and vertical mobility. Micro-credentials should be formally integrated into NCrF pathways with clear rules for accumulation and progression.

8.4. Mainstream Recognition of Prior Learning (RPL)-Given the scale of India's informal economy, RPL must become a core structural pathway rather than a peripheral or target-driven initiative. This requires stable rules for evidence, validation, bridging, and credit recognition, as well as ensuring that RPL credentials are fully integrated and valued within the broader system. Credentials obtained via RPL should be indistinguishable from those obtained through formal training. If a certificate identifies it was acquired through experience, it risks being relegated as a second-class qualification. RPL should be utilized across all levels of the framework, including higher education and PhDs, rather than limiting it to entry-level vocational role.

8.5. Build a National Qualifications Infrastructure-India needs a coherent, user-facing qualifications infrastructure. This includes a dynamic national qualifications register, interoperable learner records, secure digital credential verification, and clear progression pathways. Qualifications should be transparent and usable not only for regulators but also for learners, employers, and institutions. A consolidation of multiple portals into a single, integrated 'National Qualifications Information Architecture' needs to intelligently combine career path discovery(NCS), qualifications repository(NQR/ABC), credentials sharing (Digilocker), training management(SIDH) etc. to serve its purpose in sync with user needs. A trust layer for instant verification of credentials by employers needs to be prioritized.

8.6 Strengthen Labour-Market Linkages- Qualifications derive value from their use in the labour market. They should be embedded in public employment services, recruitment platforms, occupational taxonomies, apprenticeship systems, and sectoral career pathways.HR professionals should be trained to interpret and use qualification framework effectively in hiring and wage-setting. Recognizing the system's effective '13-level reality' with decimal levels" (e.g., 2.5, 3.5) may improve both internal clarity and provide next steps for international comparability. Re-incorporating the goals of amending recruitment rules and defining all jobs eligibility in terms of NSQF/NCrF levels would provide the 'market signal' necessary for the framework to have real-world value.

8.7 Strengthen Stakeholder Feedback and Sectoral Alignment- Structured feedback mechanisms such as common platforms for anonymous continuous feedback from learners and workers—should be institutionalized to ensure responsiveness and continuous improvement. At the same time, institutionalization of trade unions and worker representatives in TVET governance is needed, their involvement is "nonexistent" compared to European models. The Sector Skill Councils and their work should be able to feed into national GDP data for skills and jobs. A more manageable number aligned with international industry codes is needed.

Taken together, these reforms mark a necessary transition from a framework-centred approach to a qualifications-system model.

9. Conclusion

The National Skills Qualification Framework mattered because it introduced a new language of learning outcomes, levels, mobility, and recognition into a system that needed precisely such a vocabulary. It made possible forms of comparison and policy conversation that had previously been difficult across fragmented sectors.

Yet NSQF experience demonstrates that a framework cannot compensate for weak assessment credibility, fragmented governance, uncertain labour-market recognition, and limited institutional pathways for informal workers. Where the wider qualifications system is underdeveloped, the framework's categories remain only partially realised in practice. Certificates may proliferate, but trust does not scale automatically with volume.

The emergence of the National Credit Framework creates an important reform opportunity. For the first time, India has the possibility of constructing a genuinely linked architecture across school education, higher education, vocational education, and experiential learning. But this possibility should not be misunderstood. NCrF will not succeed merely because it is broader. It will succeed only if it is used to build real interoperability, trusted recognition, and visible progression.

The next decade would be defined by a fundamental shift in policy imagination and institutional strategy. The objective should no longer be simply to align qualifications to a framework. It should be to make qualifications substantively real: credible in assessment, coherent in governance, legible in digital systems, meaningful in labour markets, and accessible to learners whose pathways are non-linear and often informal.

That is the unfinished promise of the NSQF era—and the true test of the NCrF era.

India's experience also offers broader lessons for qualifications reform in high-informality economies where institutional consolidation lags behind framework expansion.

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