



RIS Discussion Paper # 336

# Reimagining India's Quality Ecosystem

Rajeev Kher, Anil Jauhri and Om Stutee



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# Reimagining India's Quality Ecosystem

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Rajeev Kher,\* Anil Jauhri\*\* and Om Stutee\*\*\*

## 1. Background and Rationale

It is universally acknowledged that non-tariff measures pose the biggest challenge to free international trade, regardless of the tariff protectionism that has made a comeback in recent times. It is equally recognized that among the non-tariff measures, those relating to standards and technical regulations are the dominant ones and pose even greater challenges to developing economies like India. Given the above coupled with some recent setbacks that India has faced globally - be it withdrawal of recognition of India's organic certification system by the United States or blacklisting of major certification bodies for organic certification from India by the European Commission (EC) or the quality challenges faced by the pharma industry or the recent uproar over ethylene oxide (EtO) contamination in spices; it is an opportune time to review India's quality ecosystem to identify measures for strengthening it further to meet global demands.

There have been several significant developments in India's quality ecosystem in the last few years. Some of them are the following:

- a. Realization that India is deficient in technical regulation has grown, which renders our consumers vulnerable to unsafe and substandard products, as well as promotes unchecked imports, which may be unfair to our industry. There has been a concerted effort by the Ministry of Commerce and Industry to introduce regulations across sectors such as telecom, textiles, chemicals, medical devices, and toys.
- b. Upgradation of domestic regulations to global standards evidenced in food and pharma by the adoption of Codex and WHO standards, respectively, and greater push by the Bureau

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\* Former Distinguished Fellow at RIS.

\*\* Visiting Fellow at RIS.

\*\*\* Research Assistant at RIS.

- of Indian Standards (BIS) to align its standards with ISO/IEC standards,
- c. Conscious sensitization of stakeholders to the challenges of standards and technical regulations through a series of national and regional Standards Conclaves organized by the Department of Commerce (DoC) since 2014,
  - d. Revision in the Consumer Protection Act in 2019 to bring in product liability and the establishment of the Central Consumer Protection Authority, under the Department of Consumer Affairs (DoCA)
  - e. Revision of the BIS Act in 2016 to provide for greater flexibility in choosing conformity assessment procedures, use of third-party agencies, and recognition of standards development organizations,
  - f. Release of the Indian National Strategy for Standardization (INSS) by the DoC in June 2018, which documented for the first time some sound principles and goals for India's quality ecosystem (Department of Commerce, 2018)

This paper attempts to build on the actions already taken or identified to further suggest areas for improvement in India's quality regime. While the focus of this paper is goods, many of the prescriptions, and especially the principles, apply equally to services.

Before going into specific issues, it is necessary to understand what a quality ecosystem means.

## **2. Understanding a Quality Ecosystem**

Given the importance of quality and safety in daily life, every country needs an ecosystem and an infrastructure in place to be able to assure the quality and safety of products and services. From a marketplace understanding, an ecosystem would comprise a standards framework covering both regulatory and voluntary sectors, a conformity assessment system, and an accreditation framework. Products are manufactured in accordance with various standards, their conformity with the adopted standard is checked through a conformity assessment system, and the

competence of the institutions that provide conformity assessment is verified through an accreditation system.

This infrastructure, globally called the National Quality Infrastructure (NQI) but defined differently, has the following components as laid down in INSS referred to earlier:

- **Technical regulators** - who regulate the quality of products and services - meaning bodies empowered by law to lay down standards for compulsory compliance and enforce them. Although technical regulation strictly applies in the World Trade Organisation Agreement on Technical Barriers to Trade (WTO TBT) context to goods other than food regulation (which is covered under the Sanitary and Phytosanitary Measures Agreement (SPS)), the term ‘technical regulators’ is being used here to cover all regulators of products and services which are based on technical standards. The Food Safety & Standards Authority of India (FSSAI) and the Central Drugs Standard Control Organization (CDSCO) are two examples of regulators in India.
- **Scheme owners** - who own voluntary conformity assessment schemes. In the voluntary world, they are the apex bodies, like in regulatory regimes, designated regulators are. Any country and its industry face a number of voluntary certifications demanded by buyers like FSSC 22000 or BRCGS in food, ISO 13485 in medical devices, AS 9100 in aerospace, IATF 16949 in automotive, etc. In many sectors that are not subject to regulations, voluntary standards and certifications regulate the products and services, and acquire dominance in the quality ecosystem. Lately, several voluntary schemes have been developed in India, led by the Quality Council of India (QCI), and some of them have been internationally benchmarked - e.g., Forest management (FM) certification and Trees outside Forest (ToF) certification schemes of the Network for Conservation & Certification of Forests (NCCF) by Geneva-based Program for Endorsement of Forest Certification (PEFC) and QCI’s IndG.A.P. by GlobalGAP.

- **Standards setting (BIS)** - essentially means voluntary standards, though some of them may be referenced in regulations for compulsory compliance, typically led by the national standards body; however, other stakeholders, like industry-led bodies or professional associations, may also develop such standards. In India, this trend is on the rise.
- **Metrology (National Physical Laboratory)** - the science of measurement and traceability, which also forms the basis of legal metrology enforced by law on measurements like weights, etc.
- **Conformity assessment bodies** - means laboratories/inspection/certification and now validation and verification bodies, both in the government and private sectors; India has a large number of such bodies available.
- **Accreditation** - which means attesting the competence of conformity assessment bodies as per international standards. This is not to be confused with healthcare or education accreditation, which, in terms of definitions in ISO, are certifications. Other than national bodies, the National Accreditation Board for Certification Bodies (NABCB) and the National Accreditation Board for Testing and Calibration Laboratories (NABL), there are now private accreditation bodies too, in India, namely Quality & Accreditation Institute (QAI), Federation for Development of Accreditation Services (FDAS), and International Quality and Accreditation Services Pvt. Ltd. (IQAS) with international recognition.
- **Consulting & Training** - means either individuals or organizations in both the government and private sector imparting training and advising on quality-related multiple areas - this is the most unorganized activity with no structured mechanism for identifying competent ones, except in some areas.

However, the understanding of this infrastructure and interplay among its components is inadequate among all stakeholders - policy makers,

governments, regulators, industry, consumers, buyers, academia, etc., which needs to be improved. Therefore, while India has much of the necessary infrastructure in place, it is also ranked high in the world as per the Global Quality Infrastructure Index (GQII)<sup>1</sup>; the question is whether it is leveraged effectively and cohesively to promote national interest.

### **3. Systemic Governance Challenges in India's Quality Ecosystem**

India's quality infrastructure has expanded, but governance has not kept pace with the rising complexity of regulation, conformity assessment, and market-led standards. The systemic governance challenges below continue to limit coherence, enforcement credibility, and global acceptance of Indian products and services.

#### **3.1 Cross-Sector Governance and Role Clarity**

**a. Absence of a nodal authority:** A key systemic governance gap in India's quality ecosystem is the absence of a single institutional mechanism that provides a whole-of-government perspective on standards, technical regulations, and conformity assessment. The growing complexity of these domains requires strong technical competence and coordinated policy responses across sectors. A study presented by the WTO secretariat has shown that a large share of specific trade concerns in the WTO TBT Committee relate not to the content of standards but to conformity assessment procedures - testing, inspection, and certification requirements; demonstrating that implementation mechanisms often drive market-access frictions as much as, or more than, the standards themselves (McDaniels & Karttunen, 2016). These dynamics have direct implications for India's trade competitiveness and for the national objective of "Zero Defect and Zero Effect" in production, which depends on sustained attention to quality across the economic governance framework.

At present, specialised capability to interpret international developments, assess cross-sector implications, and design coherent

responses across regulatory and voluntary quality regimes remains unevenly distributed across ministries and departments. This creates a coordination and capacity gap at the Centre, particularly on issues that cut across standards, technical regulations, accreditation, conformity assessment integrity, surveillance models, and international recognition. The absence of a central policy hub becomes evident when examining existing institutional mandates: The DoC engages with trade-related market-access issues; DPIIT focuses on industrial and investment policy. BIS functions primarily as the national standards body and administers parts of the regulatory framework under the BIS Act through its conformity assessment schemes. The Quality Council of India (QCI) supports the voluntary quality ecosystem through its accreditation and quality promotion activities. None of these institutions is designed to provide integrated policy direction for quality governance across sectors.

Emerging developments further highlight this gap. India's transition to a multi-accreditation-body environment, with internationally recognised private accreditation bodies operating alongside NABCB and NABL, has raised system-level questions regarding the treatment of domestic non-national accreditation bodies with international equivalence and the role of foreign accreditation bodies in the Indian market. Such cross-cutting issues require consistent national positioning and coordinated policy responses, underscoring the structural limitations of the current institutional arrangement.

**b. Role clarity and separation:** Although the INSS recognised the need for clearer institutional roles, the standards and quality domain continues to reflect legacy arrangements that blur regulatory and voluntary functions. The economic reforms of 1991 were accompanied by a conscious effort to redefine the role of government in governance; a similar recalibration is now required within India's quality ecosystem. In advanced economies, governments focus primarily on technical regulation and enforcement, while voluntary standards development and certification activities are largely undertaken by non-governmental stakeholders. In contrast, developing economies historically relied on government-led

voluntary initiatives due to limited stakeholder capacity, a model that is increasingly misaligned with the maturity of India's present economic landscape.

The absence of clear institutional separation has also created conflicts of interest within the ecosystem, including overlaps between promotional and regulatory roles, licensing and market surveillance functions, accreditation and conformity assessment activities, and conformity assessment and enforcement responsibilities. Such overlaps can weaken credibility, dilute accountability, and create uncertainty for industry and international partners.

- c. Lack of sector-wide 360-degree oversight:** Recent developments in sectors such as agri-food and textiles illustrate a systemic governance gap: the absence of an institutional mechanism capable of taking a comprehensive, cross-cutting view of sectoral challenges across regulatory and voluntary regimes, and across domestic and global markets. Multiple agencies often operate within narrow mandates, leading to fragmented responses to emerging risks, evolving private certification requirements, and changing market-access conditions.

Two examples illustrate this fragmentation:

- i. The issue of Ethylene Oxide (EtO) contamination has affected multiple commodities over a period of more than three years, moving from sesame seeds to organic produce and subsequently to spices. Responses have largely remained siloed, with individual organisations acting within their respective mandates. While visible regulatory action emerged in the case of spices through FSSAI, a comparable system-wide response, especially in the domestic market, was not evident for organic produce regulated under the National Programme for Organic Production (NPOP), despite challenges raised by EC and authorities in the United States.
- ii. The textile sector has faced simultaneous pressures from mandatory regulatory requirements and a growing proliferation of private certifications relating to organic production, sustainability,

chemical use, and recycled content. The temporary suspension of accreditation of a certification body associated with the Global Organic Textile Standard (GOTS) disrupted exports and prompted calls for the creation of a domestic alternative. However, as such certifications are largely driven by buyer requirements, a local scheme alone would not resolve market-access challenges unless recognised or benchmarked by the relevant global scheme owner.

These examples underscore the need for more integrated sectoral oversight capable of anticipating risks, coordinating institutional responses, and aligning domestic approaches with global market realities.

### **3.2 Regulatory architecture, enforcement, and oversight**

**a. Is the BIS Act the right instrument for regulation?** A review of global regulatory regimes shows a clear distinction between how developed economies and developing economies approach technical regulation. In developed economies, regulation is exercised by governments or their designated sectoral regulators, while standards setting remains the domain of national standards bodies, which are typically industry-led and operate in the voluntary space. The functions of regulation and voluntary standards development are institutionally distinct.

In developing economies, including India, governments historically relied on national standards bodies to administer regulations, largely due to the absence of strong stakeholder capacity and specialised sectoral regulators. In India, this historical context explains why the government established the Indian Standards Institution (now the BIS) in 1947 and subsequently vested it with regulatory functions. While this model was appropriate at the time, it reflected institutional constraints rather than an optimal regulatory design.

As economies mature, global practice has moved towards separating regulatory functions from standards development and placing regulation with dedicated government regulators. Against this backdrop, it is appropriate to question whether continued reliance on the BIS Act as

the principal instrument for technical regulation and BIS conformity assessment for demonstration of compliance remains the most effective approach for India. The current regulatory model under the BIS Act is often cumbersome and costly for industry and is not fully aligned with internationally accepted regulatory practices (Kher & Jauhri, 2025). At present, there is no mutual recognition arrangement (MRA) involving BIS certification, even though India has been able to secure recognition for certain export certification systems, such as APEDA's NPOP and the Export Inspection Council's seafood certification in specific markets. This contrast points to structural limitations in the present regulatory model under the BIS Act. The continued non-acceptance of BIS hallmarking overseas, despite gold purity standards being globally harmonised, further illustrates the gap between domestic regulatory design and international acceptance.

**b. Market surveillance:** Market surveillance is a core component of any effective regulatory regime. However, weaknesses in its institutional design have constrained enforcement outcomes across multiple frameworks in India, including food and pharmaceutical regulation as well as regimes administered under the BIS Act. In the case of Quality Control Orders (QCOs) issued under the BIS Act, the vesting of both conformity assessment and market surveillance functions within BIS raises concerns regarding institutional conflict of interest, which is not consistent with principles reflected in WTO TBT guidance.

A further governance issue concerns the institutional model through which surveillance is carried out. Existing arrangements rely substantially on state-level administrative machinery, as seen in food and pharmaceutical regulation, resulting in variations in capacity and enforcement effectiveness across jurisdictions. These structural limitations have contributed to uneven surveillance outcomes and highlight the need to re-examine the institutional architecture to ensure greater consistency, independence, and credibility in enforcement.

**c. Regulation of conformity assessment:** The administration of technical regulations has increasingly shifted, globally, towards

reliance on third-party conformity assessment bodies for testing, inspection, and certification. While this approach enhances scalability and operational efficiency, it also introduces risks relating to credibility and integrity. In the Indian context, instances of malpractice by conformity assessment bodies have led to adverse actions by foreign regulators and accreditation bodies, thereby eroding confidence in domestic testing and certification systems.

As regulators such as FSSAI, CDSCO, and the Bureau of Energy Efficiency (BEE) expand their reliance on third-party agencies, gaps in supervisory oversight have become more visible. Risks such as certifications issued without adequate audits, test reports issued without actual testing, and concerns relating to greenwashing highlight vulnerabilities within the current oversight framework. These developments point to systemic weaknesses in the regulation and monitoring of conformity assessment activities, with implications for both domestic enforcement and international acceptance.

There is a need to strengthen regulatory oversight of conformity assessment bodies, including accreditation bodies, particularly as reliance on third-party agencies in regulatory frameworks continues to expand, and there is an increasing number of instances of fraudulent or non-credible certifications in the market that undermine both public trust and India's international credibility.

### **3.3 Consolidation of export regulation**

It is pertinent to recall that before the enactment of the Food Safety and Standards Act, 2006, the regulation of food in India was fragmented across multiple ministries, including Health, Food Processing, Consumer Affairs, Agriculture, and Animal Husbandry. The decision to consolidate food regulation under a single authority led to the establishment of the Food Safety and Standards Authority of India (FSSAI), bringing coherence and clarity to the regulatory framework. A similar principle merits consideration in the context of export regulation, which remains distributed across several bodies such as the Export Inspection Council (EIC), the Agricultural and Processed Food Products Export Development

Authority (APEDA), the Spices Board, and the Indian Oilseeds and Produce Export Promotion Council (IOPEPC).

This fragmented architecture raises two systemic concerns. First, entities established primarily for export promotion are also vested with regulatory powers, creating a potential conflict of interest that may inhibit difficult regulatory decisions when required. Second, the absence of a unified regulatory framework limits the ability to respond holistically to emerging quality challenges in global markets. The experience of the EtO contamination, which moved from sesame seeds to organic produce and subsequently to spices, demonstrated how multiple agencies responded within their individual mandates without addressing the wider systemic implications.

### **3.4 Global alignment and market access pressures**

- a. Global compatibility of domestic regimes:** Growing expectations in international markets require greater alignment of domestic regulatory and voluntary regimes with internationally accepted standards and conformity assessment practices so that Indian products regulated or certified domestically are accepted abroad without additional compliance burdens on industry. Periodic calls for the development of India-specific standards can create fragmentation unless scientifically justified and carefully positioned within a broader strategy of international harmonisation. The priority in this context has increasingly shifted towards enhancing India's influence within international standards-setting processes and ensuring compatibility rather than divergence.
- b. Alternative systems for global acceptance:** Where domestic regulatory regimes are not fully compatible with global requirements owing to constraints related to industry preparedness, technological capability, or transitional considerations, exporters face duplicative or costlier compliance processes in destination markets. This creates pressure to develop pragmatic mechanisms that can facilitate access to international markets during periods of regulatory transition. India has successfully created export certification regimes in some sectors,

which are accepted by foreign governments, thus bringing down the cost of compliance for exporters, which needs to be cohesively pursued.

### **3.5 Capacity constraints in the enabling ecosystem**

- a. Laboratory infrastructure:** Robust laboratory infrastructure remains fundamental to both effective product regulation and credible voluntary certification; however, recent experiences, including during the COVID-19 crisis, exposed gaps in India's laboratory capacity for critical testing needs, leaving the country insufficiently prepared during periods of heightened demand. The difficulty faced by individual Ministries in mobilising timely financing for laboratories reflects underlying structural weaknesses and highlights the absence of a coordinated, forward-looking approach to strengthening testing infrastructure.
- b. Gaps in Training and ConsultingSupport:** Training and consulting were identified as key pillars of the NQI under the INSS, yet the ecosystem for structured technical support remains underdeveloped. As the government has expanded technical regulations, including QCOs under the BIS Act, and upgraded regulatory frameworks in sectors such as pharmaceuticals and medical devices, the industry, particularly Small and Micro Enterprises (SMEs) have encountered increasing challenges in accessing competent advisory and implementation support. Similar pressures arise in meeting evolving overseas regulatory requirements and private certification schemes, especially sustainability-related certifications that are increasingly linked to market access.
- c. Misalignment of MSME Support with Market Needs:** Although both central and state governments have introduced multiple schemes to support MSME quality upgradation, these initiatives have often not translated into improved readiness for global markets. A persistent gap lies in the limited alignment between existing support programmes and the actual compliance requirements faced by industry in domestic

and international markets, which constrains the effectiveness of such interventions within the broader quality ecosystem.

### **3.6 Private standards and voluntary scheme ecosystem**

- a. Challenge of private standards:** In addition to regulatory requirements in domestic and international markets, industry across sectors increasingly faces pressures arising from private and sustainability-related certification schemes, particularly in global markets where such certifications are often driven by buyer demand. This challenge extends even to regulated sectors, where compliance with importing country regulations alone is frequently insufficient. For example, alongside stringent food regulations of the EC, exporters may also be required to obtain certifications such as BRCGS or FSSC 22000, while in the textile sector, exporters encounter a proliferation of private schemes such as GOTS and Textile Exchange. The absence of a coordinated national approach reflects the complexity of the private standards landscape, which spans multiple ministries, sectors, and institutional actors. At the same time, the private standards ecosystem operates largely outside direct government control and is shaped by market and stakeholder dynamics, limiting the scope for direct regulatory intervention.
- b. Fragmentation in the Voluntary Scheme Landscape:** As the government's role evolves towards a stronger regulatory focus with enabling policies in the voluntary domain, multiple voluntary standards and certification schemes continue to coexist within the market. In the absence of clearly defined recognition or benchmarking approaches, this multiplicity can lead to fragmentation, inconsistent signalling, and uncertainty for the industry navigating voluntary quality regimes.
- c. Limited Availability of Structured Regulatory Intelligence:** India's ambition to emerge as a global manufacturing hub has increased the importance of maintaining an up-to-date and comprehensive database of technical regulations and standards applicable in key destination markets. At present, gaps in access to reliable and current regulatory

information constrain exporters' ability to anticipate compliance obligations and respond effectively to evolving market-access requirements.

## **4. Policy Directions for Strengthening India's Quality Ecosystem**

The systemic governance gaps identified above call for a calibrated policy response that strengthens institutional coherence, clarifies regulatory roles, and improves India's ability to meet evolving global quality requirements.

### **4.1 Establishing Coherent Governance Architecture**

- a. Creation of a National Authority on Quality:** Establish a dedicated institutional mechanism in government - a National Authority on Quality, whether housed within an existing department, created as a separate department, or set up as an autonomous body. The Authority should provide a holistic and uniform perspective on quality across products and services; set shared principles and goals for quality governance; and offer policy advice and technical analysis to line ministries, while sector-specific issues continue to be handled by the concerned ministries and regulators.
- b. Clarifying Government Role and Separation of Functions:** India's economy has matured considerably in the last three decades. It is, therefore, appropriate for the government to progressively focus on regulatory functions while opting out of voluntary spaces. Its role instead should be to articulate, enabling policies and establish mechanisms that recognise credible voluntary initiatives serving market needs. This role clarity is essential to strengthen credibility, ensure effective enforcement, and align India's quality governance with internationally accepted principles.
- c. Strengthening Sectoral Policy Leadership:** Line ministries should assume the rightful role of comprehensive policy and strategy-making for their sectors, including the capability to anticipate cross-cutting risks, coordinate across regulators and scheme owners, and engage

systematically with importing country requirements and private standards where they affect market access.

## **4.2 Reforming regulatory architecture, enforcement, and oversight**

- a. Modernising the Legislative Basis for Technical Regulation:** Consider alternative regulatory architectures - either through a separate, dedicated legislation for technical regulations or by housing such regulation under the Consumer Protection Act, with sufficient flexibility for the government to designate or set up appropriate agencies, specify product requirements directly or rely on any recognised standard (national or international), and adopt a wider range of conformity assessment procedures and independent bodies than those currently available under the BIS Act. The Export (Quality Control and Inspection) Act provides an example of such flexibility, having enabled the establishment of specialised Export Inspection Agencies.
- b. Strengthening Market Surveillance Frameworks:** Multiple institutional approaches may be considered to strengthen market surveillance.
  - i. One option is for ministries or regulators to designate state governments for this function. While such an approach has merit in a large federal system and can extend administrative reach, experience in sectors such as food and pharmaceuticals indicates that outcomes have been uneven. In the context of regulations administered under the BIS Act, state governments are presently neither adequately aware of nor sufficiently equipped to undertake these responsibilities effectively.
  - ii. An alternative approach would be to assign a central coordination role to the DoCA, under which the BIS Act is administered, for market surveillance of regulations issued by various line ministries. Under this model, state consumer affairs departments could be vested with operational responsibility, supported by

adequate resourcing, capacity building, and the establishment of dedicated surveillance mechanisms at the state level.

- iii. A third approach would involve creating a dedicated market surveillance machinery with a pan-India presence, institutionally separated from licensing and conformity assessment functions. Such a mechanism could be housed under the Consumer Protection Act within the DoCA and focus exclusively on surveillance and enforcement.

Irrespective of the model adopted, market surveillance and enforcement should remain core regulatory functions carried out by government agencies, free from conflicts of interest and clearly separated from conformity assessment activities. Conformity assessment, including testing, inspection, and certification, may continue to be undertaken by appropriately accredited non-governmental bodies, consistent with WTO TBT guidelines and global practices.

- c. **Regulatory Oversight of Conformity Assessment:** A regulatory framework for conformity assessment may be considered, drawing on the approach adopted for financial auditing oversight through the National Financial Reporting Authority (NFRA) under the Companies Act, 2013. Such a framework could empower a designated regulator to oversee both conformity assessment bodies and individual practitioners, including auditors and inspectors, thereby strengthening accountability across the system. Key elements may include registration requirements for certification bodies, inspection bodies, testing laboratories, and accreditation bodies operating in India; periodic submission of information necessary for effective regulatory supervision; and adherence to minimum governance and operational standards, including independence, impartiality, competence, and confidentiality. The framework should also provide powers to conduct audits, investigate non-compliance, impose penalties where necessary, and take appropriate enforcement action - including suspension of operations or withdrawal of recognition, to reinforce confidence in India's conformity assessment ecosystem.

- d. Consolidation of Export Quality Regulation:** Given that India already has a dedicated legislative framework in the Export (Quality Control and Inspection) Act, 1963, consideration may be given to consolidating export quality regulation and certification functions under the Export Inspection Council. Such consolidation could enable a more coherent regulatory approach while retaining operational flexibility to utilise specialised agencies, including Export Inspection Agencies, for implementation. A unified framework would help strengthen accountability, reduce institutional overlap, and enhance India's capacity to respond strategically to evolving global market developments.

### **4.3 Strengthening International Engagement and Global Acceptance**

- a. Enhancing Participation in International Standardisation:** India's participation in international standards-setting bodies should be strengthened through the identification of domain experts and sustained support for their continued engagement. Experience shows that international standards development is often shaped by countries that maintain long-term expert participation, sometimes spanning decades. In contrast, Indian participation has frequently relied on rotating government representatives who may not always possess the deepest technical expertise, limiting continuity and influence. A more strategic approach would involve identifying and supporting a small pool of high-calibre experts to represent India's interests consistently, while allowing additional participants to join at their own expense where appropriate. Participation decisions should be guided by national interest rather than institutional affiliation. India should also seek to exercise leadership among developing countries to shape international standards in ways that reflect shared interests, recognising that influencing international frameworks offers a more effective pathway than developing standards that are not globally compatible and may inadvertently create barriers for Indian industry in export markets.

- b. Developing Alternative Pathways for Global Recognition:** India can draw lessons from successful precedents such as the Export Inspection Council's (EIC) seafood certification system, recognised by the EC, and the organic certification system NPOP administered by APEDA, which has received recognition from the EC and other importing countries. These examples demonstrate that credible, India-based systems aligned with global standards can secure international acceptance and reduce the need for individual exporters to seek approvals from foreign regulators at significantly higher cost and effort. A similar approach can be extended to other sectors of export interest, including pharmaceuticals, AYUSH products, and medical devices, where global regulatory expectations are stringent, and compliance costs are high. In this context, initiatives such as the QCI's Ayush Premium Mark and the ICMED 13485 Plus certification for medical devices or the Coffee Board's recently launched sustainable coffee certification scheme illustrate how alternative certification pathways aligned with internationally accepted standards can be developed domestically. Such systems should be pursued in a coordinated and cohesive manner across sectors, supported by a clear strategy for international benchmarking and recognition rather than fragmented, sector-specific efforts.

#### **4.4 Facilitating Voluntary Quality Systems and Responding to Private Standards**

- a. Government as Facilitator in the Private Standards Ecosystem:** The role of government in the private standards ecosystem should be that of a facilitator - articulating enabling policies and creating conditions that allow industry to respond effectively to evolving private certification requirements. Export Promotion Councils (EPCs), given their proximity to global markets where such certifications are often mandated, should play a more proactive role. This includes developing dedicated capacity on standards and technical regulations in destination markets, undertaking capacity-building initiatives for members, and supporting the development of local certification schemes, where appropriate.

- b. Benchmarking and Recognition of Voluntary Schemes:** Businesses should retain the flexibility to adopt one or more voluntary schemes that best meet their market needs. Government support should therefore be based on benchmarking or recognising multiple voluntary schemes against clearly defined criteria, rather than tying assistance to a single scheme. The Ecomark notification issued by the Ministry of Environment, Forest and Climate Change (MoEF&CC) in June 2023, which provides for recognition of other ecolabelling schemes, offers an initial example of such an approach. Similar principles may be extended to other areas, including skill development, where initiatives that demonstrably address market requirements should be recognised, rather than limiting recognition exclusively to programmes delivered through Sector Skill Councils. This approach would promote competition, innovation, and responsiveness within the voluntary quality ecosystem while maintaining the integrity of regulatory oversight.

It's also essential that wherever India develops voluntary certification schemes, these, at the highest levels, are globally compatible and secure benchmarking with systems available, as NCCF has done in the case of Forest Management and Trees outside Forests with PEFC.

## **5. Enabling Ecosystem for Implementation**

The proposed policy reforms will only translate into measurable outcomes if supported by a resilient and well-coordinated enabling ecosystem that strengthens implementation capacity across institutions and industry.

- a. Strengthening Laboratory Infrastructure and Financing Models:** A centralised mechanism for funding and upgrading laboratory infrastructure can play a critical role in supporting effective regulation and credible voluntary certification. Such an approach may include targeted support for laboratories in the private sector and, where appropriate, within MSMEs to encourage in-house testing aligned with good manufacturing practice. At the same time, reassessing the extent of direct government ownership of laboratories and exploring

public-private partnership models can help leverage private sector capability and investment. Expanding support for the growth and accreditation of private laboratories would contribute to enhanced testing capacity, improved geographic coverage, and greater resilience within India's quality ecosystem.

- b. Integrating Skill Development with Quality Infrastructure Needs:** Although India has developed a broad skill development ecosystem, its linkages with the country's trade, standards, and regulatory agenda remain limited. Strengthening this interface requires integrating quality-related competencies into existing skill development frameworks through mechanisms for identifying, certifying, and recognising competent training providers and consultants who can support industry in regulatory compliance and certification processes. Sector Skill Councils under the Ministry of Skill Development and Entrepreneurship (MSDE) can play a more structured role in developing certification frameworks for trainers and consultants aligned with sector-specific regulatory and market requirements.

Recent initiatives, including the decision of the Life Sciences Sector Skill Council to establish a certification system for consultants in the medical devices sector, provide a model that may be extended across other sectors. Enhancing linkages between the skill ecosystem and India's quality infrastructure would help create a credible pool of technical expertise, support industry, particularly MSMEs, in meeting compliance obligations, and strengthen preparedness for both domestic regulatory requirements and international market expectations.

- c. Aligning MSME Support Mechanisms with Compliance Requirements:** The policy announced by the Government of Uttar Pradesh in 2019, based on advice from the DoC, provides an example of a more responsive approach to MSME support. The policy recognised a broad spectrum of compliance requirements, including private certifications, and sought to assist MSMEs in meeting both domestic and export-oriented standards. Support frameworks should

encompass assistance for compliance with standards, conformity assessment procedures, and related requirements across both domestic and export markets.

Support for domestic market requirements may include:

- i. Voluntary management systems standards and certifications such as ISO 9001, ISO 14001, ISO 45001, and ISO 50001, as well as sector-specific management systems certification schemes (MSCS) such as TL9000, IATF 16949, AS 9100, and similar standards.
- ii. Voluntary product quality standards and certification schemes, including recognised marks such as the ISI Mark, Hallmarking, and Registration Mark of the BIS; AGMARK of the Ministry of Agriculture; the S-Mark of Standardisation Testing and Quality Certification (STQC); Silk Mark of the Silk Board; AYUSH Mark of the QCI; and other recognised quality certification marks.
- iii. Process compliance certifications such as WHO-GMP, India-GHP, India-HACCP, IndG.A.P., Zero Effect Zero Defect, and similar recognised schemes.
- iv. Mandatory compliance with domestic technical regulations and conformity assessment procedures, including QCOs notified under the BIS Act, regulations under FSSAI, the Drugs and Cosmetics Act, the Energy Conservation Act administered by the BEE, United Nations (UN) certification through the Indian Institute of Packaging (IIP) for hazardous goods, and other quality or safety regulations notified by the Government of India.

Support for importing country market requirements may include:

- i. Regulatory compliance relating to product and process quality standards, packaging, and labelling requirements as notified by importing countries.
- ii. Special regulatory requirements applicable to champion or export-excellence sectors identified by the Government of India,

particularly where technology upgradation and compliance costs are high.

- iii. Voluntary certifications related to responsible manufacturing practices - such as environmental protection, labour safety, labour welfare, and social accountability, that are required by buyers or stakeholder-led certification schemes in importing markets.
- iv. Certification systems developed in India that demonstrate alignment with global standards, including regulatory schemes such as APEDA's NPOP and voluntary certifications such as QCI's Ayush Premium Mark or forest certification schemes developed by the Network for Conservation and Certification of Forests (NCCF).

**d. Industry Engagement with Private Certification Ecosystems:**

Industry associations have generally taken limited initiative in engaging with scheme owners or representing collective industry interests in global certification forums. Strengthening this interface requires more systematic analysis of private certification schemes that affect Indian exporters, to develop credible domestic schemes that can be internationally benchmarked or endorsed. Initiatives such as forest certification schemes developed by the NCCF and QCI's IndG.A.P. certification demonstrate possible pathways in this direction. Where endorsement by global scheme owners is not feasible, targeted capacity-building efforts may be necessary to support the industry in meeting prevailing private standards.

**e. Strengthening Institutional Mechanisms for Regulatory**

**Intelligence:** As noted earlier, EPCs, commodity boards, and the Federation of Indian Export Organisations (FIEO) are institutionally well placed to undertake systematic monitoring of regulations and standards in destination markets. Establishing dedicated verticals within these bodies focused on technical regulations and standards can help track regulatory developments, maintain sector-specific databases, and disseminate timely information to the industry, thereby improving preparedness for evolving market-access requirements.

## 6. Conclusion

India's quality ecosystem has evolved significantly and has become increasingly complex in response to expanding domestic regulation, growing reliance on conformity assessment mechanisms, and rising global expectations relating to quality, safety, and sustainability. These developments have intensified governance, coordination, and capacity demands across the system. Maintaining alignment with global requirements while safeguarding national economic interests will require periodic review and recalibration of institutional arrangements, regulatory frameworks, and enabling mechanisms. An agile and coherent approach to governance, supported by coordinated action among government, regulators, industry, and other stakeholders, will be essential to address emerging challenges and sustain the credibility and competitiveness of India's quality ecosystem.

### Endnote

<sup>1</sup> Global Quality Infrastructure Index (GQII), available at: <https://gqii.org/>

### References

- Bureau of Indian Standards. (2016). BIS Act, 2016. Government of India.
- Department of Commerce. (2018). *Indian National Strategy for Standardization (INSS)*. Ministry of Commerce & Industry, Government of India. [https://www.commerce.gov.in/wp-content/uploads/2020/02/MOC\\_636655449469105249\\_INSS\\_Booklet\\_2018.pdf](https://www.commerce.gov.in/wp-content/uploads/2020/02/MOC_636655449469105249_INSS_Booklet_2018.pdf)
- Kher, R., & Jauhri, A. (2025). Decoding QCOs: Do we need a rethink? (RIS Discussion Paper No. 311). Research and Information System for Developing Countries (RIS). <https://www.ris.org.in/sites/default/files/Publication/DP%20311%20Rajeev%20Kher%20and%20Anil%20Jauhri.pdf>
- McDaniels, D., & Karttunen, M. (2016). *Trade, testing, and toasters: Conformity assessment procedures and the TBT Committee* (WTO Staff Working Paper ERSD-2016-09). World Trade Organization, Economic Research and Statistics Division. [https://www.wto.org/english/res\\_e/reser\\_e/ersd201609\\_e.pdf](https://www.wto.org/english/res_e/reser_e/ersd201609_e.pdf)

## About the Authors



**Mr. Rajeev Kher**, former Commerce Secretary to the Government of India and former Distinguished Fellow at RIS, is a senior policy expert with over three decades of experience in international trade and negotiations. He has played a leading role in shaping India's strategy at the WTO and in bilateral trade agreements, and contributed to key policy frameworks, including the Foreign Trade Policy (2015-2020) and the National Environment Policy (2005). His areas of expertise include trade facilitation, regional integration, agricultural trade, and development policy.



**Mr. Anil Jauhri** is a Visiting Fellow at RIS and former CEO of the National Accreditation Board for Certification Bodies (NABCB) under the Quality Council of India. He is an internationally recognized expert in standards, accreditation, and conformity assessment, with over four decades of experience working across national and global institutions, including engagements with bodies such as UNFCCC and WTO. His work focuses on strengthening quality infrastructure, regulatory frameworks, and market access, with particular emphasis on sustainability standards, carbon markets, and global regulatory convergence.



**Ms. Om Stutee** is a Research Assistant at RIS. Her work focuses on trade and sustainability, particularly evolving regulatory frameworks such as CBAM and EUDR, as well as sustainability challenges in India's plantation sector. She also contributes to policy research on quality and standards, with a focus on their implications for developing economies. She holds a Master's degree in Economics from the Central University of Punjab, where she was awarded the Gold Medal.

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Core IV-B, Fourth Floor, India Habitat Centre  
Lodhi Road, New Delhi-110 003 India., Tel. 91-11-24682177-80  
Fax: 91-11-24682173-74, Email: [dgoffice@ris.org.in](mailto:dgoffice@ris.org.in)  
Website: <http://www.ris.org.in>