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DECODING COMPLIANCE MANAGEMENT FOR THE FOOD PROCESSING INDUSTRY




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Industry Insight

Piruz Khambatta
Chairman, Rasna International

*"**I should complement TeamLease RegTech for coming out with a very good compliance management report for food processing industry. In todays world compliance is not a choice but absolute necessity for growth and even survival of organizations and I am sure that this documents will be a good document for compliance managers, directors and CEOs and would also be a pointer for policy changes.***

Piruz Khambatta is an Indian entrepreneur and industry leader, currently serving as the Chairman of Rasna International, one of India's most recognised homegrown beverage companies. Under his stewardship, Rasna has maintained its market leadership in the non-carbonated soft drink concentrate category, with a strong presence across urban and rural India. He has been instrumental in positioning the brand as a cost-effective, mass-market alternative to global beverage players, while also expanding its footprint in international markets. His leadership has focused on strengthening distribution networks, enhancing manufacturing capabilities and driving product innovation aligned with evolving consumer preferences. He also contributes to policy and industry discussions and supports national initiatives such as Make in India, reflecting his emphasis on strengthening India's manufacturing ecosystem and promoting indigenous brands.

Executive Summary

India's food processing industry occupies an important position in the country's economic architecture, acting as a critical bridge between agriculture, manufacturing and consumption. The sector strengthens supply chains, reduces wastage and drives higher economic realisation by transforming raw agricultural output into value-added products. As of FY 2023–24, it contributes 7.93% to manufacturing Gross Value Added (GVA) and 17.6% to the country's overall GVA, with value addition rising significantly from ₹1.34 lakh crore in FY 2014–15 to ₹2.24 lakh crore.

Additionally, processed food exports now account for 20.4% of India's total agri-food exports in FY 2024–25, highlighting its growing importance as both an industrial and export growth lever.

The industry is structurally dominated by micro and small enterprises. Approximately 24.59 lakh food processing enterprises operate in the unregistered segment, accounting for over 98% of all units.

In contrast, the remaining ~2% of medium and large enterprises contribute nearly 60–65% of total production value. The unorganised segment also accounts for a significant majority of employment in the sector, highlighting its critical role in livelihoods.

The sector's significance extends well beyond output metrics. It is the largest employer within registered manufacturing, accounting for 12.83% of the total workforce and supports over 2.23 million workers in the registered segment and approximately 5.1 million in the unregistered economy. Its strong rural linkage, MSME-led structure, and integration with farmer value chains make it a cornerstone of inclusive growth, enabling income diversification and strengthening non-farm livelihoods across the country. However, this scale and expansion are accompanied by extensive and evolving compliance requirements across the sector.

The sector is governed by a regulatory ecosystem that is both extensive and deeply layered. Food processing businesses operate within a multi-jurisdictional framework spanning central, state and local authorities, covering domains such as food safety, including packaging, labelling, standards set by the Bureau of Indian Standards and the Legal Metrology Department, as well as labour, environment, taxation, and corporate governance. This results in a compliance landscape that is not only large in volume but also diverse in nature and continuous in its application. At a high level, the scale of this challenge is significant. A typical mid-sized multi-state food processing enterprise is subject to more than 3,285 unique compliance obligations, which translates into a much larger number when multiple filing frequencies are considered.

In addition, businesses are required to secure more than 30 regulatory approvals across different stages of operations, each involving separate processes, documentation and regulatory interfaces. What makes this landscape particularly complex is not just its size, but its structure. Compliance obligations span multiple functional areas and are enforced by a wide range of authorities, often operating in parallel. Requirements vary across states, regulatory updates are frequent and enforcement intensity differs by jurisdiction. As a result, compliance is not a one-time exercise but a continuous, resource-intensive function embedded across the lifecycle of the business.

The breadth of compliance extends across every layer of operations from sourcing and manufacturing to distribution and market-facing activities while its depth is reflected in the frequency of filings, inspections, recordkeeping and reporting obligations. This creates a compounding effect as businesses scale across geographies, product lines and supply chains, significantly increasing regulatory exposure.

This report seeks to bring clarity to this complexity by quantifying the length, breadth, and depth of compliance in the food processing sector. It aims to shift the narrative from viewing compliance as a checklist exercise to recognising it as a strategic business function that directly impacts operational efficiency, risk management and scalability.

As India aspires to become a global food processing hub, the focus must extend beyond production capacity to include regulatory efficiency. Simplification, harmonisation, and digitisation of compliance frameworks will be critical to unlocking the sector's full potential.

Food Processing Industry in India: An Overview

Role of Food Processing in India's Economy

The food processing industry plays a crucial role in India's economy by linking agriculture with manufacturing. It adds value to agricultural produce, supports industrial growth and contributes meaningfully to the country's Gross Domestic Product (GDP). Its importance lies not just in scale but in how it converts primary farm output into higher-value food products consumed domestically and exported globally.

Contribution to Gross Value Added (GVA)

As per the latest available estimates for FY 2023–24, the food processing sector continues to play a substantial role in India's economic value creation:

- The sector contributes 7.93% of India's manufacturing Gross Value Added (GVA), underscoring its importance within the industrial ecosystem.
- It accounts for a significantly larger 17.6% of the country's overall GVA, reflecting its deep linkages with agriculture and downstream consumption markets.

Growth in Economic Value Over Time

The sector has demonstrated strong and sustained growth in value addition over the past decade:

- The Gross Value Added of the food processing sector increased from ₹1.34 lakh crore in FY 2014–15 to ₹2.24 lakh crore in FY 2023–24 (as per 1st Revised Estimates).

- This upward trajectory indicates consistent expansion driven by rising domestic demand, supply chain formalisation, and policy support.

Please refer to Appendix 2 for more details on the investment landscape of the sector

Role within Manufacturing

Food processing continues to hold a critical position within both manufacturing and export ecosystems:

- The sector remains a core component of the manufacturing sector, contributing nearly 8% of manufacturing GVA.
- In FY 2024–25, processed food exports accounted for 20.4% of India's total agri-food exports, highlighting its growing role in global trade and value-added exports.

Employment and Economic Linkages

The sector is one of the most significant employment generators within India's industrial landscape:

- As per ASI 2023–24, it is the largest employer in the registered manufacturing segment, accounting for 12.83% of total workforce.
- It supports approximately 2.23 million (22.3 lakh) workers in the registered sector.
- Additionally, the unregistered segment employs around 5.1 million (51 lakh) workers, indicating the sector's strong MSME base and informal footprint.

Employment Generation and Rural Livelihood Linkages

Employment generation is one of the most significant economic and social contributions of India's food processing industry. Owing to its strong linkage with agriculture and its labour-intensive nature, the sector plays a critical role in supporting livelihoods across rural, semi-urban and urban regions.

Scale of Employment in the Food Processing Industry

As per the Annual Survey of Industries (ASI) 2022–23, which is the latest official dataset available as of 2025:

- The registered food processing sector employed approximately 22.96 lakh persons
- Food products manufacturing accounted for the largest share of employment among all manufacturing industries, making it one of the biggest employers in India's organised manufacturing sector
- The food processing industry contributed around 12-13% of total organised manufacturing employment, as reflected in the Economic Survey 2024-25 and Ministry of Food Processing Industries (MoFPI) analysis.

In parallel, employment in the unregistered food processing sector remains substantial. As per the Annual Survey of Unincorporated Sector Enterprises (ASUSE) 2022-23:

- The unregistered food processing sector supported employment for 46.57 lakh workers.
- This constituted about 15.21% of total employment in unregistered manufacturing activities.

Taken together, the organised and unorganised segments highlight the food processing industry as one of the largest employment-generating industrial sectors in the country.

Policy-Driven Job Creation

Government schemes under the Ministry of Food Processing Industries have contributed substantially to job creation. As of October 2025, flagship programmes have generated significant employment outcomes:

- PM Kisan Sampada Yojana (PMKSY): 4.53 lakh jobs
- PM-Formalisation of Micro Food Processing Enterprises (PM-FME): 4.88 lakh jobs
- Production Linked Incentive Scheme for Food Processing (PLISFPI)**:** 3.39 lakh jobs

Together, these initiatives have supported over 12.8 lakh direct and indirect jobs nationwide.

Rural Employment and Non-Farm Livelihoods

A distinctive feature of food processing employment is its strong rural linkage. Processing units are often located close to farms and production clusters to ensure the timely availability of raw material and to reduce transportation and storage losses.
As highlighted in the MoFPI Annual Report 2024-25, this proximity to agricultural regions results in:

- Direct rural employment in activities such as sorting, grading, milling, preservation, packaging, and storage

- Indirect employment in transportation, cold chain operations, warehousing, quality testing, and allied services
- Seasonal and semi-skilled work opportunities, which are particularly important in regions with limited industrial activity

The food processing industry, therefore, acts as a key driver of non-farm employment in rural areas, helping reduce dependence on agriculture alone and providing income stability beyond the crop cycle.

Linkages with Farmer Livelihoods and Income Stability

Beyond employment at the factory level, food processing has a direct impact on farmers' livelihoods. According to MoFPI and IBEF sectoral analysis (as of 2024-25):

- Processing creates assured demand for agricultural produce, improving market access for farmers
- Value addition through processing improves price realisation compared to the sale of raw produce

- The sector encourages crop diversification into fruits, vegetables, dairy, fisheries, meat, poultry, millets, and other high-value segments

By strengthening backward linkages with agriculture, food processing contributes to income diversification and reduced vulnerability for farming households.

Role of MSMEs in Employment Creation

Employment generation in food processing is largely driven by micro, small and medium enterprises (MSMEs). The MoFPI Annual Report 2024–25 notes that a majority of food processing units operate at micro and small scales, particularly in:

- Grain milling and cereal processing
- Fruits and vegetables processing
- Dairy and traditional food products
- Edible oils, spices, and meat processing

Please refer to Appendix 1 and 3 for more details on the different segments of the sector and their regulatory applicability

These MSME units are highly labour-intensive, generating more employment per unit of investment compared to capital-heavy manufacturing sectors. This makes food processing particularly relevant for inclusive growth, including employment for women, local entrepreneurs, and self-help group members.

Government Schemes and Livelihood Outcomes

Government-led initiatives have further strengthened employment and livelihood linkages in the sector. As reported by MoFPI in its Annual Report 2024–25:

- Under the PM Formalisation of Micro Food Processing Enterprises (PMFME) Scheme, more than 92,500 micro food processing units had been approved as of June 2024, many of them located in rural areas
- During 2024, over 32,000 beneficiaries were trained under food processing and entrepreneurship development programmes
- Seed capital support under PMFME benefited over 70,000 SHG members, directly supporting women-led rural livelihoods

Institutions such as National Institute of Food Technology Entrepreneurship and Management (NIFTEM)(Kundli and Thanjavur) have also played a key role in skill development and capacity building, strengthening the employment ecosystem for the sector.

Regulatory Framework

Regulatory Jurisdiction, Legislative Framework and Applicable Acts

The food processing sector in India operates within a multi-layered and highly distributed regulatory framework spanning central, state, and local authorities. At the apex, the Food Safety and Standards Authority of India, established under the Food Safety and Standards Act, 2006, serves as the principal regulator responsible for laying down science-based standards for food products, licensing and registration of food business operators and ensuring food safety across the country. Complementing this framework, central ministries such as the Ministry of Food Processing Industries and the Ministry of Health and Family Welfare plays a critical role in policy formulation and sectoral oversight. Additional regulatory interfaces arise through bodies such as the Bureau of Indian Standards, Legal Metrology Division, and Agricultural and Processed Food Products Export Development Authority, depending on the nature and market orientation of food businesses.

At the constitutional level, the framework derives from Article 246 of the Constitution of India, which allocates legislative competence across the Union, State, and Concurrent Lists. Food safety and standards primarily fall within the Concurrent List, particularly in relation to food adulteration and public health, enabling both the Centre and States to legislate. This creates a shared governance model where the Centre sets standards and regulatory architecture, while States are responsible for implementation, inspections and enforcement through designated authorities.

The legislative architecture is anchored in the Food Safety and Standards Act, 2006, which is operationalised through an extensive framework of subordinate legislation issued by FSSAI. These regulations collectively govern the full lifecycle of food products.

Licensing and registration requirements are prescribed under the Food Safety and Standards (Licensing and Registration of Food Businesses) Regulations, 2011, establishing entry conditions and operational compliance for food business operators. Product standards, composition and use of additives are governed through food product standards and additive regulations, while safety thresholds for contaminants, toxins and residues define permissible limits to prevent adulteration.

Consumer-facing transparency is driven through the Food Safety and Standards (Labelling and Display) Regulations, 2020, which mandate detailed disclosures including ingredients, nutritional values, allergens and claims. Packaging safety is regulated through the Food Safety and Standards (Packaging) Regulations, 2018, prescribing permissible materials and migration limits. Shelf life, expiry, and storage conditions are also embedded within labelling requirements, ensuring traceability and consumer awareness. In addition, the Food Safety and Standards (Advertising and Claims) Regulations, 2018 restrict misleading claims and require scientific substantiation of health and nutrition claims, strengthening consumer protection.

Beyond FSSAI's framework, parallel legislative frameworks address adjacent compliance requirements. Pricing and quantity-related disclosures, including Maximum Retail Price (MRP) and net quantity, are governed under the Legal Metrology Act, 2009 and its packaged Commodities Rules. Quality certification and standardisation may be mandated through standards and quality control orders issued under the Bureau of Indian Standards framework. Export-oriented food businesses are subject to additional requirements under Agricultural and Processed Food Products Export Development Authority (APEDA), including traceability, certification, and adherence to importing country standards. Import of food products is separately regulated through FSSAI's import regulations, which prescribe clearance, inspection, and sampling requirements at ports of entry.

Enforcement responsibility is distributed across multiple levels. At the central level, FSSAI undertakes standard-setting, risk assessment, and national coordination. At the state level, Food Safety Departments, led by Commissioners of Food Safety, are responsible for licensing, inspections, sampling, and enforcement through a network of Designated Officers and Food Safety Officers. Local bodies, including municipal corporations and panchayats, play a complementary role in trade licensing, sanitation, and public health oversight, adding an additional interface for compliance.

A critical pillar of the ecosystem is the food testing and compliance infrastructure. India has a network of over 200 food testing laboratories, including those notified by FSSAI and accredited by the National Accreditation Board for Testing and Calibration Laboratories. These include central government laboratories, state public health laboratories, referral labs, and private accredited facilities, which collectively support sample analysis, surveillance, and enforcement actions. This network is supplemented by associated institutions and certification bodies that function as extended arms of the regulatory system.

Regulatory capacity is driven by the availability of enforcement personnel, including Food Safety Officers, Designated Officers, and laboratory professionals. While capacity-building initiatives have strengthened the system, variations persist across states in terms of inspector coverage, infrastructure, and enforcement intensity. Digitisation efforts, particularly through FSSAI's FoSCoS platform, have streamlined licensing, filings, and compliance tracking, although integration with broader systems such as the National Single Window System remains partial.

Compliance management in the sector requires robust recordkeeping, traceability, and responsiveness to regulatory changes. Businesses must maintain detailed documentation across sourcing, production, quality control, and distribution.

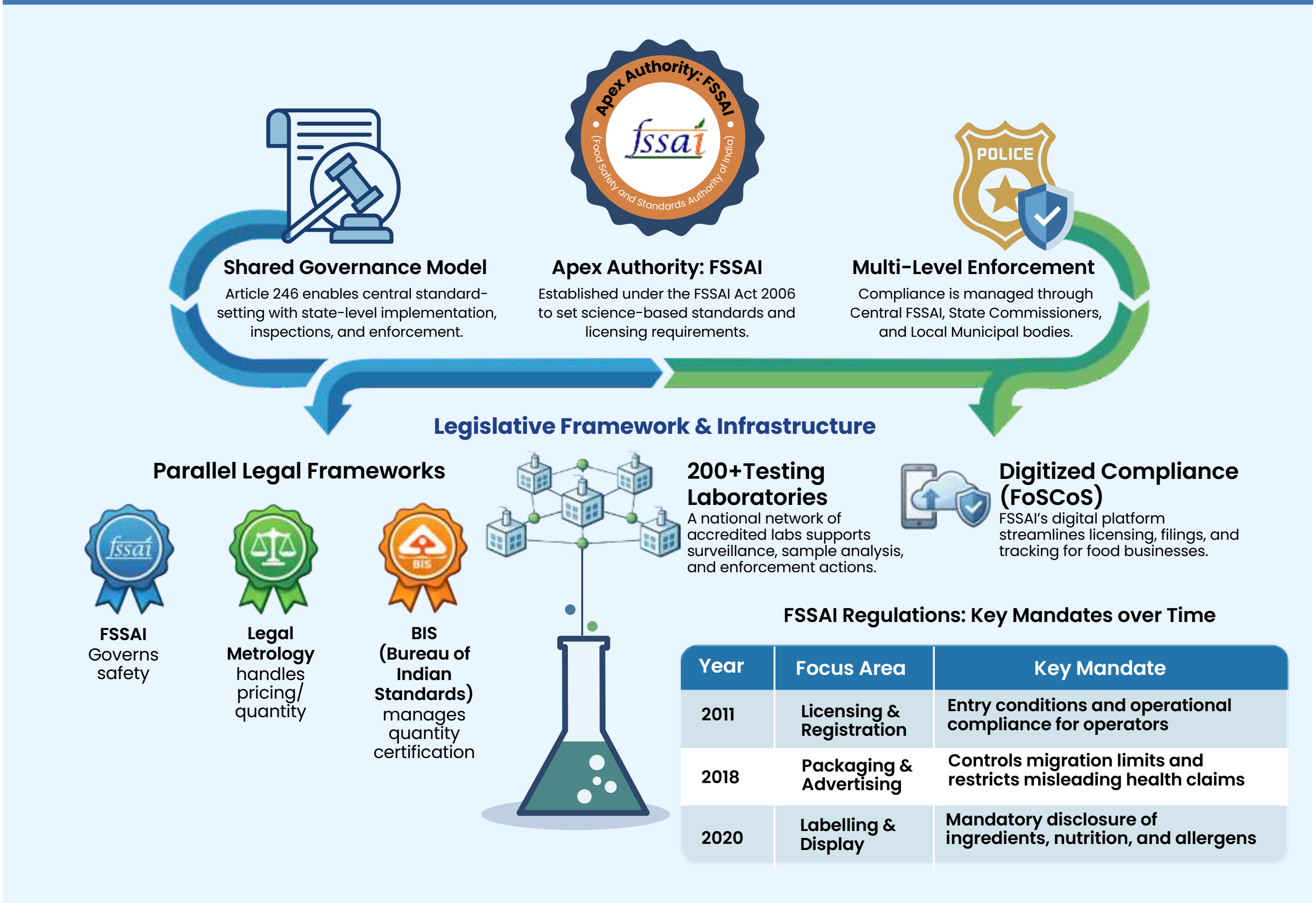
Regulatory transition management is critical, given frequent updates to labelling norms, packaging standards, and safety thresholds. Additionally, enforcement intensifies during high-consumption periods such as festivals, with regulators undertaking targeted inspections, sampling drives, and surveillance to curb adulteration and ensure food safety.

Overall, the regulatory framework governing the food processing sector is comprehensive and deeply layered, spanning across seven categories of the law and three levels of the government combining a centralised standard-setting approach with decentralised enforcement and a wide network of supporting institutions. While this ensures extensive coverage across pricing, labelling, nutritional value, quality, safety, and distribution, it also necessitates strong coordination and compliance management capabilities for effective implementation.

The regulatory requirements of a food processing firm can be classified into 7 categories of the law:

- Labour
- Finance & Taxation
- EHS
- Secretarial
- Commercial
- Industry-Specific
- General

Navigating India’s Food Regulatory Ecosystem



Year	Focus Area	Key Mandate
2011	Licensing & Registration	Entry conditions and operational compliance for operators
2018	Packaging & Advertising	Controls migration limits and restricts misleading health claims
2020	Labelling & Display	Mandatory disclosure of ingredients, nutrition, and allergens

Assumptions

The food processing sector is governed by Central, State and Local regulations. For a food processing entity, these requirements scale based on the geographical footprint of manufacturing units, the diversity of the product portfolio and the nature of the supply chain (including imports and nationwide distribution).

The establishment in focus is a Private Limited Company operating in the FMCG food processing sector, engaged in the manufacturing, marketing and distribution of branded packaged food and beverages. The Company maintains its Registered Office in Telangana and Corporate Office in Gurugram, Haryana, with manufacturing and carry-forwarding facilities located in Hosur, Tamil Nadu, and Ludhiana, Punjab. Its operations include the production of sauces, beverages, and packaged fruits and vegetables, distributed nationwide through both retail and foodservice (B2B) channels.

Fig 1: The figure outlines the key assumptions and parameters used to decode the regulatory framework applicable to the company's operations:

General Information

Compliance Type
Private Limited Company engaged in manufacturing, marketing and distribution of branded packaged food and beverage products in India.

Operates under FMCG regulatory framework including food safety, labour, EHS, tax and commercial laws applicable to food processing and distribution companies.

Labour & Workforce

Manpower
Workforce includes plant workers, quality control staff, R&D personnel, supply chain teams, sales & marketing personnel and corporate staff. Includes permanent and contractual labour at manufacturing facilities.

PF Registration and other Related Matters
Compliance with EPF, ESI, Professional Tax (as applicable), gratuity, bonus and labour welfare laws. Contract labour compliance applicable at plant locations.

Facilities Provided
Employee welfare facilities including sanitation, drinking water, canteen (if threshold met), safety gear, medical facilities and statutory welfare amenities under factory regulations.

Plant Operations
Food processing operations including manufacturing of sauces, dips, beverages and packaged fruits & vegetables. Automated production lines with quality control labs and food safety systems.

Industry Specific

Operations
Manufacturing and distribution of sauces, packaged fruits & vegetables and edible oils. Operations include sourcing, processing, packaging, warehousing and nationwide distribution across retail and foodservice channels. Entity does not own any boiler.

Finance & Taxation

Income Tax, GST and Import - Export related matters
The entity is subject to Income Tax, GST, and import-export obligations

Environment, Health & Safety (EHS)

Usage of Material
Raw materials include tomatoes, fruits, vegetables, edible oils, sugar, preservatives and packaging materials. Food-grade ingredients sourced domestically and via imports where applicable. Cooking oil is not used.

Waste Generation
Organic food waste, wastewater from processing, packaging waste (plastic, metal cans, corrugated boxes) and sludge from effluent treatment. Managed as per pollution control norms. Does not fall under contaminated sites.
Battery and e-waste Hazardous and non-hazardous wastes (solid waste including food)

State Pollution Control Board (SPCB) Requirements
Manufacturing facilities are subject to State Pollution Control Board approvals. Environmental clearances, consent to establish/operate and effluent treatment systems required.

Commercial

Legal Metrology
Compliance related to weights and measures installed in the Units, along with Packaged Commodities

Advertising
Advertising across digital, print and retail platforms. Subject to food labelling and advertising regulations including nutrition and health claims.

Motor Vehicle
Includes vehicle registration, insurance and transport permits (company owned or third-party vehicles).

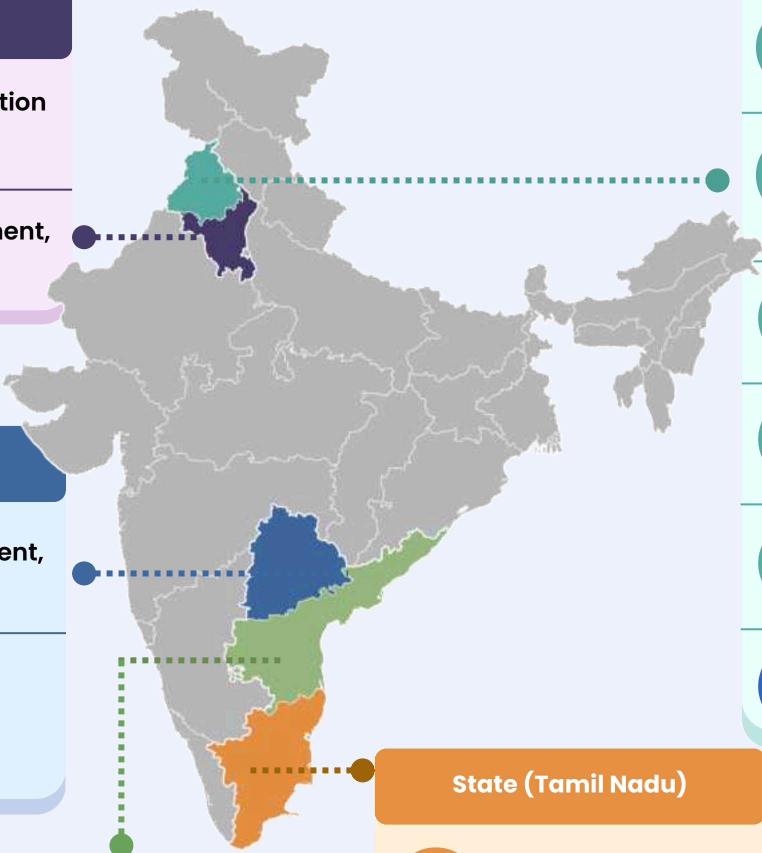
Lift & Escalator
There are no passenger lifts installed across any establishment

Packaging
Food packaging compliance including ingredient list, nutritional information, allergen declaration, FSSAI license number and barcode requirements. Packaging must meet food-grade standards.

Fig 2: An Illustrative list of reporting authorities for a typical multi-regional food processing establishment*

Central

- Department for Promotion of Industry and Internal Trade
- Department of Consumer Affairs
- Department of School Education and Literacy
- Development Commissioner (MSME), Ministry of Micro, Small & Medium Enterprises
- Director General of Foreign Trade
- State Disaster Response and Fire Services, Govt. of Telangana



State (Haryana)

- **Excise and Taxation Department,** Govt. of Haryana
- **Labour Department,** Govt. of Haryana

State (Telangana)

- **Labour Department,** Govt. of Telangana
- **State Disaster Response and Fire Services,** Govt. of Telangana

State (Andhra Pradesh)

- **Department of Commercial Taxes,** Govt. of Andhra Pradesh

State (Punjab)

- **Excise and Taxation Department,** Govt. of Punjab
- **Department of Food Civil Supplies and Consumer Affairs,** Govt. of Punjab
- **Local Government,** Govt. of Punjab
- **Power Department,** Govt. of Punjab
- **Labour Department,** Govt. of Punjab
- **Punjab Police**

State (Tamil Nadu)

- **Directorate of Town Panchayats,** Govt. of Tamil Nadu
- **Home Department,** Govt. of Tamil Nadu
- **Labour Department,** Govt. of Tamil Nadu
- **Tamil Nadu Police**

**Data aggregates key locations of a typical multi-regional food processing firm, covering carry-forwarding locations in Chennai and Ludhiana, manufacturing locations in Hosur and Ludhiana, with a registered office in Telangana and corporate office in Gurugram*

Approvals

Every food processing manufacturing unit must obtain registrations, licenses, permissions, and approvals under multiple Central, State, and Municipal laws at various stages of business operations. In this case, **34 approvals** are required. These approvals ensure compliance with food safety standards, environmental protection requirements, labour welfare laws, commercial regulations, and industry-specific obligations. These stages can be classified as follows:

- **Setting Up**
- **Pre-Commissioning Stage**
- **Post-Commissioning Stage**
- **Ongoing**

A food processing unit with registered offices and carry-forwarding locations must adhere to numerous registration and approval requirements to ensure compliance with relevant regulations.

Table 1: Approvals across the stages of business*

Stage	Number of Approvals
Setting Up	1
Pre-Commissioning	13
Ongoing	20
Total	**34**

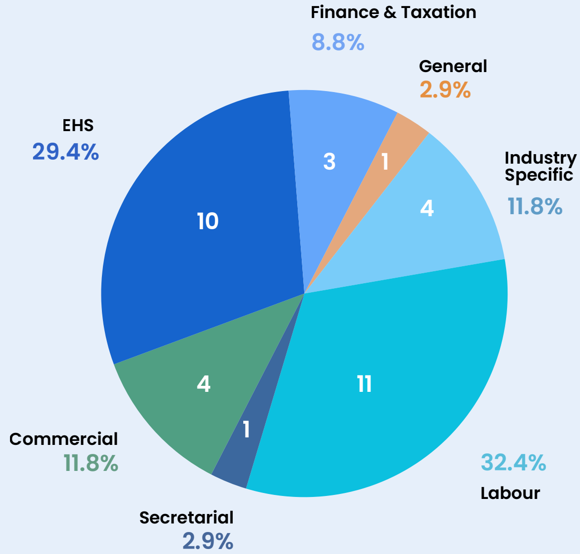
**Data aggregates key locations of a typical multi-regional food processing firm, covering carry-forwarding locations in Chennai and Ludhiana, manufacturing locations in Hosur and Ludhiana, with a registered office in Telangana and corporate office in Gurugram*

These approvals include environmental clearances, factory licensing, food safety registration, pollution control permissions, labour registrations, fire safety approvals, waste management authorizations, and packaging and intellectual property registrations.

Compliance with these approvals is essential for lawful establishment and continuous operation of food processing manufacturing units in various parts of the country.

Furthermore, these approvals can also be classified based on the 7 categories of compliance.

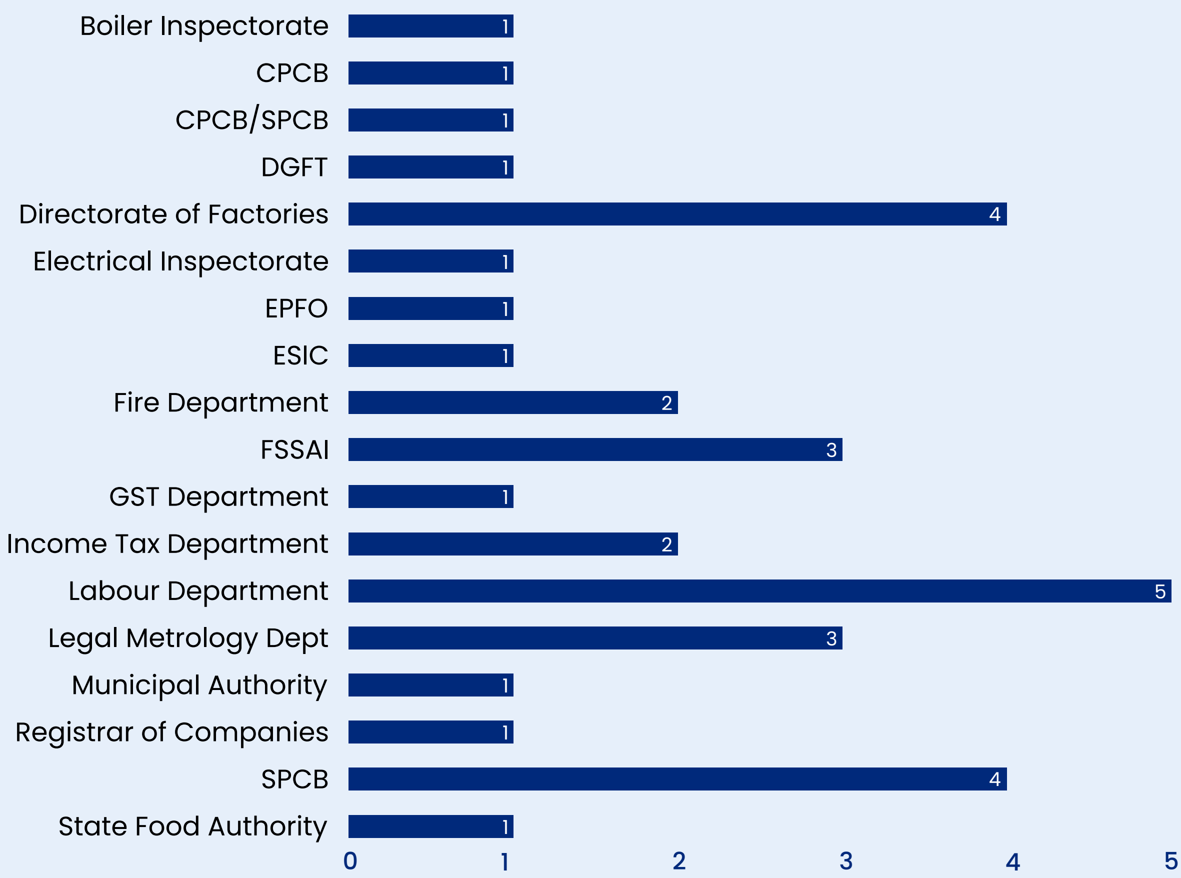
Fig 3: Approvals to Establish, Start, and Continue Operations across Compliance Categories*



**Data aggregates key locations of a typical multi-regional food processing firm, covering carry-forwarding locations in Chennai and Ludhiana, manufacturing locations in Hosur and Ludhiana, with a registered office in Telangana and corporate office in Gurugram*

A food processing manufacturing unit must obtain multiple registrations, licenses, approvals, and certifications under several Central, State, and Municipal laws. In many cases, there are multiple compliance requirements under a single legislation, especially under the Food Safety and Standards Act, 2006, Environment Protection Act, 1986, and Factories Act, 1948. Consequently, several regulatory authorities are responsible for issuing multiple registrations, permissions, and licenses. Each approval requires a separate application, documentation, and verification process. This results in multiple parallel compliance processes that must be completed before and during the operation of the manufacturing unit.

Fig 4: Illustrative list of authorities responsible for multiple approvals*



**Data aggregates key locations of a typical multi-regional food processing firm, covering carry-forwarding locations in Chennai and Ludhiana, manufacturing locations in Hosur and Ludhiana, with a registered office in Telangana and corporate office in Gurugram*

Levels of Compliance

Table 2: Compliances at Central and State Levels*

Category	Number of Compliances
Central	2,042
State	1,243
Total	3,285

**Data aggregates key locations of a typical multi-regional food processing firm, covering carry-forwarding locations in Chennai and Ludhiana, manufacturing locations in Hosur and Ludhiana, with a registered office in Telangana and corporate office in Gurugram*

For a food processing B2B unit, the compliance landscape is both extensive and layered. As reflected in the table above, the establishment is required to comply with a total of 3,285 statutory compliances, comprising 2,042 Central-level compliances and 1,243 State-level compliances. These obligations span multiple regulatory domains, including corporate, labour, environment, taxation, and industry-specific laws.

Categories of Compliances

The compliance requirements for a food processing establishment can be broadly classified across seven categories: Labour, Finance and Taxation, Environment, Health and Safety (EHS), General, Commercial, Secretarial, and Industry-Specific regulations. The applicability and scale of these requirements depend on factors such as the geographical spread of manufacturing units, workforce size, product portfolio, and the nature of the supply chain, particularly in cases involving multi-state operations and distribution.

Based on the assumptions for a multi-state food processing entity with operations in Haryana, Tamil Nadu, and Punjab, the establishment is subject to 3,285 unique compliance requirements across these categories. However, when the frequency of these obligations is considered such as monthly, quarterly, half-yearly, and annual filings, the total number of annual compliance actions rises to 11,554. This reflects the extensive regulatory oversight governing food processing operations, covering areas such as food safety, labour welfare, environmental protection, taxation, and packaging and labelling compliance.

Fig 5: Category-wise frequency of compliances for a food processing sector establishment*

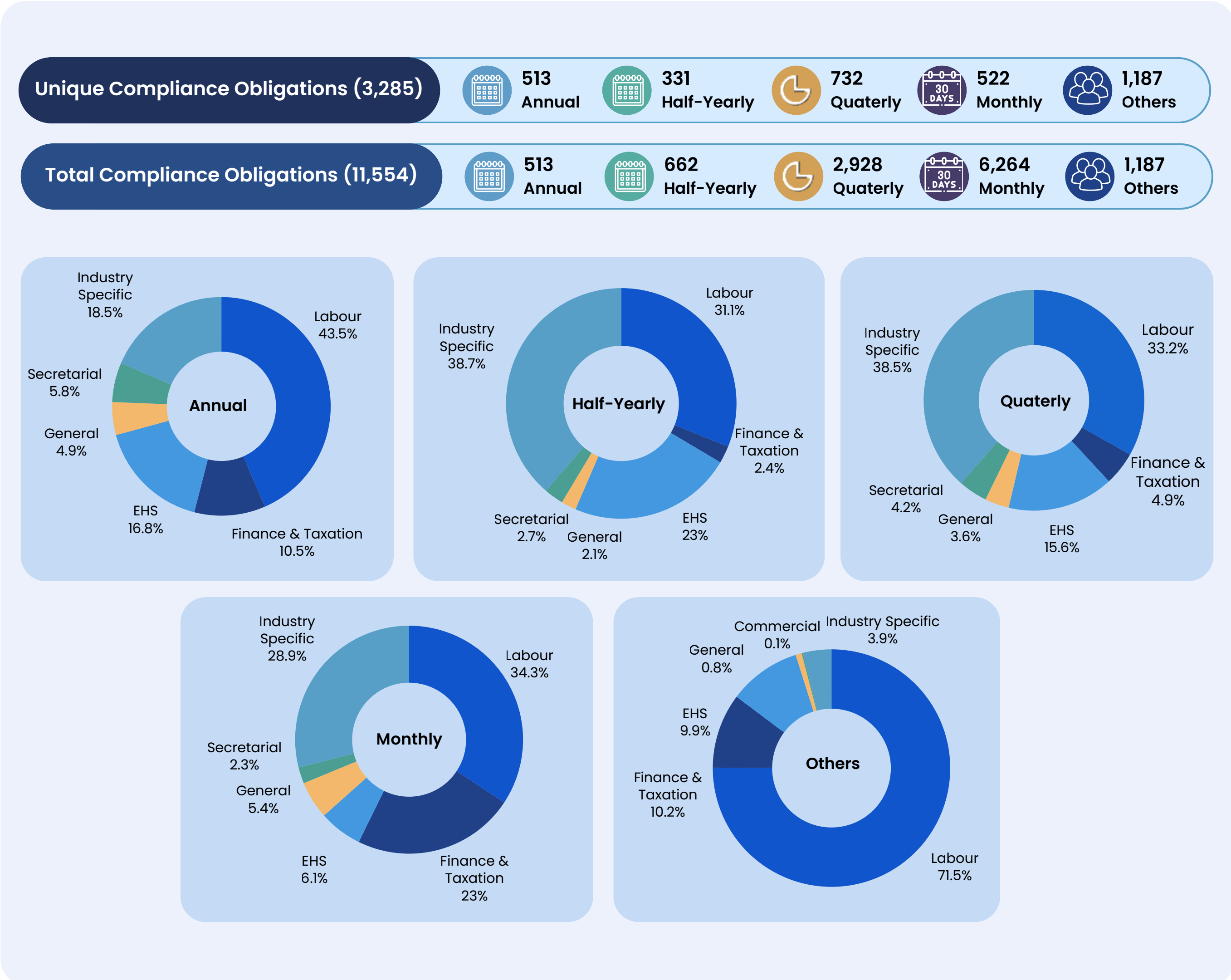
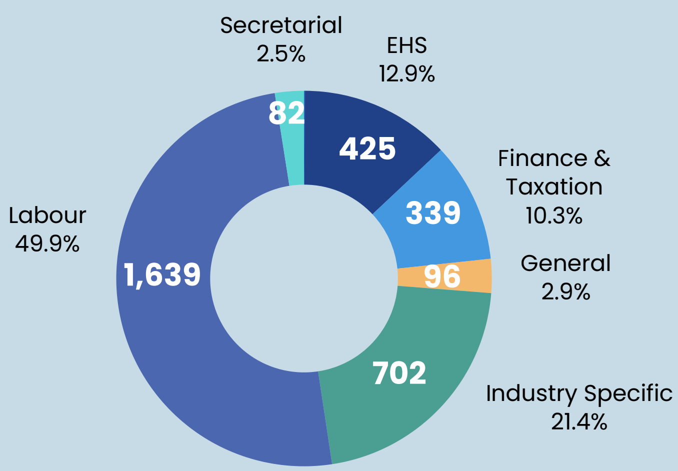


Fig 6: Category-wise compliances for a food processing sector establishment*



Data aggregates key locations of a typical multi-regional food processing firm, covering carry-forwarding locations in Chennai and Ludhiana, manufacturing locations in Hosur and Ludhiana, with a registered office in Telangana and corporate office in Gurugram

Labour

This category covers central and state labour laws governing employment conditions, social security, workplace safety, and employee welfare across the Company's manufacturing facilities, warehouses, and offices in Haryana, Tamil Nadu, and Punjab. As labour is a concurrent subject, compliance requirements arise under both central and state-specific frameworks, necessitating location-wise applicability assessment and continuous compliance with registrations, returns, statutory records, notices, and payment obligations.

A food processing company with multi-state operations is subject to extensive labour compliance administered by authorities such as State Labour Departments, EPFO, and ESIC. Obligations include maintenance of employee records and registers, timely payment of wages and statutory dues, filing of periodic returns, contract labour compliance, and implementation of workplace policies on safety, welfare, and non-discrimination. These requirements are recurring in nature and carry penal consequences, including monetary penalties and imprisonment, reflecting the regulatory intensity of labour governance in manufacturing operations.

Key legislations governing labour compliance in the food processing sector include:

- The Factories Act, 1948
- The Employees' Provident Funds & Miscellaneous Provisions Act, 1952
- The Employees' State Insurance Act, 1948
- The Payment of Wages Act, 1936
- The Minimum Wages Act, 1948
- The Payment of Gratuity Act, 1972
- The Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013

Transition from Labour Laws to a Labour Code Framework

At the time of preparation of this report, labour compliance for food processing companies was governed by a fragmented framework of numerous central and state legislations, each with its own set of registrations, filings, and enforcement authorities. However, with the introduction and subsequent notification of the four consolidated labour codes the Code on Wages, 2019, Industrial Relations Code, 2020, Occupational Safety, Health and Working Conditions Code, 2020, and Code on Social Security, 2020, India's labour law landscape is undergoing a structural transformation. These codes aim to subsume and rationalise 29 central labour laws into a simplified, harmonised framework, reducing multiplicity and enabling standardisation across states.

Under this new regime, most of the key legislations listed above including the Factories Act, 1948, Employees' Provident Funds and Miscellaneous Provisions Act, 1952, Employees' State Insurance Act, 1948, Payment of Wages Act, 1936, Minimum Wages Act, 1948, Payment of Bonus Act, 1965, Contract Labour (Regulation and Abolition) Act, 1970, and Maternity Benefit Act, 1961 have been subsumed within the respective codes. This consolidation is intended to streamline compliance requirements, introduce common definitions (such as "wages"), enable unified registrations and returns, and promote the use of digital compliance mechanisms. For food processing companies operating across multiple states, this marks a shift from law-by-law compliance to code-based, integrated compliance management.

However, it is important to note that certain legislations remain outside the ambit of the labour codes and continue to apply independently. Notably, the Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013 (POSH Act) has not been subsumed and continues to require separate compliance, including constitution of Internal Committees and adherence to reporting obligations.

As the labour codes move towards full implementation across states, businesses must navigate a transition phase—ensuring continued compliance with existing laws where the codes are not yet enforced, while simultaneously preparing their systems, processes, and technology infrastructure for the new, consolidated regime.

Secretarial

This category covers corporate governance, statutory reporting, financial disclosures, and internal management requirements under the Companies Act, 2013 and, where applicable, SEBI regulations. As a Private Limited Company with multi-state operations and a subsidiary structure, compliance is driven by central frameworks and is required to be maintained at the registered office and across operational units.

Secretarial compliance includes maintenance of statutory registers (members, charges, beneficial ownership), filing of periodic returns and financial statements, conduct of board and shareholder meetings, and related governance requirements. These obligations are recurring and documentation-intensive, with penalties including fines and, in certain cases, imprisonment, reflecting the regulatory focus on transparency and accountability.

Key legislations include:

- Companies Act, 2013 and related rules,
- SEBI Act, 1992, and
- SEBI (LODR) Regulations, 2015

Finance and Taxation

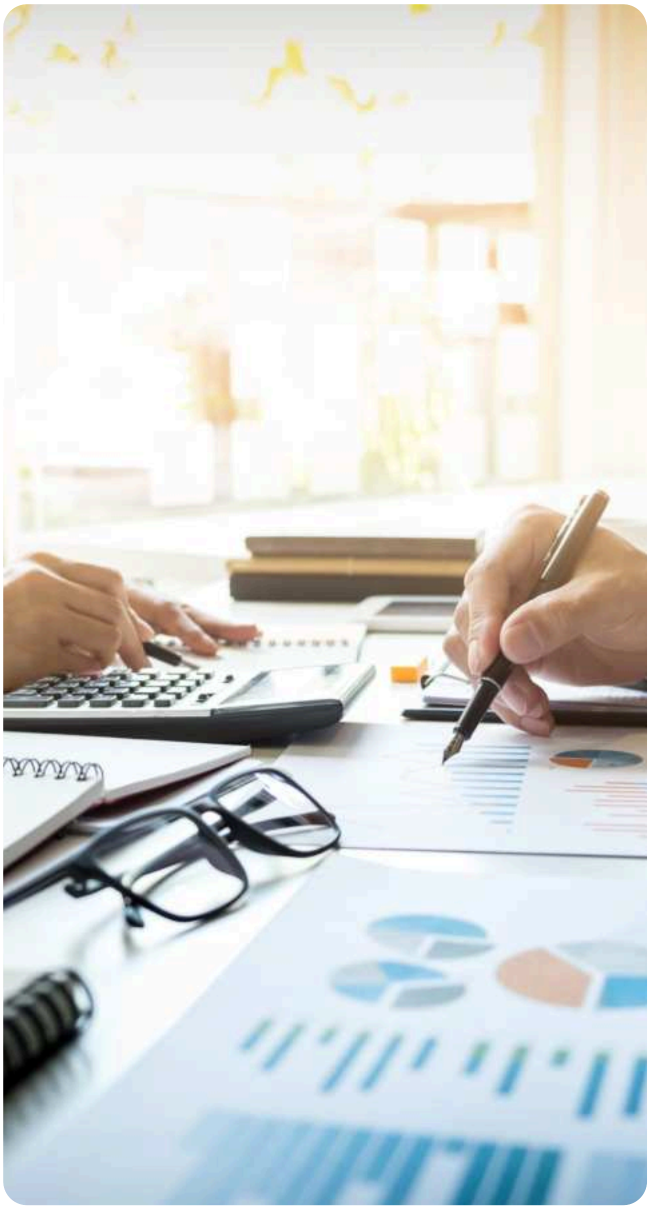
This category covers direct tax, indirect tax, and foreign exchange compliances governing tax reporting, financial records, and cross-border transactions. For a food processing company with multi-state operations, compliance is driven primarily by GST, Income Tax, and FEMA frameworks, requiring adherence across manufacturing units, warehouses, and offices.

Finance and taxation compliance includes GST registration, periodic filings (such as GSTR-1, GSTR-3B, and annual returns), tax payments, reconciliation statements, and maintenance of detailed records of production, supply, inventory, imports, and exports. It also covers income tax obligations along with FEMA-related reporting for foreign transactions.

These obligations are highly periodic and data-intensive, with strict timelines, digital reporting requirements, and penalties including interest, fines, and imprisonment in cases of non-compliance or misreporting, reflecting the high regulatory scrutiny over financial and tax governance.

Key legislations include:

- Income Tax Act, 1961,
- CGST Act, 2017 along with State GST laws,
- Foreign Exchange Management Act, 1999, and
- The Customs Act, 1962



Environment, Health & Safety (EHS)

This category covers environmental protection, waste management, and workplace safety obligations applicable to manufacturing and storage operations. For a food processing company operating across multiple states, compliance is governed by central environmental laws and state-specific regulations, requiring approvals, ongoing monitoring, and adherence to prescribed standards across facilities.

EHS compliance includes obtaining and maintaining regulatory approvals, operation and maintenance of pollution control systems, and adherence to emission and discharge limits. It also covers segregation, storage, handling, and disposal of various waste streams, along with maintenance of records and periodic reporting. Operational requirements extend to fire safety systems, inspections, and display of statutory notices. These obligations are continuous and operationally intensive, with significant penalties including monetary fines and, in certain cases, imprisonment for non-compliance, reflecting the high regulatory scrutiny over environmental and safety standards.

Key legislations include:

- Environment (Protection) Act, 1986 and allied Waste Management Rules
- Air Act, 1981
- Water Act, 1974
- Applicable state fire safety laws

Commercial

This category covers compliance requirements relating to intellectual property and lawful commercial operations, particularly the protection and regulation of trademarks used on branded food products. For a food processing company, these obligations are critical to ensuring brand integrity, authorised use of marks, and prevention of misleading representations in the market.

Commercial compliance includes registration and governance of trademarks, and filing of prescribed forms with the Trade Marks Registry governing their use. Non-compliance may result in significant penalties, including monetary fines and imprisonment, reflecting the regulatory importance of protecting intellectual property and maintaining transparency in commercial practices.

Key legislations include:

- Trade Marks Act, 1999
- Trade Marks Rules, 2017

General

This category covers cross-functional compliance requirements relating to product labelling, operational transparency, and regulatory reporting. For a food processing company, these obligations are primarily driven by the Legal Metrology framework and other general laws, applying across manufacturing, packaging, and distribution operations.

General compliance includes adherence to detailed packaging and labelling requirements along with prescribed standards for display, language, and format. It also covers restrictions on misleading declarations, pricing practices, and requirements for e-commerce disclosures. In addition, companies are required to furnish information and records to authorities under statistical and regulatory laws, and comply with operational directions relating to workplace safety and public health.

These obligations are continuous and highly granular, with frequent (including monthly and quarterly) requirements and penalties ranging from monetary fines to imprisonment in certain cases, reflecting the regulatory focus on consumer protection and transparency.

Key legislations include:

- Legal Metrology Act, 2009 and related rules
- Collection of Statistics Act, 2008
- Disaster Management Act, 2005

Industry Specific

This category covers core regulatory requirements governing food safety, quality, licensing, and consumer-facing operations under the Food Safety and Standards Act, 2006 and related regulations. For a food processing company operating across manufacturing, storage, and distribution units, compliance is continuous and operational in nature, applying across all stages of the value chain.

Industry-specific compliance includes obtaining and renewing FSSAI licenses, display of licenses and food safety information at premises, filing of periodic returns, and adherence to prescribed standards for hygiene, storage, processing, and product handling. It also extends to operational requirements such as display of Food Safety Boards, testing of food and water, maintenance of hygiene standards, and ensuring traceability and safety across distribution and last-mile delivery.

These requirements are frequent (monthly, quarterly, and annual) and operationally intensive, with penalties including significant monetary fines and, in certain cases, imprisonment, reflecting the high regulatory scrutiny on food safety and consumer protection.

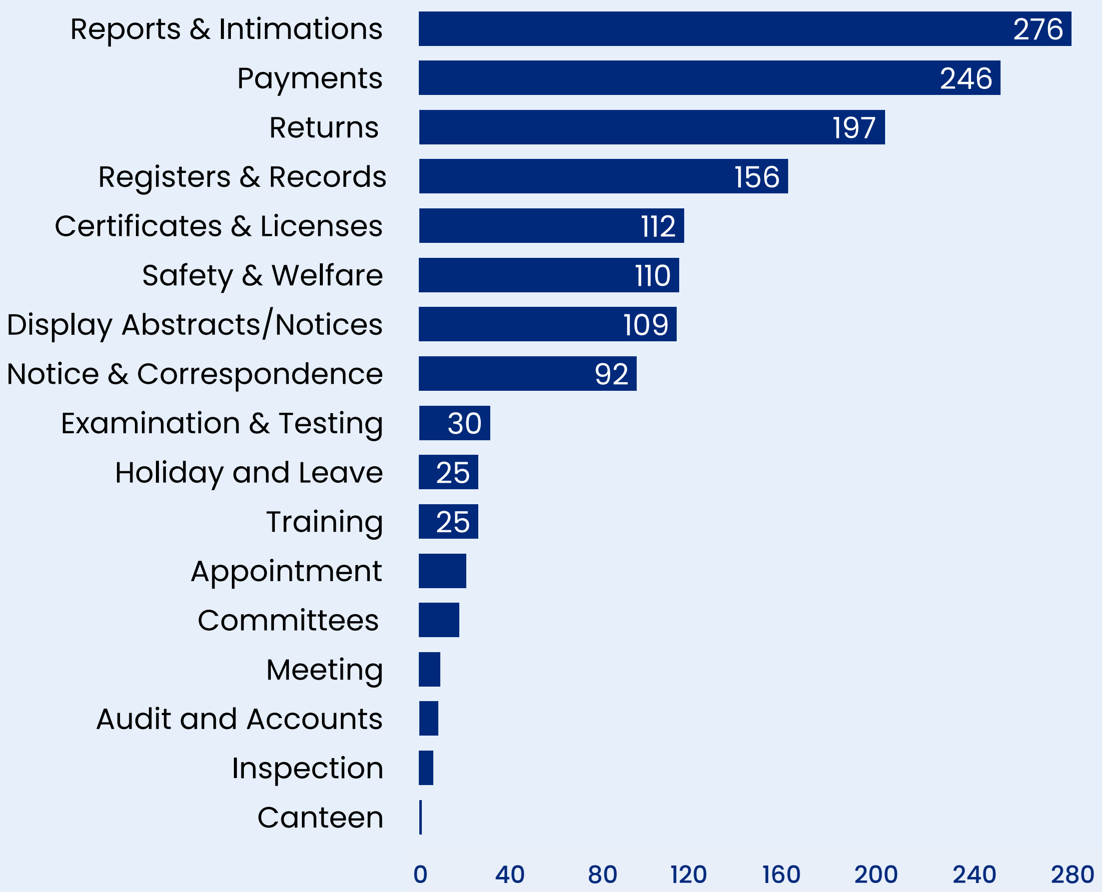
Key legislation includes:

- Food Safety and Standards Act, 2006 & associated regulations and guidelines

Types of Compliances

Having looked at the different categories of compliances, this section will look at the broad types in which such compliances are typically classified.

Fig 7: Type-wise Compliances for a Food Processing Industry Unit*



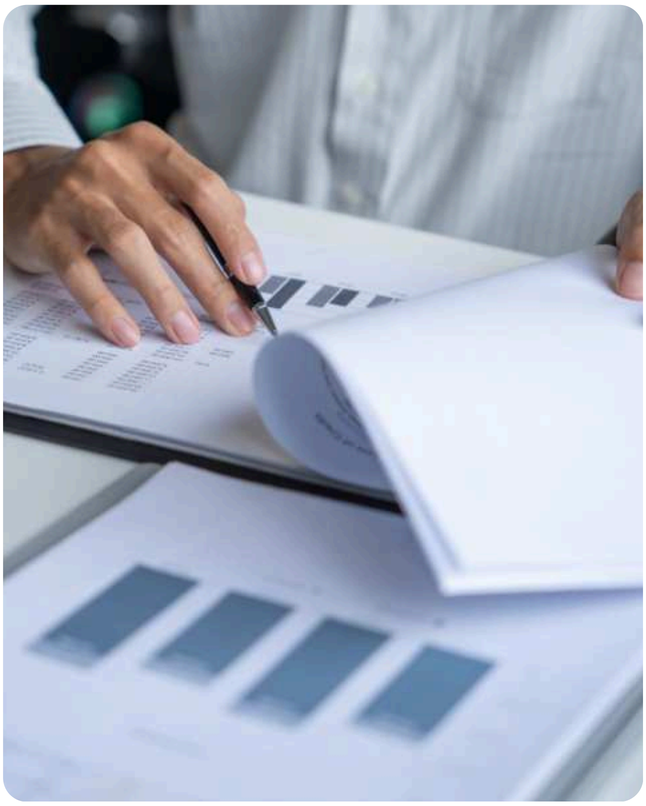
**Data aggregates key locations of a typical multi-regional food processing firm, covering carry-forwarding locations in Chennai and Ludhiana, manufacturing locations in Hosur and Ludhiana, with a registered office in Telangana and corporate office in Gurugram*

*****The remaining 1,846 out of the total 3,285 types of compliance fall under the 'Others' type of compliance. Others is a broad range of miscellaneous regulatory requirements applicable to the workplace or operations that do not fall under the other categories specifically.***

Appointments

This category covers statutory appointments required under labour, food safety & corporate laws to ensure operational compliance across manufacturing units and offices. These include designation of grievance redressal officers (such as under the HIV & AIDS Act and Transgender Persons Act), issuance of appointment letters to employees, and appointment of qualified personnel for specific operational roles.

Key operational appointments include Food Safety Supervisors under the Food Safety and Standards framework, designated electrical safety personnel under the Electricity Act, medical and welfare staff under factory laws, and Fire Safety Officers/Managers under state fire safety laws. In addition, companies are required to appoint key managerial and audit personnel such as internal auditors, statutory auditors, secretarial auditors, and company secretaries under the Companies Act, 2013. These obligations are role-specific and continuous, with non-compliance attracting penalties including fines and, in certain cases, imprisonment, reflecting the importance of accountability and safe operations.



Audit and Accounts

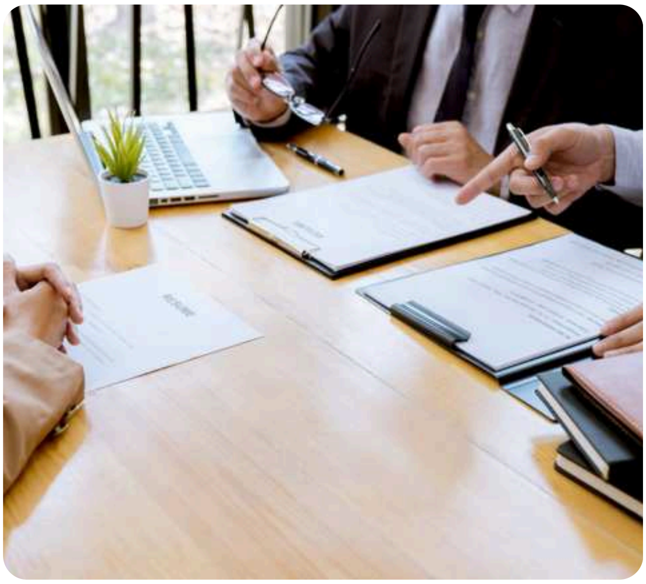
This category covers audit, financial reporting, and record-keeping obligations under food safety, labour, IT, consumer protection, and corporate laws. For a food processing company, these requirements ensure ongoing monitoring of operational systems, financial accuracy, and regulatory compliance across manufacturing units and offices.

Audit and accounting compliance includes periodic audits of food safety systems (GMP/GHP) under the Food Safety framework, annual audits of specific facilities such as canteens under factory laws, and self-audits for e-commerce practices to prevent misleading consumer interfaces. It also covers annual audits of data security practices under IT laws, maintenance of books of accounts, and filing of financial statements and audit reports under the Companies Act, 2013. These obligations are periodic and documentation-intensive, with strict timelines and penalties including fines and, in certain cases, imprisonment, reflecting the regulatory focus on transparency, consumer protection, and operational integrity.

Certificates and Licenses

This category covers statutory registrations, licenses, and approvals required for lawful operation of manufacturing units, warehouses, and offices. For a food processing company, these obligations arise under multiple laws including the Food Safety and Standards Act, 2006, the Central Goods and Services Tax Act, 2017 and State GST laws, the Factories Act, 1948, the Shops and Establishments Acts of respective states, the Contract Labour (Regulation and Abolition) Act, 1970, and applicable environmental and fire safety laws.

Compliance includes obtaining and maintaining GST registration and undertaking timely amendments, registration of shops and establishments and obtaining corresponding certificates, and securing and renewing FSSAI licenses. It also covers factory and contract labour registrations, including issuance, amendment, transfer, and duplication of licenses, as well as obtaining and renewing fire safety licenses under state fire laws and complying with waste management authorisations under environmental laws. These obligations are event-based and recurring, requiring continuous validity and timely updates upon changes in business particulars. Non-compliance may result in penalties including fines, cancellation of licenses, and in certain cases imprisonment, reflecting the critical role of licensing in ensuring lawful and regulated operations.



Committees

This category covers constitution and periodic reconstitution of statutory committees required under labour and workplace safety laws to ensure employee welfare, grievance redressal, and safe working conditions across manufacturing units and offices.

Committee-related compliance primarily arises under the Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013, which mandates constitution and periodic reconstitution of Internal Complaints Committees across all locations. In addition, under the Industrial Disputes Act, 1947 and applicable state rules, establishments are required to constitute and periodically reconstitute Works Committees and Grievance Redressal Committees. The Factories Act, 1948 and state factory rules further require constitution of Safety Committees in hazardous operations and Canteen Managing Committees where applicable. These obligations are event-based and periodic (ranging from 2 to 6 years), with non-compliance attracting penalties including fines and, in certain cases, imprisonment, reflecting the importance of structured governance mechanisms for workplace safety and employee welfare.

Display of Abstracts and Notices

This category covers statutory requirements for display of notices, certificates, abstracts, and safety information at workplaces and on product packaging or digital platforms to ensure transparency, employee awareness, and regulatory compliance. These obligations arise under multiple laws including the Human Immunodeficiency Virus and Acquired Immune Deficiency Syndrome (Prevention and Control) Act, 2017, the Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013, the Minimum Wages Act, 1948, the Child and Adolescent Labour (Prohibition and Regulation) Act, 1986, the Central Goods and Services Tax Act, 2017, the Legal Metrology Act, 2009, the Food Safety and Standards Act, 2006, the Environment (Protection) Act, 1986, the Electricity Act, 2003, and the Cigarette and Other Tobacco Products Act, 2003, along with applicable state laws such as Shops and Establishments Acts and holiday laws.

Compliance includes display of workplace policies (HIV/AIDS policy, POSH notices), statutory abstracts, wage and holiday information, registration certificates, and GST details at business premises. It also extends to product labelling and declarations under food safety and legal metrology laws, display of "No Smoking" notices and responsible persons, safety instructions, emergency contact details, and environmental data such as hazardous waste and emissions. These obligations are largely periodic and location-specific (monthly, quarterly, annual), requiring clear, legible, and accessible display in prescribed formats and languages. Non-compliance may result in penalties including fines and, in certain cases, imprisonment, reflecting the regulatory emphasis on transparency, consumer protection, and workplace safety.

Examination and Testing

This category covers periodic examination, inspection, and testing of equipment, utilities, and products to ensure safety, operational reliability, and regulatory compliance. These obligations arise primarily under the Food Safety and Standards Act, 2006 and related regulations, the Factories Act, 1948 and state factory rules, the Legal Metrology Act, 2009, and applicable safety standards.

Compliance includes periodic laboratory testing of food products and water samples through FSSAI-approved or NABL-accredited laboratories, as well as annual medical examination of food handlers to ensure hygiene and safety standards. It also covers testing and examination of critical equipment such as lifting machines, pressure vessels, ovens, and related machinery before use, after repairs, and at prescribed intervals by competent persons, along with maintenance of test certificates. Additionally, periodic verification and re-verification of weights, measures, and storage systems is required to ensure accuracy in commercial transactions. These obligations are largely periodic (annual, half-yearly, or event-based) and technical in nature, with non-compliance attracting penalties including fines and, in certain cases, imprisonment, reflecting the critical importance of safety, product quality, and operational integrity.

Holiday and Leave

Organisations are required to comply with statutory provisions relating to employee holidays, leave, and related records under laws such as the Factories Act, 1948, the Maternity Benefit Act, 1961, the Minimum Wages Act, 1948, the Representation of the People Act, 1951, and state-specific Shops and Establishments and holiday laws in Punjab, Tamil Nadu, Haryana, and Telangana. These laws mandate grant of weekly rest days, national and festival holidays, and paid leave including maternity, casual, and sick leave.

Employers must maintain prescribed records and comply with procedural requirements such as prior intimation, approvals, and documentation for leave and holiday management, including substituted holidays and leave schemes. Event-based obligations such as paid leave on polling days also apply. These requirements are periodic and operational, with non-compliance attracting penalties including fines and, in certain cases, imprisonment.

Inspection

Organisations are required to conduct periodic inspections of electrical systems and fire safety equipment to ensure safe operations and compliance with statutory requirements. These obligations arise primarily under the Electricity Act, 2003 and the Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations, 2023, along with applicable safety standards.

Compliance includes periodic inspection and testing of fire extinguishers, including quarterly checks of critical components, and annual inspection of electrical installations by qualified Electrical Safety Officers for facilities exceeding prescribed load thresholds. These inspections must be carried out at defined intervals and in accordance with prescribed technical standards. The requirements are periodic (quarterly, half-yearly, and annual) and critical in nature, with non-compliance attracting significant penalties including fines and, in certain cases, imprisonment, reflecting the importance of electrical and fire safety in industrial operations.

Meeting

Organisations are required to conduct periodic meetings under labour, environmental, and corporate laws. Under the Industrial Disputes Act, 1947 and applicable state rules, Works Committee meetings must be held at prescribed intervals (monthly or quarterly) to facilitate engagement between employers and employees. Under the Environment (Protection) Act, 1986 and Bio-Medical Waste Management Rules, 2016, committees must meet at least once every six months to review waste management practices.

In addition, under the Companies Act, 2013 and Secretarial Standards, companies are required to hold Annual General Meetings, periodic Board meetings, and ensure compliance with procedural requirements relating to notice, conduct, and documentation of meetings. These obligations are periodic in nature and critical for governance, compliance oversight, and stakeholder engagement, with non-compliance attracting penalties including fines and, in certain cases, imprisonment.

Notice and Correspondence

Organisations are required to issue statutory notices, obtain declarations, and communicate prescribed information to employees, regulators, and other stakeholders. Under labour laws such as the Payment of Gratuity Act, 1972, Employees' Provident Funds and Miscellaneous Provisions Act, 1952, Employees' State Insurance Act, 1948, and Maternity Benefit Act, 1961, employers must obtain employee particulars (e.g., Forms 1, 1A, 11), issue gratuity notices, and communicate employment conditions, benefits, leave decisions, and disciplinary actions. Industrial employment laws and state rules also mandate notices relating to termination, suspension, closure, and shift changes.

Workplace protection laws, including the Sexual Harassment of Women at Workplace Act, 2013 and the HIV and AIDS Act, 2017, require communication of complaints, enquiry outcomes, and policy information. Environmental laws such as the Environment (Protection) Act, 1986 mandate intimation of accidents to regulators, while the Consumer Protection Act, 2019 requires disclosures in advertisements and endorsements. These obligations are largely event-driven and documentation-intensive, with penalties including fines and, in certain cases, imprisonment.

Payments

Organisations are required to make statutory payments to employees and government authorities within prescribed timelines. This includes payment of wages, bonus, gratuity, leave encashment, and other dues at the time of resignation, termination, retirement, or death, in accordance with laws such as the Payment of Wages Act, 1936, Minimum Wages Act, 1948, Payment of Gratuity Act, 1972, and the Factories Act, 1948. Timely payment of employee dues, including in cases of termination or closure, is a key compliance requirement across central and state labour laws.

Statutory payments also include deposit of GST under the Central Goods and Services Tax Act, 2017, contributions under the Employees' Provident Funds and Miscellaneous Provisions Act, 1952 and Employees' State Insurance Act, 1948, and payments towards labour welfare funds and insurance premiums. These obligations are periodic (monthly/annual) and event-based, with delays attracting interest, penalties, and, in certain cases, prosecution.

Registers and Records

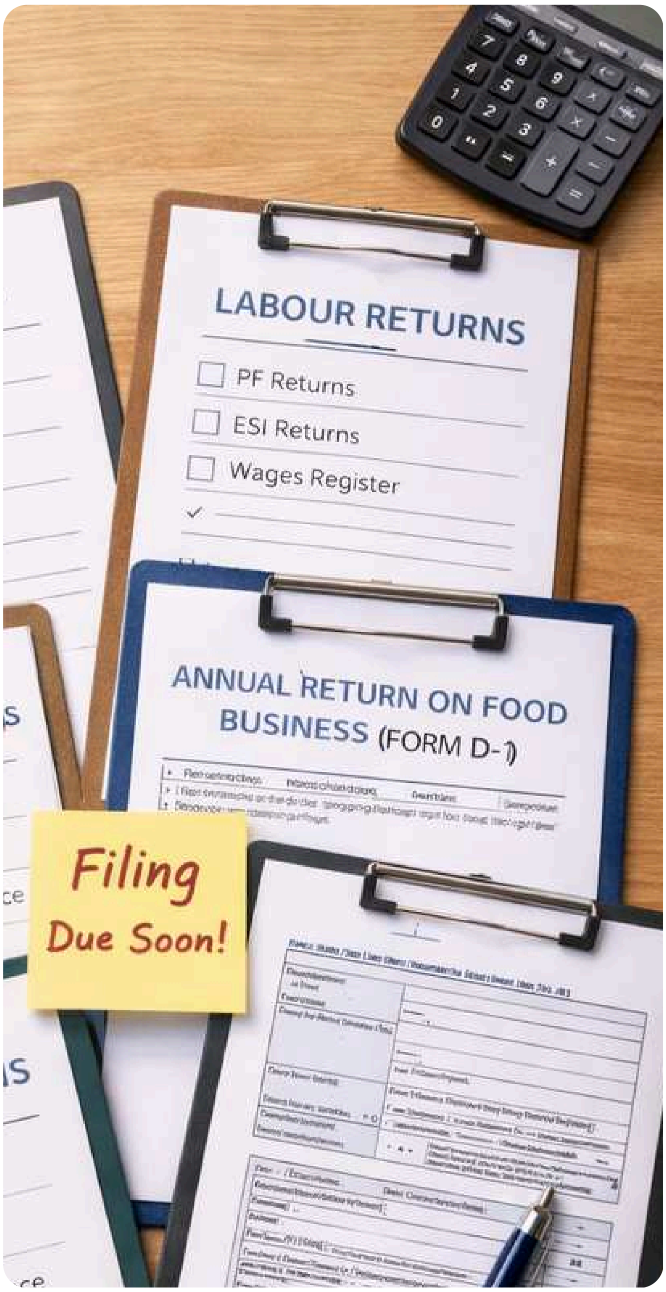
Organisations are required to maintain statutory registers and records under labour, safety, environmental, industry-specific, and corporate laws to ensure compliance and audit readiness. This includes registers relating to wages, attendance, deductions, fines, employee details, maternity benefits, apprentices, and accidents under laws such as the Minimum Wages Act, 1948, Equal Remuneration Act, 1976, Maternity Benefit Act, 1961, Employees' Compensation Act, 1923, and the Apprentices Act, 1961. These must be maintained in prescribed formats, updated regularly, and preserved for specified periods.

Additional records include inspection logs, visit books, fire and electrical safety registers, and food safety and export-related records under the Electricity Act, 2003, Food Safety and Standards Act, 2006, and Foreign Trade (Development and Regulation) Act, 1992. These are subject to inspection, with non-compliance attracting penalties.

Report and Intimation

Food processing establishments are required to submit statutory reports, returns, and intimations to regulatory authorities under tax, labour, environmental, and industry-specific laws to ensure transparency and regulatory oversight. Under the Central Goods and Services Tax Act, 2017 and State GST laws, businesses must file returns such as GSTR-10, submit applications for cancellation or modification of registration, and furnish related declarations within prescribed timelines.

Labour laws including the Employees' Provident Funds and Miscellaneous Provisions Act, 1952, Employees' State Insurance Act, 1948, Payment of Gratuity Act, 1972, and state Shops and Establishments Acts require employers to intimate authorities regarding changes in establishment details, employee particulars, working conditions, closure of operations, and submission of prescribed forms and returns. Environmental laws such as the Air (Prevention and Control of Pollution) Act, 1981 and Water (Prevention and Control of Pollution) Act, 1974 mandate immediate reporting of accidents, excess emissions, or unforeseen events to multiple authorities. Industry-specific requirements under the Food Safety and Standards Act, 2006 also require communication of operational decisions and compliance responsibilities. These obligations are time-bound and non-compliance attracts monetary and penal consequences.



Returns

Food processing establishments are subject to extensive return filing obligations under tax, labour, environmental, and industry-specific laws to ensure continuous regulatory oversight and compliance. Under the Central Goods and Services Tax Act, 2017 and State GST laws, businesses must file periodic returns such as GSTR-1, GSTR-3B, GSTR-9, and GSTR-9C, including reconciliation statements and transaction-level disclosures within prescribed timelines. These filings form the core of indirect tax compliance and enable monitoring of tax liability and input credit.

Labour laws such as the Employees' Provident Funds and Miscellaneous Provisions Act, 1952, Employees' State Insurance Act, 1948, Minimum Wages Act, 1948, and state-specific laws require periodic and annual returns relating to wages, contributions, and employee records. Environmental regulations under the Environment (Protection) Act, 1986 and allied rules mandate submission of returns on emissions, waste handling and environmental performance. Industry-specific requirements under the Food Safety and Standards Act, 2006 require annual returns (e.g., Form D-1) on food operations, while laws such as the Foreign Exchange Management Act, 1999 mandate filings like Form FLA for foreign investments. These returns are time-bound and non-compliance attracts financial penalties and, in certain cases, penal consequences.

Training

Food processing establishments must conduct periodic training and awareness programmes under food safety, labour, and safety laws to ensure compliance and operational readiness. Under the Food Safety and Standards Act, 2006 (FoSTaC requirements), Food Safety Supervisors must provide regular onsite training to food handlers on hygiene and safe practices.

Additionally, laws such as the Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013 and the HIV and AIDS Act, 2017 require orientation, workshops, and capacity-building programmes for employees, Internal Committee members, and Complaints Officers.

Technical and safety regulations, including the Electricity Act, 2003, mandate training of personnel handling operations and maintenance, while fire safety laws require periodic training of designated safety personnel. These requirements ensure workforce awareness, safety compliance, and effective regulatory adherence.

Safety and Welfare

Food processing establishments must implement safety and welfare measures under labour, factory, fire, and electrical laws to ensure safe operations. This includes installation and maintenance of fire safety systems (extinguishers, hydrants, exits), proper placement and upkeep of equipment, and periodic fire drills in line with the Factories Act, 1948, State laws, and Indian Standards. Electrical safety under the Electricity Act, 2003 requires provision of protective equipment and adherence to prescribed safety practices.

Employers must also provide essential welfare facilities such as first-aid, medical care, sanitation, drinking water, and creches under the Factories Act, Employees' State Insurance Act, 1948, and Maternity Benefit Act, 1961.

Workplace safety is further supported through training, awareness programmes, and internal policies under applicable laws. These requirements ensure employee well-being, workplace safety, and regulatory compliance.

Others (General/Operational)

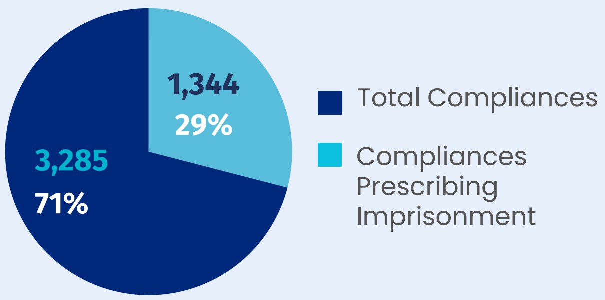
This category captures residual and cross-functional compliance obligations that do not fall within defined classifications but remain critical for lawful operations. These include obligations relating to workplace conditions, non-discrimination, statutory disclosures, and operational safeguards under laws such as the Child and Adolescent Labour (Prohibition and Regulation) Act, 1986, Transgender Persons (Protection of Rights) Act, 2019, Environment (Protection) Act, 1986, and Companies Act, 2013.

Such compliances typically involve adherence to general statutory standards—prohibition of child labour, implementation of equal opportunity policies, safe waste handling practices, maintenance of basic workplace infrastructure, and display or communication of prescribed information. Though often not tied to specific filings or forms, these obligations are continuous in nature and carry significant regulatory risk, including monetary penalties and imprisonment in certain cases, reflecting their importance in ensuring ethical, safe, and compliant business operations.

State of Criminalisation

A detailed examination of India's business laws reveals that imprisonment has long been used as a mechanism to regulate entrepreneurs. The report Jailed for Doing Business, co-authored by Gautam Chikermane and Rishi Agrawal, sheds light on the extent and severity of imprisonment risks faced by business owners in the country. Out of the 1,536 laws governing business operations in India, over half (54.9%) include provisions for imprisonment. Additionally, among the 69,233 compliance requirements within these laws, nearly two out of five (37.7%) impose jail terms for non-compliance.

Fig 8: Compliances with Imprisonment



The report emphasises that many of these provisions penalise procedural missteps and technical lapses rather than intentional misconduct or serious offences. This legal framework fosters an environment of distrust and rigidity, creating unnecessary barriers to business growth, innovation, and job creation in the economy.

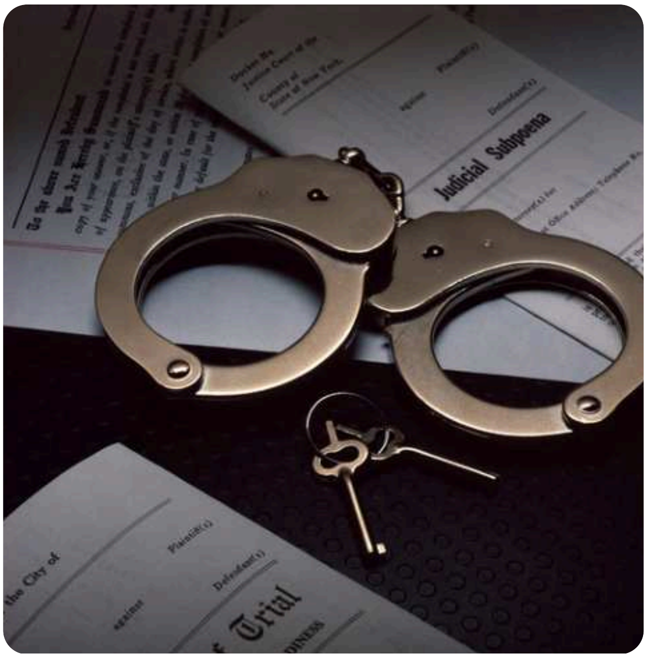


Fig 9: Imprisonment Clauses across Levels of Compliance

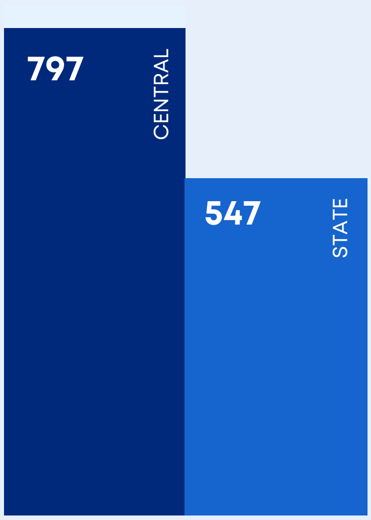
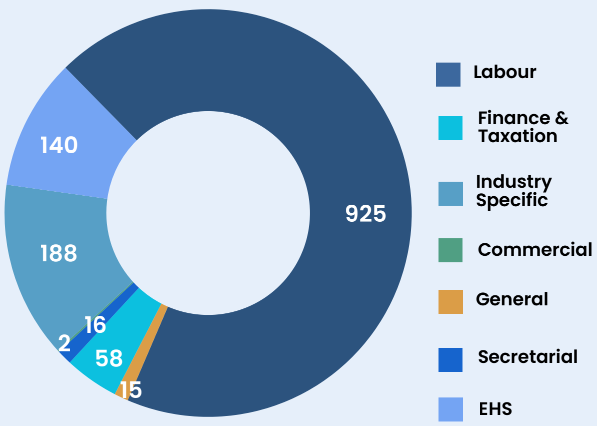


Fig 10: Distribution of imprisonment clauses across compliance categories



**Data aggregates key locations of a typical multi-regional food processing firm, covering carry-forwarding locations in Chennai and Ludhiana, manufacturing locations in Hosur and Ludhiana, with a registered office in Telangana and corporate office in Gurugram*

Regulatory Changes in the Food Processing Sector

Central Level – Food Safety and Standards Authority of India (FSSAI)

In 2025 alone, there were as many as 12,973 updates w.r.t compliance requirements. These regulatory changes are notified on over 3,756 union, state, and local government websites in the form of notifications, directions, circulars, advisories, orders, amendments, and so on. More often than not, these regulatory updates pertain to crucial changes in procedures, dates, penalties, calculations and applicable duties, among others.

During the period from March 2025 to February 2026, the Food Safety and Standards Authority of India (FSSAI) issued **61 legal and regulatory updates** affecting food manufacturers, processors, importers, distributors, and other Food Business Operators (FBOs). These updates included amendments to existing regulations, draft regulations for stakeholder consultation, compliance advisories, enforcement directions, product standard revisions, packaging requirements, and licensing-related procedural changes.

These regulatory developments primarily relate to licensing and registration, packaging standards, labelling and claims, product-specific standards, enforcement mechanisms, compliance reporting, and food safety monitoring.

During the last 12 months, the Food Safety and Standards Authority of India (FSSAI) introduced a series of regulatory amendments and compliance directions affecting licensing, packaging, labelling, product standards, imports, and enforcement oversight. Draft amendments to the Food Safety and Standards (Licensing and Registration of Food Businesses) Regulations, 2011 proposed revisions to procedures for grant, renewal, and management of licences applicable to manufacturing, storage, and distribution units. The Food Safety and Standards (Packaging) First Amendment Regulations, 2025 and related draft amendments introduced revised standards for food contact materials, including conditions for use of recycled PET (rPET), along with enhanced testing and certification requirements. Amendments to the Food Safety and Standards (Labelling and Display) Regulations, 2025 revised labelling requirements for packaged foods, restricted the use of certain claims such as "100%" where non-compliant, issued clarifications for specific products including honey and tea, and extended enforcement timelines for select provisions. Further updates under the Food Products Standards and Food Additives Regulations revised standards across multiple food categories, including alcoholic beverages, introduced the Ayurveda Aahara category, and notified enforcement of updated standards for products such as meat sausages and dairy analogues. The Food Safety and Standards (Import) First Amendment Regulations, 2025 revised procedural requirements for import clearance and documentation. In addition, FSSAI issued multiple enforcement advisories and inspection drives covering spices, dairy products, fruits, and packaged foods, and strengthened compliance reporting through standardized formats, scrutiny of annual returns, and directions for display of the Food Safety Connect mobile application to facilitate consumer reporting. Collectively, these updates focused on strengthening licensing procedures, material safety standards, product classification, labelling controls, import oversight, and digital compliance monitoring across food business operators.

Ministry of Food Processing Industries (MoFPI)

During the period May 2025 to December 2025, the Ministry of Food Processing Industries (MoFPI) issued **11 regulatory and policy updates** relating to production-linked incentives, infrastructure development schemes, GST rationalisation measures, cold chain development, micro-enterprise formalisation, Farmer Producer Organisation (FPO) support, and regulatory clarifications affecting the food processing sector.

These updates primarily concern policy implementation, financial incentives, scheme restructuring, and compliance-linked benefits for food processing units.

The most significant development was the notification and operational clarification of the Production Linked Incentive (PLI) Scheme for the Food Processing Industry, which sets out eligibility conditions, incentive calculations, and reporting requirements linked to incremental sales and value addition. Updates under the Pradhan Mantri Kisan Sampada Yojana (PMKSY) and revised guidelines for the Integrated Cold Chain and Value Addition Infrastructure Scheme clarified compliance and approval processes for infrastructure projects, including cold storage and supply chain facilities. Multiple notifications relating to the Pradhan Mantri Formalisation of Micro Food Processing Enterprises (PMFME) Scheme and FPO empowerment strengthened formalisation and aggregation mechanisms within the supply chain. In addition, communications on GST simplification for processed foods and advisories regarding fraudulent scheme advertisements were issued to ensure tax clarity and regulatory transparency. Collectively, these updates primarily addressed incentive-linked manufacturing expansion, infrastructure compliance, structured scheme implementation, and tax-related clarity within the food processing sector.

Ministry of Consumer Affairs, Food & Public Distribution

Between March 2025 and February 2026, the Ministry of Consumer Affairs, Food & Public Distribution (through the Department of Consumer Affairs) issued **58 legal updates** impacting the FMCG sector, primarily focusing on Legal Metrology compliance and commodity regulation. Key developments included amendments to the Legal Metrology (Packaged Commodities) Rules, 2011 and the Legal Metrology (General) Rules, introducing revised requirements for declarations on pre-packaged goods, verification and stamping of weighing and measuring instruments, and compliance obligations for manufacturers and packers. Draft amendments relating to Government Approved Test Centres were also issued. In addition, multiple notifications addressed reallocation of sugar export quotas and amendments to wheat stock limits under the Essential Commodities framework, directly affecting procurement, storage, and export planning for food businesses. Collectively, these updates strengthened quantity declaration standards, compliance verification mechanisms, and regulatory oversight over essential food commodity distribution and trade.

An example on how this challenge can be fixed

The Food Safety and Standards Authority of India (FSSAI) has officially fixed July 1 as the annual enforcement date for amendments related to food labelling and display regulations.

In January 2025, FSSAI announced that any amendments to the Food Safety and Standards (Labelling and Display) Regulations, 2020 will come into force on July 1 each year. The rule also provides a minimum transition period of 180 days from the date of notification for industry to comply with the new requirements.
The objective is to give predictability to food businesses, especially since packaging and labels are often printed in large batches and sudden regulatory changes can create operational challenges.

This approach could serve as a regulatory best practice for other types of regulatory updates as well. Establishing standardised implementation dates for broader food safety and operational regulations can improve regulatory certainty, reduce compliance disruptions for industry, and enable businesses to plan transitions more efficiently.

Compliance Challenges for Food Processing Sector

India's food processing sector is a critical sunrise sector, poised to reach half a trillion dollars by 2025-26. The sector spans a wide range of activities, including grain milling, dairy processing, meat and poultry, seafood, fruits and vegetables, edible oils, beverages, packaged foods, and ready-to-eat products. While the sector has been prioritised under various government initiatives such as Production Linked Incentive (PLI) schemes and infrastructure development through mega food parks, it continues to face substantial compliance challenges arising from complex regulatory framework, stringent safety standards, state-level variations, and evolving consumer protection norms.

Food processing operates within a multi-layered framework involving central bodies such as the Food Safety and Standards Authority of India (FSSAI), State Food and Drug Administrations (FDAs) and export councils such as APEDA. The shift from reactive inspection to proactive digital surveillance has introduced significant operational hurdles for Food Business Operators (FBOs).

Compliance obligations extend across food safety, quality standards, environmental laws, labour regulations, taxation, packaging and labelling norms, trade and export controls, and sector-specific licensing requirements. One of the most significant challenges is the absence of a unified, centralised compliance framework, which requires businesses to navigate hundreds of overlapping, frequently changing regulatory requirements.

The following analysis details the primary compliance challenges facing the sector in 2026, many of which align with the regulatory complexities identified in recent industry surveys on the Ease of Doing Business in India.

1

Overlapping Regulatory Jurisdictions

India's food compliance system is managed by several different bodies, including FSSAI, BIS, AGMARK, and the Ministry of Ayush. Because there is no centralized single-window system, food processors must navigate a complex web of overlapping rules. While FSSAI is the primary regulator, products like honey, ghee, and packaged water often require additional mandatory certifications from BIS or AGMARK. This dual jurisdiction leads to redundant testing, forcing businesses to verify the same product against two different sets of standards, which increases operational costs.

2

Challenges in State-Level Enforcement

A significant gap exists between national rule-making and local enforcement. FSSAI sets uniform standards for the entire country, but state departments handle licensing, inspections, and legal actions. Differences in digital tools, lab access, and staff training lead to inconsistent interpretations of the law. Consequently, a production process or label accepted in one state may be rejected in another, making it difficult for companies to maintain standard operations across state lines.

3

Regulatory Uncertainty and Frequent Amendments

Food safety regulations in India change rapidly to keep pace with new scientific data and international trade standards. While this responsiveness is important, the sheer volume and frequency of these updates create a heavy burden for businesses.

There is no single source for these updates. Food business operators must constantly monitor multiple government platforms, including the FSSAI, the Department of Consumer Affairs, and the Legal Metrology Department. Requirements for labeling, weight specifications, and processing aids change often. Missing even a single update can lead to immediate non-compliance during a regulatory audit.

This constant change is especially difficult for MSMEs, which often lack specialized legal or quality assurance teams. These smaller businesses struggle to track and implement new rules in real-time. As a result, there is a compliance lag where the business cannot keep up with the law. This delay increases the risk of financial penalties, license suspensions, and expensive product recalls.

4

Infrastructure Gaps & High-Risk Scrutiny

In the food processing sector, compliance depends heavily on physical infrastructure, such as cold storage, laboratories and logistics. Inadequate facilities often lead to regulatory non-compliance, especially as the government moves toward tech-driven surveillance and evidence-based inspections.

High-risk categories including meat, dairy, seafood, and ready-to-eat products face the strictest oversight due to their perishability. Regulators now require end-to-end cold chain integrity. This means businesses must prove uninterrupted temperature control from the moment raw materials are sourced until the final product is distributed.

Modern protocols require tamper-proof, digital sensors that provide real-time and historical data. Any temperature deviation, however brief, can lead to failed inspections or license conditions. For smaller businesses using manual logs or older cold rooms, upgrading to these sensor-based systems is a major financial and technical challenge. There is an increasing requirement for frequent testing through laboratories accredited by the National Accreditation Board for Testing and Calibration Laboratories (NABL). While NABL testing is more reliable, it is also more expensive and time-consuming. In regions with few accredited labs, delays in receiving test reports can stall product releases, increase storage costs, and disrupt supply chains.

Infrastructure gaps are even more pronounced in smaller cities and semi-rural industrial clusters, where access to accredited laboratories, cold-chain logistics providers, and certified equipment vendors remains limited. As a result, food processors are often compelled to rely on distant facilities, increasing transportation risks and compliance latency.

Regulatory scrutiny has also intensified following the introduction of new and revised product-specific standards, particularly for processed meats, enforced from early 2026. These standards prescribe precise ingredient compositions, protein-to-fat ratios, permissible additives, and microbiological limits. Compliance is no longer limited to end-product testing; regulators now assess process validation, raw material sourcing, and in-line quality controls.

Aligning with these standards frequently necessitates re-engineering formulations, recalibrating machinery, upgrading hygiene infrastructure, and retraining operational staff for existing meat processors. In many cases, older production lines are incompatible with revised requirements, forcing capital-intensive retrofitting or partial shutdowns. The costs associated with compliance are further amplified by the need for repeated validation studies and shelf-life assessments to satisfy regulatory expectations.

5

Environmental, Waste Management & EHS Compliance

Food processing plants generate significant amounts of organic waste, wastewater, and packaging materials. Following environmental laws is mandatory and strictly monitored by both central and state pollution boards.

Smaller units often lack in-house waste treatment facilities, while larger processors face challenges in harmonising environmental compliance across multiple sites. Occupational health and safety compliance is equally critical, particularly in facilities involving heavy machinery, refrigeration systems, chemicals, and repetitive manual labour.

6

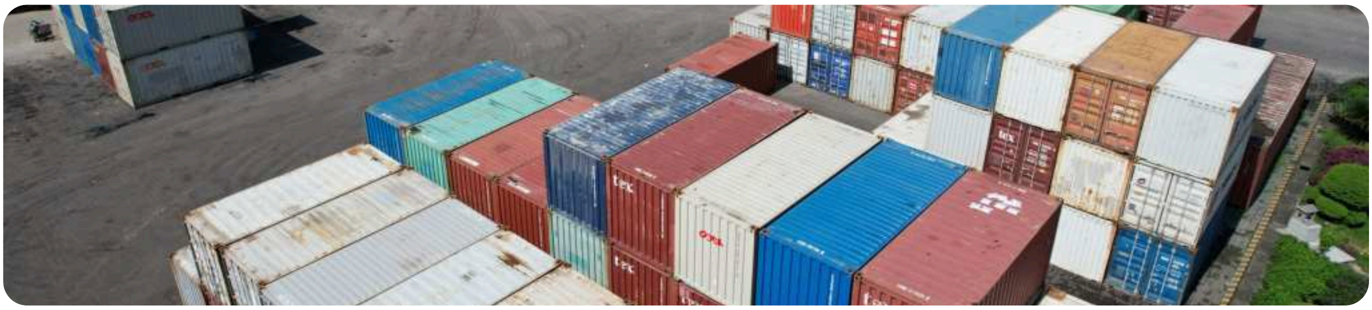
Export Compliance & Technical Barriers to Trade

Meeting Indian standards is only the first step for companies exporting food. International markets like the EU and the US often have different and much stricter rules. This gap between domestic and foreign standards creates significant hurdles for Indian exporters.

Indian food exports are frequently rejected at foreign borders because of Maximum Residue Limits (MRLs). International regulators have very low tolerance for pesticides and heavy metals, often much lower than FSSAI's domestic limits. In early 2026, the EU introduced even tighter MRLs for specific items like spices (turmeric, cumin, and chili), meaning trace amounts that are legal in India can lead to a total shipment ban or blacklisting in Europe.

With the 2025-26 push toward sustainable packaging, FSSAI has reclassified food-grade packaging as Critical in inspection checklists. Manufacturers must now provide a Certificate of Conformity from NABL-accredited labs for all contact materials, adding another layer of recurring costs.

These differences in rules act as Technical Barriers to Trade. To succeed, exporters must invest in high-end testing and strictly follow the laws of the destination country, not just the laws of India. A single failed test can result in millions of rupees in losses and permanent damage to a brand's international reputation.



7

Ambiguous Applicability and Strict Liability Risks

A major challenge for food businesses is that the rules change depending on the context. Unlike industries with a single set of rules, food compliance is a moving target based on several variables:

- Scale of Operations: Annual turnover, daily processing capacity, and the number of employees.
- Product Risk: Whether the food is considered high-risk, a novel food, or contains specific additives.
- Business Model: Whether the product is for local sale, interstate trade, or export.

Determining which category a business falls into often requires a legal expert rather than a simple checklist. This is especially difficult for companies that run multiple production lines under one license. Because the rules are spread across many different circulars, FAQs, and advisories, businesses are often found non-compliant not because they ignored the law, but because they interpreted it differently than an inspector did.

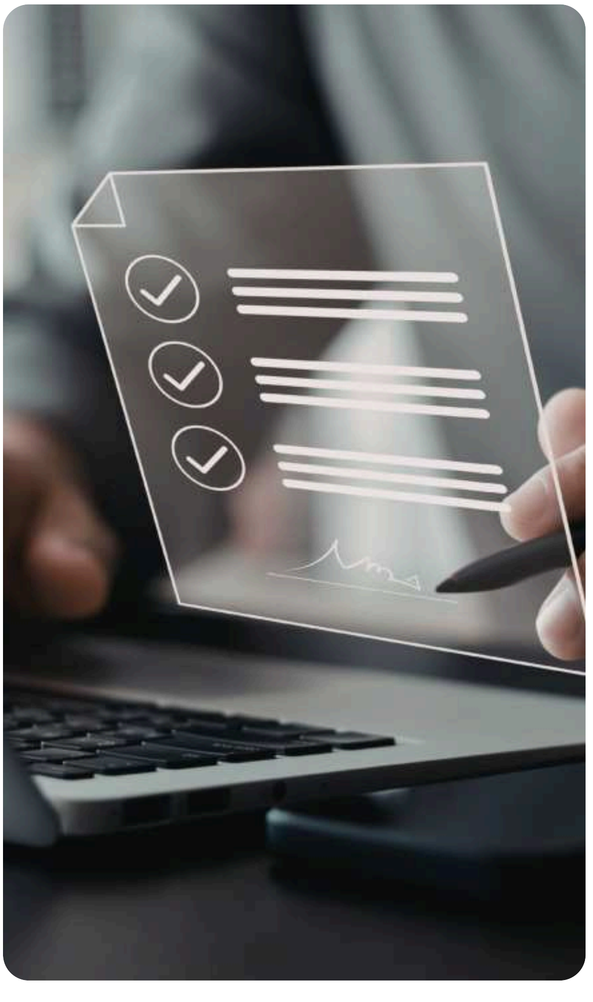
The compliance risk arising from ambiguous applicability is significantly amplified by the strict liability framework underpinning food safety regulation in India. Food safety laws impose liability irrespective of intent, negligence, or absence of mens rea. Consequently, Food Business Operators may be held legally accountable for violations even when lapses originate outside their direct control.

Enforcement mechanisms under food safety laws empower regulators to impose swift and proportionate sanctions, including monetary penalties, suspension or cancellation of licenses, mandatory recalls, and initiation of criminal proceedings in serious cases. Given the essential nature of food supply and public health considerations, enforcement thresholds are intentionally low, and regulatory discretion is exercised conservatively in favour of consumer safety.

Recommendations for Enabling Ease of Compliance

1 Foster collaborative engagement with regulatory and industry stakeholders

Active engagement with regulatory authorities and industry associations can significantly enhance regulatory clarity and compliance readiness in the food processing sector. Food business operators can benefit from participating in industry bodies, policy consultations, and stakeholder forums organised by authorities such as the Food Safety and Standards Authority of India (FSSAI), Ministry of Food Processing Industries, and export promotion councils. Such engagement facilitates early awareness of regulatory updates, enables constructive industry feedback on emerging standards, and promotes harmonisation of food safety practices across the sector.



2 Maintain a Comprehensive Compliance Checklist

Developing and maintaining a detailed compliance checklist tailored to food processing operations can help streamline adherence to regulatory requirements. This checklist should cover central and state-level obligations under food safety laws, environmental regulations, labour laws, packaging and labelling requirements, taxation laws, and local licensing frameworks. Categorising obligations into time-based filings (such as license renewals and periodic returns), event-based requirements (such as product approvals, expansion approvals, or changes in formulation), and continuous obligations (such as hygiene standards, quality control, and record maintenance) can improve monitoring and accountability. For companies operating multiple manufacturing units across states, maintaining a consolidated compliance matrix can help ensure consistency across locations.

3 Proactively Track and Respond to Regulatory Changes

The food processing industry is subject to frequent regulatory updates relating to food standards, labelling requirements, permissible additives, packaging norms, and import regulations. Companies should institutionalise systems to monitor and interpret notifications issued by regulatory bodies such as the Food Safety and Standards Authority of India, the Bureau of Indian Standards, the Ministry of Consumer Affairs (Legal Metrology Division), and the Ministry of Environment, Forest and Climate Change. Continuous monitoring of amendments to food safety regulations and packaging rules is particularly important as food business operators are legally responsible for ensuring that products manufactured, stored, distributed, and sold comply with prescribed safety standards.

4 Implement Due Diligence with a Focus on Sector-Specific Risk

Due diligence in the food processing sector should extend beyond conventional legal compliance to include food safety risk assessments, supplier verification, and traceability mechanisms across the supply chain. Since food manufacturers are responsible for ensuring that products meet safety standards at all stages from procurement of raw materials to processing, storage, and distribution, robust due diligence mechanisms can help identify potential compliance gaps in sourcing practices, ingredient approvals, and labelling declarations. Sector-specific due diligence is particularly important in areas such as product formulation, additive usage, health claims, and import of ingredients, where regulatory scrutiny is high.

5 Adopt Risk-Based Compliance Audits

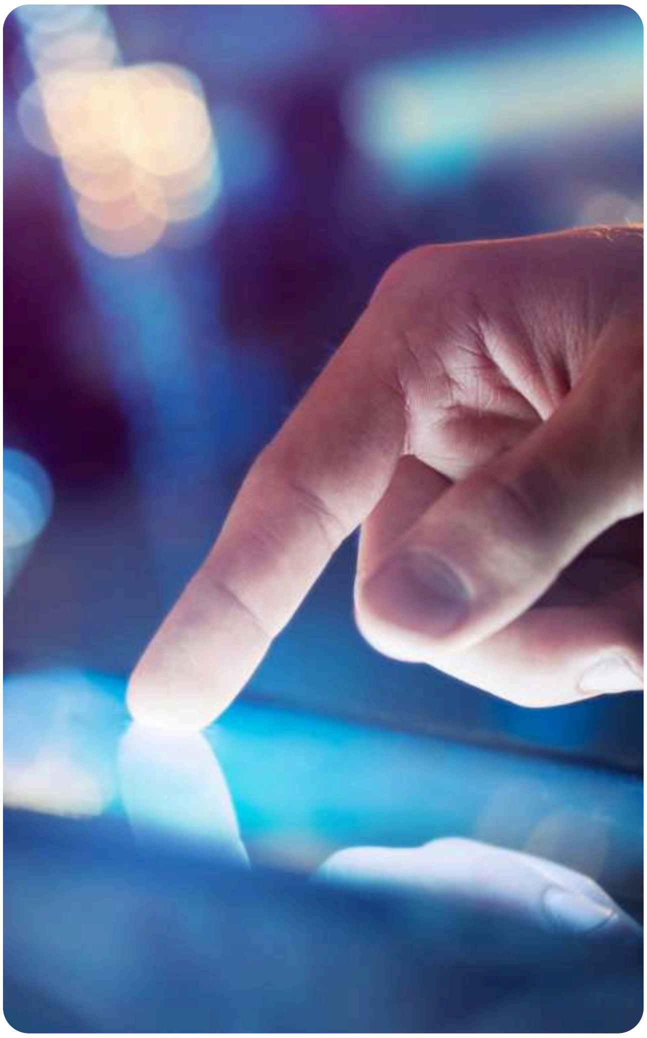
Periodic internal and third-party compliance audits can help identify operational gaps in areas such as hygiene practices, documentation systems, product labelling, and facility management. Structured audit programs can assess compliance with Good Manufacturing Practices (GMP), Food Safety Management Systems (FSMS), waste management protocols, and environmental standards applicable to manufacturing units. Risk-based audits can also help companies maintain audit readiness for regulatory inspections and reduce the likelihood of enforcement actions, penalties, or product recalls associated with non-compliance.

6 Creating a Culture of Food Safety and Compliance

Establishing a strong organisational culture that prioritises food safety and regulatory compliance is essential for long-term operational stability. Leadership commitment to compliance and product integrity plays a critical role in ensuring adherence to statutory requirements. Companies should promote internal awareness through regular training programmes on food safety regulations, hygiene standards, labelling requirements, and documentation practices. Embedding food safety practices across procurement, production, quality control, and distribution functions helps ensure consistent compliance with statutory obligations and strengthens consumer trust in food products.

7 Adopting Digital Solutions

Digital compliance management systems can play an important role in simplifying regulatory compliance in the food processing industry. Technology solutions can assist companies in managing licensing requirements, tracking regulatory updates, maintaining digital documentation, and monitoring compliance obligations across multiple facilities. Digital platforms can also support traceability systems that track the movement of raw materials and finished products throughout the supply chain, thereby improving transparency and accountability in food safety management. Advanced technologies such as automated compliance tracking tools and digital traceability systems can reduce administrative burdens, improve record accuracy, and enhance overall regulatory preparedness across large and geographically distributed operations.



8 Support Compliance Capacity Building for MSMEs

A large proportion of enterprises in the food processing industry operate at micro and small scales and often face capacity constraints in meeting regulatory obligations related to food safety, environmental standards, and packaging regulations. Structured training programs, simplified compliance frameworks, and digital support systems can help improve awareness and facilitate better compliance among smaller processors.

APPENDIX

APPENDIX - 1

Structure of the Industry: Segments and Market Share

The Indian food processing industry is a complex, multi-layered ecosystem that serves as a vital bridge between the nation's massive agricultural base and its rapidly expanding consumer market. Representing approximately 32% of the overall food and grocery market, the sector is characterised by deep fragmentation and a distinct dualism between a vast informal base and a technologically sophisticated organised segment.

Major Segments and Market Share

The industry is structured into six primary sub-segments, each facing unique production cycles and regulatory pressures:

- **Dairy:** As the world's largest milk producer (contributing nearly 25% of global output), dairy is the industry's anchor. The market reached a valuation of INR 18,975 billion in 2024, yet processing levels remain relatively low at 21.1%. Only about 32% of the marketable surplus is handled by the organised sector, within which cooperatives control a significant 56% share.
- **Grains, Cereals, and Pulses:** This is the most widespread segment, with cereals and grains holding a 49.10% share of the total agriculture market as of 2025. Primary processing is heavily rural-based and decentralised, with approximately 10,000 pulse mills processing 75% of national production.
- **Fruits and Vegetables (F&V):** Often labelled a sunrise sector, India ranks second globally in F&V production, yet only processes 4.5% of its fruits and 2.7% of its vegetables. This low processing level results in significant post-harvest economic losses, estimated at up to 15.05% for certain horticultural crops.
- **Marine and Meat Processing:** India is the 4th largest exporter of marine products and the 2nd largest exporter of frozen shrimp globally. Meat processing levels are comparatively higher at 34.2%, driven by strong export demand for buffalo meat to Southeast Asia and the Middle East.
- **Beverages:** The non-alcoholic market, valued at USD 14.95 billion in 2024, is shifting from traditional carbonated soft drinks toward healthy, functional, and
- **Packaged Foods:** This is the fastest-growing segment, driven by urbanisation and a 22% growth rate in the food delivery market.

MSME Dominance and Fragmentation

The structural foundation of the industry is built upon Micro, Small, and Medium Enterprises (MSMEs). This results in a 2/98 paradox that defines the sector's economic output:

- **The Informal Foundation:** Approximately 24.59 lakh food processing enterprises operate in the unregistered segment, accounting for over 98% of all units in the sector.
- **Production Disparity:** While large and medium enterprises represent only 2% of the units, they contribute a disproportionate 60–65% of the total production value.
- **Employment Dynamics:** The unorganised sector provides livelihoods to approximately 5.1 million workers, compared to 1.93 million in the registered sector, highlighting its role in rural social stability.

Presence of Large Players vs. Small, Localised Units

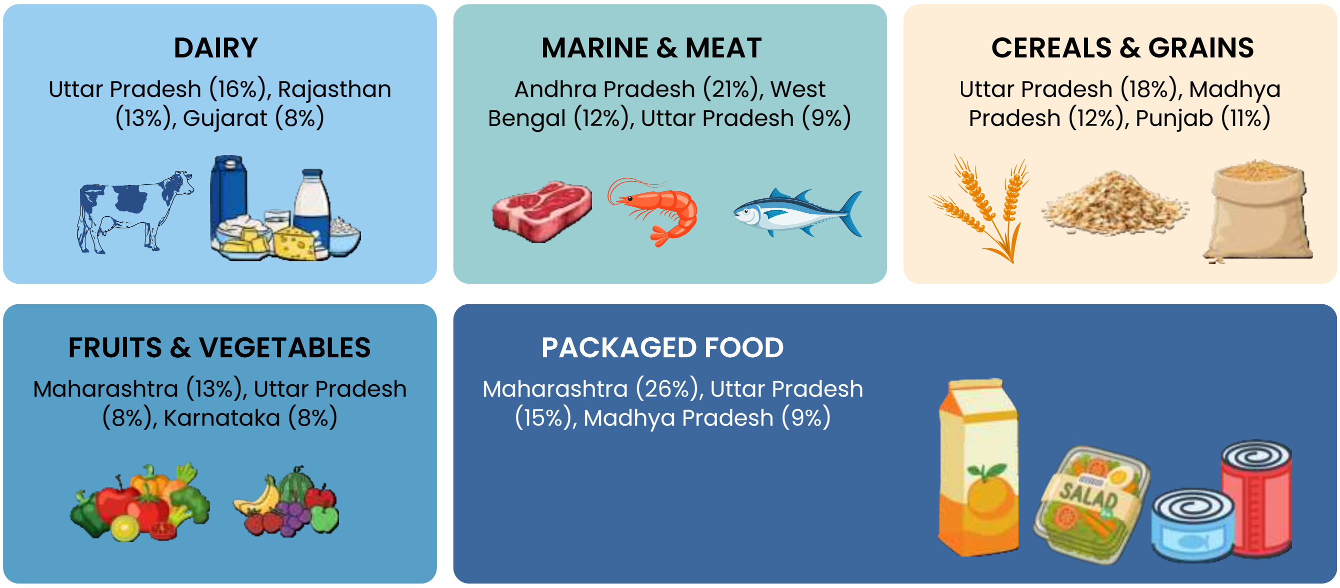
The competitive landscape features a sharp divide in capital intensity and market reach:

- **Large Organised Players:** Global MNCs (Nestle, PepsiCo, Coca-Cola) and domestic giants (Amul, ITC, Britannia) drive innovation and exports. These entities typically spend 5-8% of their revenue on capital expenditure during expansion, compared to an industry average of just 0.5-1.5%.
- **Small, Localised Units:** These units dominate regional tastes, particularly in traditional snacks, spices, and pickles. They often operate with outdated equipment and face high capital costs for automation, making them the primary targets for government up-gradation schemes like PMFME.

Regional Clustering and Agri-linked Geographies

Production is organised around specialised clusters to minimise logistics costs for perishable items. The Southern region leads in registered factories, with Andhra Pradesh (14.3%), Tamil Nadu (12.7%), and Telangana (9.6%) housing the highest numbers.

Fig 11: Food Processing Industry- Classification by Segment



The government has institutionalised these clusters through 41 approved Mega Food Parks (25 operational) and over 76 Agro-Processing Clusters designed to link farmers directly to processors

Degree of Formalisation Across Segments

Formalisation is accelerating, though at an uneven pace across the industry's long tail:

- **Udyam and GST Registration:** Policy measures and the simplification of the digital tech stack have surged Udyam registrations to 6.2 crore by March 2025. The GST regime has encouraged formalisation by allowing micro-units to claim input tax credits.
- **FSSAI Compliance:** Mandatory food safety licensing is a primary formalisation tool. The number of registered food business operators has grown from 25 lakh to 64 lakh, with FSSAI basic registration required for all businesses with a turnover below INR 12 lakh.
- **Impact of the PMFME Scheme:** Since its launch in 2020, this scheme has successfully formalised approximately 31,978 enterprises and facilitated over 1.44 lakh loans for technology upgrades as of mid-2025.

Farm to Fork Value Chain Dynamics

The Farm to Fork value chain in India is the structural spine of the food processing industry, a complex web that transforms raw agricultural output into high-value consumer goods. Historically, this chain has been hampered by a labyrinth of intermediaries and a 99% gap in first-mile cold chain connectivity. Over the last decade, however, the ecosystem has been gradually evolving toward more organised, technology-enabled, and enterprise-driven models, supported by policy intervention and private sector participation.

Agricultural Input and Sourcing Ecosystem

The agricultural sourcing ecosystem for food processing is undergoing a visible shift from fragmented, informal procurement to more organised, direct sourcing models. Traditionally, processors relied heavily on mandis, commission agents, and local traders, which limited transparency over pricing, quality, and traceability. According to the Ministry of Food Processing Industries (MoFPI), processors are increasingly seeking direct engagement with farmers and farmer collectives to stabilise raw material costs and ensure compliance with food safety and quality requirements

- **Farmer-Producer Organisations (FPOs):** FPOs have emerged as new generation cooperatives, acting as a vital bridge between formal processors and smallholder farmers. As of June 2025, over 9,000 FPOs have been onboarded onto the Open Network for Digital Commerce (ONDC) to facilitate direct B2B sales.
- **Contract Farming Dynamics:** Contract farming arrangements are increasingly used for high-value and processing-specific crops such as potatoes, tomatoes, dairy inputs, poultry, and marine produce. Under these arrangements, processors provide inputs, technical guidance, and pre-agreed quality standards, including residue and safety requirements. This integration helps farmers receive 31–43% higher price realisation compared to traditional open markets.
- **Digitised Sourcing:** Agritech startups like DeHaat and Ninjacart are deploying AI-driven soil analytics and satellite monitoring to provide processors with predictability of supply, a historically critical bottleneck in the Indian context.

Storage, Cold Chain and Logistics Infrastructure

Storage and cold chain infrastructure is one of the most capital-intensive and critical segments of the farm-to-fork value chain. While India has developed significant bulk storage capacity for staples such as grains and potatoes, integrated cold chain systems for perishables such as fruits, vegetables, dairy, meat, and marine products remain unevenly distributed.

- **Current Infrastructure Status:** As of June 2025, a total of 395 integrated cold chain projects have been approved, with 291 currently operational, creating a preservation capacity of 25.52 lakh metric tonnes (LMT) per year. These projects have added substantial preservation capacity and created linkages between farms, processing units, and markets.
- **Regional Concentration:** Cold storage capacity is heavily skewed, with Uttar Pradesh (38%), West Bengal (15%), and Gujarat (10%) dominating the national landscape.
- **The Technology Gap:** The industry is moving toward Solar-based cold storage and Multi-product food irradiation units to extend shelf life without chemical preservatives. Despite this, the refrigerated transport segment still lags, with only 1,482 reefer vehicles completed against a vast national requirement.

Processing, Packaging and Distribution Stages

Food processing in India typically occurs across three stages: primary processing (cleaning, grading, milling), secondary processing (canning, freezing, pasteurisation), and tertiary processing (ready-to-eat and ready-to-cook products). The degree of mechanisation and automation increases as one moves up the value chain.

- **Automation Trends:** Large-scale processing plants have achieved over 50% automation in core operations, utilising AI-based rice sorting and automated deboning for meat. Large processing units, particularly in dairy, beverages, marine exports, and packaged foods, have adopted higher levels of automation, including automated sorting, grading, and packaging systems. In contrast, a large number of micro and small units continue to rely on manual or semi-mechanised processes, which affects productivity and compliance consistency (MoFPI Annual Report 2024–25).
- **Sustainability in Packaging:** There is a decisive regulatory and consumer-led shift toward Biodegradable and Flexible packaging. In June 2025, new Plastic Waste Management Rules mandated that at least 30% of plastic packaging be recyclable, pushing brands to adopt bioplastics and digital printing for brand recognition.
- **Logistics Corridors:** Distribution is increasingly aligned with national logistics reforms. Initiatives under the **National Logistics Policy** and improvements in warehousing and documentation systems aim to reduce transit delays and spoilage, particularly for perishable food products (Ministry of Commerce & Industry).

Role of Intermediaries and Aggregators

The traditional supply chain, often involving up to 5-7 layers of middlemen (agents, auctioneers, wholesalers), typically erodes value and escalates prices without adding quality. This structure limited farmer earnings and reduced transparency for processors.

- **Disintermediation through Agritech:** New-age aggregators are redrawing the map by embedding digital tools into procurement. By bypassing traditional brokers, platforms like Ninjacart and ONDC ensure better margins for farmers and fresher inputs for processors.
- **CBBOs:** Cluster-Based Business Organizations are now being tasked by the government to facilitate direct linkages between FPOs and institutional buyers, ensuring that small-scale units can achieve the scale required for global exports.

Linkages with Retail, Exports, and Food Services

- The final stage of the farm-to-fork value chain connects processors with retail, food services, and export markets. Organised retail, e-commerce, and quick-commerce platforms have expanded rapidly in urban areas, reshaping demand for processed and packaged foods. Food service operators, including hotels, restaurants, and quick-service restaurant chains, are major buyers of standardised and portion-controlled processed inputs to ensure consistency and food safety.

- **Quick Commerce Explosion:** Platforms like Blinkit and Zepto have transformed distribution, with over 60% of urban consumers now defaulting to quick commerce for daily food essentials.
- **Food Service (HORECA):** The food service industry, valued at INR 4.23 lakh crore, has become a massive buyer of portion-controlled processed meat and standardised poultry inputs to maintain consistency across QSR chains like KFC and McDonald's.
- **Export Integration:** Processed food exports reached USD 10.09 billion in 2024-25, representing 20.4% of total agri-food exports. Linkages are being strengthened through 41 sanctioned Mega Food Parks, designed to group farmers, processors, and exporters in a single plug-and-play infrastructure model.

Demand Drivers & Consumption Trends

The Indian food consumption story is undergoing a fundamental structural transformation, evolving from a caloric-security model to one defined by convenience, wellness, and digital access. This shift is not merely a preference change but is anchored in a demographic dividend where over 65% of the population is under the age of 35, driving a projected domestic food market valuation of USD 1.2 trillion by fiscal year 2026.

Changing Consumption Patterns and Urbanisation

Urbanisation in India is currently at a nascent yet high-impact stage. While the urban population stood at 36.8% in 2024, it is projected to rise to 40.9% by 2030, with these centers expected to contribute 75% of the national GDP. This geographical shift is accompanied by a shrinking household size, declining from 4.9 persons in 2011 to 4.1 in 2024, which inherently reduces the time available for traditional, labour-intensive food preparation.

Furthermore, a significant socio-economic catalyst is the rise in female workforce participation, which surged from 23.3% in 2018 to 41.7% in 2024. As dual-income households become the norm in Tier-1 and Tier-2 cities, the opportunity cost of cooking has risen, leading to a decisive preference for aspirational and time-saving food products.

Rising Demand for Processed and Packaged Foods

The demand for convenience has propelled the Ready-to-Eat (RTE) and Ready-to-Cook (RTC) segments to become the fastest-growing categories within the industry. Urban consumers are increasingly moving toward packaged versions of dietary staples due to hygiene assurances and consistent quality. For instance, the demand for packaged and fortified wheat flour is growing as 1 in 3 urban buyers now prioritise nutrient-enriched variants over loose produce from local mills.

MoFPI has also observed a steady move toward fortified and value-added products. For example, demand for packaged and fortified wheat flour has increased as urban consumers show greater awareness of nutritional content. This trend has supported the expansion of branded food products while simultaneously increasing the importance of labelling accuracy, ingredient disclosure, and food safety compliance.

Growth of Organised Retail and E-commerce

The distribution of food products has been redrawn by a massive digital expansion. India's online grocery market, valued at USD 12 billion, is expanding at a staggering rate of over 40% annually.

The expansion of organised retail and digital commerce has reshaped food distribution in India. While traditional kirana stores continue to dominate overall volumes, modern trade formats such as supermarkets and hypermarkets have expanded at a Compound Annual growth rate (CAGR) of over 20% between FY19 and FY25. These channels have improved product visibility, cold-chain handling, and regulatory compliance for perishable and temperature-sensitive products.

E-commerce has become a critical demand enabler. India's online grocery market was valued at approximately USD 12 billion in 2024, with annual growth exceeding 40%, driven largely by urban consumers. Quick commerce platforms such as Blinkit and Zepto have further shortened delivery timelines, with an estimated 60% of urban consumers relying on such platforms for daily food essentials. This shift has reinforced demand for standardised, well-packaged, and compliant food products that can withstand rapid distribution cycles.

Nutrition, Safety and Quality Expectations

Post-pandemic, there is a health-first mindset that has made nutritional transparency a non-negotiable demand. Buyers are increasingly attentive to food labels, sugar and salt content, additives, and sourcing practices. This shift has strengthened the regulatory relevance of the Food Safety and Standards Authority of India (FSSAI) and its standards on labelling, fortification, and hygiene.

- **The Organic Surge:** The organic and health-food segments have also gained traction. The Indian organic food market was projected to grow at a CAGR of nearly 20%, reaching an estimated valuation of INR 75,000 crore by 2025.

Surveys indicate that a significant share of urban consumers are willing to pay a premium for certified organic and clean-label products. Demand for functional foods and plant-based alternatives has also increased, pushing processors to adopt higher-quality inputs, improved traceability, and stricter compliance systems.

- **Functional and Plant-Based Diets:** Demand for functional foods and plant-based alternatives has also increased, pushing processors to adopt higher-quality inputs, improved traceability, and stricter compliance systems. There is a surge in demand for Better-for-you meals, with healthy orders growing at 2.3x the rate of overall food service orders. This includes functional beverages such as probiotic drinks, energy water, and herbal infusions, which are growing three times faster than traditional carbonated drinks.

Export Demand and Global Market Access

The Vocal for Local vision has transitioned into a Global Food Hub ambition. Export demand has become a key growth lever for the food processing industry. Processed food exports reached USD 10.09 billion in FY 2024-25, accounting for approximately 20-23% of India's total agri-food exports, compared to about 14% a decade earlier.

India has leveraged its position as a global leader in ethnic food categories, with a strong appetite in the Middle East, the USA, and Europe for Indian spices, snacks, and sweets. To sustain this growth, the industry is aligning with stringent international safety protocols, including AI-powered inspection systems and blockchain-based traceability, to meet the Maximum Residue Limits (MRLs) and hygiene standards of mature markets.

APPENDIX - 2

Investment Landscape & Capacity Creation

The Indian food processing industry has seen a steady rise in both public and private investment over the last decade. Policy liberalisation, growing domestic consumption, and export opportunities have positioned the sector as an important destination for long-term capital. The regulatory framework permits 100% Foreign Direct Investment under the automatic route for food processing and allows FDI in food product e-commerce under the government approval route, which has contributed to sustained investor interest.

As per data released by the Department for Promotion of Industry and Internal Trade (DPIIT) and cited by the Ministry of Food Processing Industries (MoFPI), cumulative FDI inflows into the food processing sector stood at approximately USD 13.49 billion between April 2000 and June 2025, with nearly USD 7 billion received during the last ten years alone. This trend reflects a clear acceleration in investment momentum in recent years.

Role of Government Schemes and Incentives

Public investment acts as a catalyst for private expenditure through a suite of mission-mode incentives designed to bridge the technology and scale gap.

- **Production Linked Incentive (PLI) Scheme:** With a total outlay of INR 10,900 crore, the PLI scheme has already seen investments of INR 8,910 crore across 213 locations. It specifically targets Global Food Manufacturing Champions in segments like Ready-to-Eat/Ready-to-Cook, marine products, and mozzarella cheese.

- **Pradhan Mantri Kisan SAMPADA Yojana (PMKSY):** The Pradhan Mantri Kisan SAMPADA Yojana (PMKSY) serves as the umbrella scheme for infrastructure creation in the sector. Restructured for the 15th Finance Commission cycle with a total outlay of INR 6,520 crore, this umbrella scheme has sanctioned over 1,600 projects to date. As of 2025, 1,185 projects are operational, creating a total processing and preservation capacity of 270.51 Lakh Metric Tonnes (LMT).

- **PMFME Scheme:** At the micro level, the PM Formalisation of Micro Food Processing Enterprises (PMFME) Scheme, with an outlay of INR 10,000 crore, focuses on the informal and household-based segment. Since its launch, the scheme has facilitated over 1.7 lakh credit-linked loans to micro-enterprises and Self-Help Groups, supporting formalisation, branding, and technology upgrades.

Capacity Constraints

Despite record investments, the sector faces a systemic infrastructure deficit that limits its global competitiveness. India continues to lose approximately INR 92,651 crore (USD 10.78 billion) annually due to inadequate storage and transport facilities.

- **Cold Chain Disconnect:** Currently, less than 10% of India's agricultural products are processed through a formal cold chain. There is a 99% gap in first-mile farm-gate connectivity and a 70-80% gap in specialised dairy and fisheries logistics.
- **Testing and Quality Assurance:** While FSSAI has notified 246 NABL-accredited labs, a significant gap remains in remote areas. To address this, the government is funding 100 new NABL-accredited labs and has deployed 305 Mobile Food Testing Laboratories (MFTLs) to provide on-the-spot analysis.
- **Machinery Gap:** India relies heavily on imported precision machinery from Germany, Japan, and the US for high-speed processing, as the domestic equipment sector primarily serves primary tasks like grading and sorting.

Technology Adoption Across Sectors

The industry is currently transitioning toward Industry 4.0, where automation and AI are no longer optional but baseline requirements for safety and efficiency.

- **Dairy 4.0:** Over 60% of Indian dairy farms are expected to adopt sensor-led solutions by 2025, including automated milking systems and wearable biosensors for herd health.
- **AI and Robotics:** AI-driven predictive analytics are now used by over 60% of large food manufacturers to forecast demand and minimise spoilage. In 2025, the industry saw the launch of India's first AI-based rice sorting system.
- **Traceability:** Blockchain and IoT sensors are being embedded into supply chains to meet the Maximum Residue Level (MRL) demands of export markets like the EU and USA.

Entry Barriers and Scale Challenges

Entry into the food processing sector, particularly at scale, remains constrained by structural and regulatory barriers. High capital requirements for land, plant, machinery, and compliance infrastructure raise the cost of entry, especially in regulated segments such as dairy, meat, and export-oriented processing.

- **The Credit Gap:** The addressable credit gap for MSMEs in the sector is estimated at a staggering INR 30 lakh crore, with only 19% of the total demand currently met through formal banking channels.
- **Compliance Cholesterol:** High implementation costs and a regulatory labyrinth involving over 1,450 annual compliance obligations per unit deter many informal players from entering the formal ecosystem.
- **Skilled Labour Shortage:** One in four MSMEs reports a critical shortage of skilled manpower, as nearly 17.8 million individuals require specialised food technology training to meet modern production standards.

Policy Environment & Government Priorities

India's policy framework for the food processing industry has evolved from a fragmented, incentive-driven approach to a more coordinated and mission-oriented model. The current policy direction recognises food processing not merely as an industrial activity, but as a strategic instrument for improving farm incomes, reducing post-harvest losses, generating rural employment, and strengthening national food security. Government priorities increasingly focus on value-chain integration, infrastructure creation, formalisation of micro-enterprises, and alignment with global food safety and quality standards.

National Food Processing and Agri-Value-Chain Policies

The food processing sector is governed primarily by the Ministry of Food Processing Industries (MoFPI), which implements a suite of integrated schemes aimed at developing modern processing infrastructure and efficient supply chains. The flagship policy framework is the Pradhan Mantri Kisan SAMPADA Yojana (PMKSY), which acts as an umbrella scheme covering Mega Food Parks, Integrated Cold Chain projects, Agro-Processing Clusters, Food Safety and Quality Assurance Infrastructure, and value addition initiatives.

For the 15th Finance Commission period (up to March 2026), PMKSY has an approved outlay of INR 6,520 crore, reflecting the government's medium-term commitment to strengthening food processing capacity (MoFPI Annual Report 2024-25).

A key intervention within the agri-value-chain strategy is Operation Greens. Initially launched for Tomato, Onion, and Potato (TOP) crops, the scheme was expanded in subsequent phases to include additional perishable commodities.

By 2024-25, Operation Greens had been extended to cover a wider range of notified fruits and vegetables, with the objective of price stabilisation, reduction of post-harvest losses, and promotion of localised processing and storage infrastructure (MoFPI).

Export Promotion and Market Access Focus

The Vocal for Local vision has been elevated to a Make in India for the World mandate. The Agricultural and Processed Food Products Export Development Authority (APEDA) is the primary driver for this, operating the Financial Assistance Scheme (FAS) for the 2021-22 to 2025-26 period. This policy focuses on three key areas:

- development of export infrastructure,
- quality development (meeting global MRL standards), and
- market development through international trade fairs and buyer-seller meets.

To ensure Indian products are not rejected in mature markets like the EU or the USA, the government has prioritised the harmonisation of Indian standards with Codex benchmarks.

In 2025, the Union Cabinet approved targeted funding for strengthening food safety and quality infrastructure, including support for setting up additional NABL-accredited food testing laboratories and multi-product food irradiation facilities, aimed at improving shelf life and export acceptance of Indian food products. The Union Cabinet approved 1,000 crore to specifically support the setting up of 50 Multi-Product Food Irradiation Units and 100 NABL-accredited food testing labs to boost the quality reputation of Indian exports.

MSME and Startup Enablement Initiatives

Recognising that 98% of the industry consists of unregistered units, the government launched the PM Formalisation of Micro Food Processing Enterprises (PMFME) scheme with a 10,000 crore outlay. This scheme utilises the One District One Product (ODOP) approach to help micro-units achieve economies of scale in procurement and marketing.

As of June 2025, PMFME had sanctioned over 1.4 lakh credit-linked loans and provided seed capital support to more than 1 lakh Self-Help Group members, particularly in rural and semi-urban areas (MoFPI Annual Report 2024–25).

The startup ecosystem is equally vibrant, with approximately 3,319 DPIIT-recognised startups operating in the food processing sector as of mid-2025. To nurture these ventures, the government has established several high-tech incubation centers, including the National Institute of Food Technology, Entrepreneurship and Management (NIFTEM) in Bihar and Haryana, which provide product development and technological troubleshooting support to grass-roots entrepreneurs.

Infrastructure-led Policy Approach

The government's Plug-and-Play infrastructure model aims to bypass the high entry costs traditionally associated with food processing.

- **Agro-Processing Clusters (APC):** As of early 2025, 1,608 projects have been sanctioned under PMKSY component schemes, including 41 Mega Food Parks and 75 Agro-processing Cluster projects.
- **Integrated Cold Chain:** The Integrated Cold Chain and Value Addition Infrastructure (ICCVAI) component has focused on creating end-to-end cold chain facilities. As of 2025, 291 cold chain projects were operational, creating an estimated preservation capacity of 25.52 lakh metric tonnes per year (MoFPI).
- **Common Facilities:** Under the SFURTI scheme, over 10 agro-specific functional clusters were operationalised by January 2025, providing artisans and small processors with shared access to grading, sorting, and packaging lines.

Alignment with Broader Economic Objectives

The food processing sector is a central pillar of the National Manufacturing Mission (NMM) introduced in the Union Budget 2025-26. The NMM emphasises five focal areas:

- reducing the cost of doing business,
- creating a future-ready workforce,
- supporting MSMEs,
- technology adoption, and
- producing quality products.

These priorities are closely aligned with:

- **Viksit Bharat 2047:** The sector is projected to reach a valuation of USD 2,150 billion by 2047, acting as the primary engine for rural economic transformation.
- **Net Zero 2070:** Policies are increasingly mandating sustainable practices, such as the June 2025 amendment to the Plastic Waste Management Rules requiring 30% recyclability in packaging, and the promotion of solar-powered cold storage as a service for smallholders.
- **Aatmanirbhar Bharat:** By converting surplus raw materials into value-added products, the industry fulfils the national objective of doubling farmer incomes and reducing dependency on processed food imports.

Structural Challenges in the Ecosystem

Despite strong demand growth and increasing policy attention, the Indian food processing industry continues to face structural constraints that limit productivity, scalability, and global competitiveness. These challenges are systemic rather than short-term and reflect the uneven development of the sector, where a relatively small organised segment has modernised rapidly, while a large unorganised base remains characterised by low mechanisation, high wastage, and limited compliance capacity.

Supply Chain Fragmentation and Inefficiencies

A key structural weakness of the food processing industry lies in its fragmented agricultural supply base.

As per the agricultural census and policy assessments, approximately 85–86% of Indian farmers are classified as small or marginal, resulting in highly dispersed production. This makes aggregation of raw materials costly and operationally complex for processors.

Agricultural produce often passes through multiple layers of intermediaries, including local agents, traders, commission agents, and wholesalers, before reaching processors or consumers. Studies cited in reports of the Ministry of Food Processing Industries (MoFPI) indicate that such intermediation significantly increases transaction costs without corresponding improvements in quality or food safety outcomes.

Supply chain inefficiencies contribute directly to post-harvest losses. Government estimates continue to place annual post-harvest losses at over INR 90,000 crore, largely due to inadequate aggregation, storage, handling, and timely processing. These losses reduce processor margins and increase compliance risks related to quality deterioration and contamination.

Infrastructure and Logistics Constraints

India’s infrastructure deficit is most visible in the cold chain and rural connectivity segments. Despite being a leading global producer of perishables, less than 10% of India's agricultural products are currently processed through an integrated cold chain.

There is a critical 99% gap in first-mile connectivity at the farm gate, and an 80% gap in specialised dairy logistics. Furthermore, the lack of all-weather roads in many production clusters hinders the timely movement of temperature-sensitive crops like tomatoes and milk, leading to localised glut-and-famine cycles.

Logistics costs in India remain relatively high, estimated at around 14-18% of GDP, compared to 8-10% in developed economies. These elevated costs weaken the competitiveness of processed food exports and discourage investment in value-added processing.

Scale Limitations for Small Units

The industry is defined by a Missing Middle phenomenon. While 98% of the enterprises are micro-scale units, they contribute less than 40% of the production value, whereas the top 2% of players (mostly large MNCs and domestic giants) drive the bulk of value addition.

Small units face a capital-technology trap: they operate with outdated, inefficient machinery but lack the formal credit access to modernise.

The addressable credit gap for MSMEs in this sector is estimated at INR 30 lakh crore, with only 19% of demand currently met by formal banking channels. This lack of scale also means these units cannot afford the high costs of international quality certifications, effectively locking them out of high-value export markets.

Volatility in Raw Material Availability

Agricultural production in India is becoming increasingly weather-sensitive, creating severe price and supply shocks for processors. Research suggests that by 2025, a mean temperature rise of 1°C to 1.5°C could lead to a 10% loss in major crop yields, particularly for staples like wheat and rice.

Unseasonal rains and extreme heatwaves in 2025 have already triggered instant price spikes for TOP crops (Tomatoes, Onions, Potatoes), forcing manufacturers to either absorb higher input costs or reduce production runs.

Additionally, ad-hoc policy revisions such as the 25+ changes in edible oil tariffs over the last decade have created a volatile environment that undermines long-term procurement planning and investor confidence.

Coordination Gaps Across Stakeholders

The industry suffers from institutional silos, where multiple regulatory bodies, including FSSAI, MoFPI, APEDA, and various state-level agencies, often enforce overlapping or conflicting mandates. While FSSAI is responsible for science-based standards, the actual enforcement lies with state authorities, leading to inconsistent application of safety norms across different regions.

There is also a notable lack of harmonisation between Indian domestic standards and global Codex benchmarks, which contributes to frequent quality-related rejections in markets like the EU and the US. This coordination gap extends to human capital, where only 3% of the workforce is formally trained, leaving a massive skill mismatch that hinders the adoption of modern Industry 4.0 technologies.

APPENDIX - 3

Segments and their Regulatory Applicability

1. Grain, Cereal and Pulse Processing

This sector covers the processing of staple agricultural commodities that form the backbone of India's food consumption.

Includes:

- Rice milling and flour milling (wheat, maize, millets)
- Dal and pulse processing
- Ready-to-cook cereal mixes, atta, suji, rawa
- Fortified grains and flours

Why this is a distinct category?

- Large-scale, low-margin operations
- Heavy focus on storage, fortification, and packaging compliance
- High interaction with public distribution systems (PDS)

This category is often treated as low-to-medium risk but high-volume, attracting both food safety and storage-related regulations.

Table 3: Key Regulatory Framework Governing Cereal and Grain Processing in India

Types of Approvals	Applicable Act / Regulation	Key Compliance Requirements
Food Safety (Core)	Food Safety and Standards Act, 2006	Mandatory FSSAI registration/license; strict liability for unsafe, adulterated, or misbranded food
Licensing & Digital Records	FSS (Licensing and Registration of Food Businesses) Regulations (as amended)	Capacity-based registration/State/Central licence; mandatory digital records on FoSCoS for production, raw material utilisation
Stock Management	Schedule 4 – FSS Licensing Regulations	Mandatory FIFO / FEFO inventory rotation; hygiene, pest control, storage discipline
Food Product Standards	FSS (Food Products Standards and Food Additives) Regulations, 2011	Chapter 2.4 (Cereals) & 2.4.6 (Pulses); limits on moisture, ash, gluten, alcoholic acidity
Scientific Evidence for Claims	Binding FSSAI Orders / Directions (effective Jan 2026)	Any nutrition or health claim (e.g., Protein-rich, High Fibre) must be supported by scientific & toxicological evidence
Fortification	FSS (Fortification of Foods) Regulations, 2018	Mandatory fortification for supplies to PDS/ICDS/Mid-Day Meal; +F logo and warning statements
Packaging & Labelling	FSS (Labelling and Display) Regulations, 2020	Nutrition table; allergen declaration (Contains Gluten); batch & date markings
Weights & Measures	Legal Metrology Act, 2009	Net quantity accuracy; MRP; statutory declarations
Packaged Commodities	Legal Metrology (Packaged Commodities) Rules, 2011	Unit Sale Price; date of packing; old packaging allowed only till 31 March 2026

Essential Commodities	Essential Commodities Act, 1955	Enforcement of stock limits through notifications; anti-hoarding provisions
Stock Limit Order (Wheat)	Wheat Stock Limit Orders, 2026 (under ECA)	Max 60% of Monthly Installed Capacity × remaining FY months; weekly disclosure on DFPD portal
Warehousing	Warehousing (Development and Regulation) Act, 2007	Mandatory WDRA registration if issuing Negotiable Warehouse Receipts (NWRs)
Trade & Export Control	Foreign Trade (Development and Regulation) Act, 1992	Export bans/restrictions/quotas on wheat, rice, pulses, as notified by DGFT
Quality Grading	Agricultural Produce (Grading and Marking) Act, 1937 (AGMARK)	Mandatory for specified exports (e.g., Basmati rice, Grade-A pulses)
Environmental Protection	Environment (Protection) Act, 1986	Environmental safeguards; dust suppression and waste handling
Air Pollution	Air (Prevention and Control of Pollution) Act, 1981	Consent to Establish/Operate; particulate matter control in milling
Local Environmental Consent	State Pollution Control Board Directions	CTO compliance for milling operations
Labour & Safety	Factories Act, 1948	Health, safety, ventilation, machine guarding, registers & inspections
Wages	Minimum Wages Act, 1948	Minimum wage compliance (until Wage Code is notified in the state)
Contract Labour	Contract Labour (Regulation and Abolition) Act, 1970	Contractor registration; principal employer liability
Procurement	State APMC Acts	Market fees and licensing for grain procurement
Taxation	GST Acts and Rules	HSN-based classification; 5% GST on branded/pre-packaged grains

2. Fruits and Vegetables Processing

This sector deals with highly perishable raw materials and seasonal supply chains.

Includes:

- Frozen fruits and vegetables
- Canned, bottled, and aseptic products
- Pickles, jams, jellies, sauces, purees
- Dehydrated and freeze-dried produce

Why this is a distinct category?

- Strong dependency on cold chain and preservation methods
- High exposure to contamination and spoilage risks
- Significant export orientation

Regulatory scrutiny is higher due to shelf-life claims, preservatives and processing methods.

Table 4: Key Regulatory Framework Governing Fruits and Vegetables Processing in India

Types of Approvals	Applicable Act / Regulation	Key Compliance Requirements
Food Safety (Core)	Food Safety and Standards Act, 2006	Mandatory FSSAI registration/license; strict liability for unsafe, contaminated, or misbranded food
Licensing & Operations	FSS (Licensing and Registration of Food Businesses) Regulations	Capacity-based registration/state/central license; Schedule 4 GMP & GHP compliance
Food Standards	FSS (Food Products Standards and Food Additives) Regulations, 2011	Standards for thermally processed fruits & vegetables, jams, jellies, sauces, pulps; 2026 update: refractive index and volatile oil content limits enforced
Preservatives & Additives	FSS (Food Products Standards & Food Additives) Regulations	Use only permitted preservatives (SO_2, Benzoic Acid) within limits; use of unapproved preservatives is non-compoundable (2026)
Prohibited Practices	FSS (Prohibition and Restriction on Sales) Regulations	Absolute ban on Calcium Carbide for ripening; declaration mandatory for any synthetic wax/coating on produce
Contaminants & Residues	FSS (Contaminants, Toxins and Residues) Regulations, 2011	Maximum limits for pesticide residues and heavy metals; intensified testing for high-risk produce
Shelf-life & Claims	FSSAI Scientific Evidence Mandate (2026)	Mandatory shelf-life stability data and toxicological studies for claims such as Natural, No Added Sugar, High Fibre
Packaging & Labelling	FSS (Labelling and Display) Regulations	Ingredient list, nutrition table, expiry/best-before, front-of-pack labelling (FOPL) for high sugar/salt products
Packaging & Metrology	Legal Metrology Act, 2009	Net quantity accuracy and mandatory declarations
Packaging & Metrology	Legal Metrology (Packaged Commodities) Rules, 2011	Unit sale price, pack size, manufacturer details, month/year of packing

Cold Chain Compliance	FSSAI Schedule 4 & Guidance Notes	Mandatory temperature control for frozen and chilled products; storage temperature display (e.g., -18°C)
Export Registration	APEDA Act, 1985	Mandatory RCMC registration for export of processed fruits and vegetables
Export Traceability	APEDA Guidelines (2026)	Digital traceability systems (GrapeNet/VegNet-type) for residue monitoring back to farm
Export Inspection	Export (Quality Control and Inspection) Act, 1963	Mandatory Health Certificate from EIA for notified products; stricter EU-focused residue checks (2026)
Trade & Export Control	Foreign Trade (Development and Regulation) Act, 1992	Export restrictions, quotas, or authorisations as notified by DGFT
Environment	Environment (Protection) Act, 1986	Mandatory ETP for pulping, pickling, canning units; compliance with waste and effluent standards
Water Pollution	Water (Prevention and Control of Pollution) Act, 1974	Consent to Establish/Operate; BOD/COD limits for wastewater
Plastic Waste	Plastic Waste Management Rules, 2016	EPR registration mandatory for PET bottles, multilayer packaging, tetra packs
Local Approvals	Municipal Trade License & Factory Licensing Laws	Trade license, fire safety clearance, building approvals
Labour & Safety	Factories Act, 1948	Boiler safety (canning units); cold storage safety (ammonia refrigeration); sanitation and ventilation
Labour	Contract Labour (Regulation and Abolition) Act, 1970	Contractor registration; principal employer liability
Taxation	GST Acts and Rules	GST rate classification; ITC compliance
Procurement	State APMC Acts	Market fee and procurement licensing for raw produce

3. Dairy Processing

Dairy is one of the most tightly regulated food sectors in India due to its daily consumption and spoilage risk.

Includes:

- Milk processing and packaging
- Milk products (curd, butter, ghee, paneer, cheese)
- Ice cream and frozen desserts
- Whey-based and milk-based beverages

Why this is a distinct category?

- Continuous cold-chain obligation
- Veterinary and animal health linkages
- Very specific product and compositional standards

Dairy is treated as a high-risk category under food safety regulations.

Table 5: Key Regulatory Framework Governing Dairy Processing in India

Types of Approvals	Applicable Act / Regulation	Key Compliance Requirements
Food Safety (Core)	Food Safety and Standards Act, 2006	Mandatory FSSAI registration or license; strict liability for adulterated, unsafe, or sub-standard milk and milk products
Licensing & Operations	FSS (Licensing and Registration of Food Businesses) Regulations	Capacity-based registration (Registration / State / Central License); mandatory Schedule 4 GMP & GHP compliance
Dairy Product Standards	FSS (Milk and Milk Products) Regulations, 2011 (as amended)	Enforceable compositional standards for milk and milk products; species-specific fat & SNF requirements
Dairy Analogue Controls	FSS (Milk and Milk Products) Regulations	Prohibition on use of dairy terms, imagery, or misleading representations for products made using vegetable fats
Fortification	FSS (Fortification of Foods) Regulations, 2018	Mandatory fortification of milk with Vitamins A & D where notified (government supply/tenders); +F logo usage
Adulteration Control	FSS (Food Products Standards and Food Additives) Regulations	Absolute prohibition of adulterants (urea, detergent, starch, formaldehyde); permitted additives only within limits
Contaminants & Residues	FSS (Contaminants, Toxins and Residues) Regulations, 2011	Mandatory compliance with limits for Aflatoxin M1, antibiotic residues (MRLs), and heavy metals
Animal Welfare (Procurement)	Prevention of Cruelty to Animals Act, 1960	Prohibition of oxytocin use; liability for knowingly procuring milk obtained through animal cruelty
Packaging & Labelling	FSS (Labelling and Display) Regulations	Mandatory nutrition table, allergen (milk) declaration, expiry/use-by date, batch identification
Front-of-Pack Labelling	FSSAI Front-of-Pack Labelling Regulations (notified phase)	Warning labels for dairy products exceeding notified fat and sugar thresholds
Packaging & Metrology	Legal Metrology Act, 2009	Accuracy of net quantity, MRP, and mandatory consumer declarations

Packaging & Metrology	Legal Metrology (Packaged Commodities) Rules, 2011	Unit sale price, pack size norms, manufacturer/importer details
Cold Chain Compliance	Schedule 4 – FSS Licensing Regulations	Raw milk chilling (≤4°C); frozen storage norms for ice-cream and frozen desserts
Environmental Protection	Environment (Protection) Act, 1986	Waste, odour, and emission control obligations
Water Pollution	Water (Prevention and Control of Pollution) Act, 1974	Consent to Establish and Operate; mandatory ETP; BOD/COD limits
Groundwater Regulation	CGWA Directions (issued under EP Act)	Permission and water audits required where groundwater extraction exceeds notified thresholds
Air Pollution	Air (Prevention and Control of Pollution) Act, 1981	Consent to Establish and Operate for boilers and DG sets
Plastic Packaging	Plastic Waste Management Rules, 2016	Mandatory Extended Producer Responsibility (EPR) registration for milk pouches, bottles, tetra packs
Local Approvals	Municipal Trade Licence / Factory Licence Laws	Trade licence, fire safety clearance, building approvals
Labour & Safety	Factories Act, 1948	Hygiene, sanitation, machinery guarding, boiler safety, ammonia refrigeration safety
Contract Labour	Contract Labour (Regulation and Abolition) Act, 1970	Contractor registration; principal employer wage and welfare liability
Export Registration	APEDA Act, 1985 (export units)	Mandatory RCMC registration for dairy exports
Export Inspection	Export (Quality Control and Inspection) Act, 1963	Health certificate from Export Inspection Agency for notified dairy exports
Trade & Export Control	Foreign Trade (Development and Regulation) Act, 1992	Export restrictions or quotas on milk powder, butter oil, etc., as notified
Taxation	Goods and Services Tax (GST) Acts and Rules	GST rate compliance, invoicing, return filing
Milk Procurement	State Milk Procurement / Cooperative Laws	Regulation of raw milk procurement by cooperatives and private dairies

4. Meat, Poultry, and Egg Processing

This sector faces the highest level of regulatory oversight among all food categories.

Includes:

- Slaughterhouses
- Meat and poultry processing units
- Processed meats (sausages, nuggets, ready-to-eat meats)
- Egg processing and egg products

Why this is a distinct category?

- Animal welfare, hygiene, and sanitation requirements
- Bio-medical and hazardous waste generation
- Local municipal and state-level control

This category simultaneously attracts food safety, municipal, environmental, and animal welfare laws.

Table 6: Key Regulatory Framework Governing Meat, Poultry, and Egg Processing in India

Types of Approvals	Applicable Act / Regulation	Key Compliance Requirements
Food Safety (Core)	Food Safety and Standards Act, 2006	Mandatory FSSAI registration or license; strict liability for unsafe, adulterated, or unhygienic meat, poultry, and egg products
Licensing & Operations	FSS (Licensing and Registration of Food Businesses) Regulations	Capacity-based registration / State / Central license; mandatory compliance with Schedule 4 (GMP & GHP)
Meat & Poultry Standards	FSS (Food Products Standards and Food Additives) Regulations, 2011	Enforceable standards for fresh meat, poultry meat, and processed meat products; limits on preservatives, additives, processing aids
Egg & Egg Products Standards	FSS (Food Products Standards and Food Additives) Regulations, 2011	Standards for shell eggs, egg powder, liquid egg products; storage and hygiene requirements
Slaughterhouse Hygiene	Schedule 4 – FSS Licensing Regulations (Part on Meat Establishments)	Mandatory ante-mortem and post-mortem inspection; segregation of clean/unclean areas; sanitation and pest control
Prohibited Practices	FSS (Prohibition and Restriction on Sales) Regulations	Prohibition on sale of meat from diseased animals; ban on unsafe slaughter and processing practices
Contaminants & Residues	FSS (Contaminants, Toxins and Residues) Regulations, 2011	Mandatory compliance with limits for veterinary drug residues, pesticides, heavy metals, and biological contaminants
Antibiotic Residues	FSS Act read with notified MRLs	Compliance with maximum residue limits for veterinary antibiotics; routine sampling and testing
Packaging & Labelling	FSS (Labelling and Display) Regulations	Mandatory non-veg logo (brown dot), nutrition table, storage conditions (Keep Refrigerated/Frozen), expiry or use-by date
Front-of-Pack Labelling	FSSAI Front-of-Pack Labelling Regulations (notified phase)	Warning labels for high fat and high sodium processed meat products (where thresholds are crossed)

Packaging & Metrology	Legal Metrology Act, 2009	Accuracy of net quantity, MRP, and mandatory consumer declarations
Packaging & Metrology	Legal Metrology (Packaged Commodities) Rules, 2011	Unit sale price, standard pack sizes, manufacturer/importer details
Animal Welfare	Prevention of Cruelty to Animals Act, 1960	Humane handling, transport, and slaughter of animals; prohibition of cruelty
Slaughter Regulation (Local)	State Municipal / Panchayat Slaughterhouse Bye-laws	Licensing and zoning of slaughterhouses; local authority supervision
Environmental Protection	Environment (Protection) Act, 1986	Control of odour, blood waste, emissions, and solid waste from slaughter and processing
Water Pollution	Water (Prevention and Control of Pollution) Act, 1974	Mandatory ETP; Consent to Establish and Operate; BOD/COD limits
Air Pollution	Air (Prevention and Control of Pollution) Act, 1981	Consent to Establish and Operate for boilers, rendering units, DG sets
Solid Waste	Solid Waste Management Rules, 2016	Segregation and scientific disposal of organic slaughter waste and rejects
Plastic Packaging	Plastic Waste Management Rules, 2016	Mandatory Extended Producer Responsibility (EPR) for plastic and multilayer packaging
Cold Chain Compliance	Schedule 4 – FSS Licensing Regulations	Mandatory chilled or frozen storage and transport; temperature control
Local Approvals	Municipal Trade Licence / Factory Licence Laws	Trade licence, fire safety clearance, building and zoning approvals
Labour & Safety	Factories Act, 1948	Worker hygiene, protective equipment, sanitation, machinery safety
Contract Labour	Contract Labour (Regulation and Abolition) Act, 1970	Contractor registration; principal employer wage and welfare liability
Export Registration	APEDA Act, 1985 (export units only)	Mandatory RCMC registration for export of meat, poultry, and egg products
Export Inspection	Export (Quality Control and Inspection) Act, 1963	Health certificate from Export Inspection Agency for notified exports
Trade & Export Control	Foreign Trade (Development and Regulation) Act, 1992	Export prohibitions, restrictions, quotas, or country-specific bans as notified
Taxation	Goods and Services Tax (GST) Acts and Rules	GST rate compliance, invoicing, return filing

5. Fish and Seafood Processing

Seafood processing is often treated separately due to its export intensity and international compliance requirements.

Includes:

- Fresh, frozen, and processed fish
- Shrimp, prawns, molluscs
- Value-added seafood products

Why this is a distinct category:

- Coastal and port-based regulatory oversight
- Traceability and residue compliance
- Heavy alignment with international food standards

Export-driven compliance makes this category especially complex.

Table 7: Key Regulatory Framework Governing Fish and Seafood Processing in India

Types of Approvals	Applicable Act / Regulation	Key Compliance Requirements
Food Safety (Core)	Food Safety and Standards Act, 2006	Mandatory FSSAI registration or license; strict liability for unsafe, contaminated, or misbranded fish and seafood products
Licensing & Operations	FSS (Licensing and Registration of Food Businesses) Regulations	Capacity-based registration / State / Central licence; mandatory Schedule 4 GMP & GHP compliance
Fish & Seafood Standards	FSS (Food Products Standards and Food Additives) Regulations, 2011	Product standards for fresh fish, frozen fish, dried fish, crustaceans, molluscs, and processed seafood; limits on additives and preservatives
Prohibited Practices	FSS (Prohibition and Restriction on Sales) Regulations	Prohibition on use of formalin, ammonia, or other non-permitted chemicals for preservation of fish
Contaminants & Residues	FSS (Contaminants, Toxins and Residues) Regulations, 2011	Compliance with limits for heavy metals (mercury, lead, cadmium), pesticide residues, veterinary drug residues
Packaging & Labelling	FSS (Labelling and Display) Regulations	Mandatory non-veg logo, nutrition table, storage conditions (Keep Frozen/Chilled), expiry/use-by date
Front-of-Pack Labelling	FSSAI Front-of-Pack Labelling Regulations (notified phase)	Warning labels for processed seafood products exceeding fat/sodium thresholds
Packaging & Metrology	Legal Metrology Act, 2009	Accuracy of net quantity, MRP, batch identification
Packaging & Metrology	Legal Metrology (Packaged Commodities) Rules, 2011	Unit sale price, pack size norms, manufacturer/importer details
Cold Chain Compliance	Schedule 4 – FSS Licensing Regulations	Mandatory chilled/frozen storage and transport; temperature monitoring

Environmental Protection	Environment (Protection) Act, 1986	Control of effluents, odour, solid waste, and emissions
Water Pollution	Water (Prevention and Control of Pollution) Act, 1974	Mandatory ETP; Consent to Establish and Operate; BOD/COD limits
Air Pollution	Air (Prevention and Control of Pollution) Act, 1981	Consent to Establish and Operate for boilers, DG sets, processing units
Solid Waste	Solid Waste Management Rules, 2016	Segregation and scientific disposal of fish waste, offal, and rejects
Plastic Packaging	Plastic Waste Management Rules, 2016	Mandatory Extended Producer Responsibility (EPR) for plastic and multilayer packaging
Coastal Regulation	Coastal Regulation Zone (CRZ) Notification, 2019 (issued under EP Act)	Restrictions on location and expansion of processing units in CRZ areas; prior CRZ clearance where applicable
Local Approvals	Municipal / Port / Local Authority Licences	Trade licence, fire safety clearance, zoning approvals
Labour & Safety	Factories Act, 1948	Worker hygiene, protective equipment, sanitation, machinery safety
Contract Labour	Contract Labour (Regulation and Abolition) Act, 1970	Contractor registration; principal employer wage and welfare liability
Export Promotion	Marine Products Export Development Authority Act, 1972 (MPEDA)	Mandatory registration of processing plants and exporters; compliance with MPEDA standards for exports
Export Inspection	Export (Quality Control and Inspection) Act, 1963	Health certificate from Export Inspection Agency for notified seafood exports
Trade & Export Control	Foreign Trade (Development and Regulation) Act, 1992	Export restrictions, quotas, or country-specific bans as notified
Taxation	Goods and Services Tax (GST) Acts and Rules	GST rate compliance, invoicing, return filing
Fisheries Regulation	State Fisheries Acts (procurement stage)	Regulation of landing, procurement, and handling of marine and inland fish

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