

Ensuring Safe and Quality Food in India: A Comprehensive Review of Food Laws, Regulations, and Standards

Ganesh Shrirang Satarkar (Nale)

Central University of Haryana

Corresponding Author: ganeshnale0@gmail.com

Abstract

Food safety is a critical component of public health and economic stability in India, a country marked by diverse food systems, rapid urbanization, and complex supply chains. To ensure the availability of safe, wholesome, and high-quality food, the Government of India has developed a comprehensive regulatory framework that integrates mandatory legislation, scientific regulations, voluntary quality standards, and institutional oversight. The Food Safety and Standards Act (FSSA), 2006 serves as the unifying statute, consolidating earlier fragmented food laws into a single, science-based framework. Administered by the Food Safety and Standards Authority of India (FSSAI), this legislation governs licensing, food product standards, contaminants and residues, packaging and labelling, sampling and laboratory analysis, and restrictions on unsafe food sales. Beyond FSSA, various allied Acts—such as the Environment (Protection) Act, Essential Commodities Act, Consumer Protection Act, Standards of Weights and Measures Act, Export (Quality Control & Inspection) Act, and Insecticides Act—indirectly contribute to food safety by regulating environmental emissions, packaging accuracy, availability of essential foods, export inspection, and pesticide use. Voluntary standards including AGMARK, BIS, and Codex Alimentarius further enhance food quality, support export competitiveness, and harmonize national practices with international norms. Together, these mandatory and voluntary mechanisms create a multilayered food governance system. Despite its robust framework, challenges remain in implementation, laboratory capacity, small-scale FBO compliance, and consumer awareness. Strengthening enforcement, digital traceability, and public education is essential for achieving a safer, more transparent, and consumer-centric food environment in India. This review summarizes key food laws, regulations, institutional roles, and their significance in ensuring safe and quality food for all.

Keywords: Food safety; FSSAI; FSSA 2006; food standards; contaminants; licensing; AGMARK; BIS; Codex Alimentarius; consumer protection

Introduction

Food safety is foundational to public health, economic stability, and social welfare. In India a country with diverse cuisines, complex supply chains, and a large population ensuring safe and wholesome food is a continuous challenge. The Government of India has responded with an integrated legal and institutional framework that combines statutory “bare acts,” regulatory rules, voluntary standards, and enforcement mechanisms. This article offers a concise and

comprehensive overview of that framework: the Food Safety and Standards Act, 2006 (FSSA), the Food Safety and Standards Authority of India (FSSAI), key FSS regulations, relevant allied laws, and voluntary standards such as AGMARK, BIS, and Codex Alimentarius.

Need for Food Standards and Enforcement

Food standards and their enforcement protect consumers and the food system by:

1. Safeguarding public health and reducing foodborne diseases;
2. Ensuring product quality and uniformity across markets;
3. Preventing adulteration, misbranding, and deceptive practices;
4. Controlling contaminants, toxins and residues (pesticides, heavy metals, mycotoxins);
5. Ensuring accurate labelling and informed consumer choice;
6. Facilitating domestic and international trade through recognized standards;
7. Assigning clear legal responsibilities to Food Business Operators (FBOs).

Types of Food Laws in India

A. Mandatory / Regulatory Laws (Bare Acts)

Bare Acts are the authoritative, unamended statutes published by the Government of India. Key mandatory laws affecting food safety include:

1. **Food Safety and Standards Act, 2006 (FSSA)** — Ministry of Health & Family Welfare; administered by FSSAI.
2. **Environment (Protection) Act, 1986** — Ministry of Environment, Forest & Climate Change.
3. **Standards of Weights and Measures Act, 1976** — Ministry of Consumer Affairs.
4. **Essential Commodities Act, 1955** — Department of Food & Public Distribution.
5. **Export (Quality Control & Inspection) Act, 1963** — Ministry of Commerce & Industry; implemented by Export Inspection Council.
6. **Insecticides Act, 1968** — Ministry of Agriculture & Farmers Welfare.
7. **Consumer Protection Act, 1986** — Ministry of Consumer Affairs.

These acts provide legal authority for inspection, testing, penalties, and remedies when food safety norms are breached.

B. Voluntary / Optional Standards

Voluntary standards raise market credibility but are not legally mandatory:

1. **AGMARK** — quality certification for agricultural produce (Directorate of Marketing & Inspection).
2. **BIS (Bureau of Indian Standards)** — Indian Standards and ISI marks for select food products and food-contact materials.
3. **Codex Alimentarius** — international food standards set by FAO/WHO that serve as references for national rules and trade.

Food Safety and Standards Authority of India (FSSAI)

FSSAI is the statutory, science-based authority created under FSSA (2006) to protect and promote public health through regulation of food safety. Its core functions include: framing standards; licensing and registration of FBOs; surveillance and enforcement (including recalls); setting limits for contaminants and additives; strengthening laboratory networks (National Reference Laboratories and State Labs); and conducting awareness, training and capacity building (e.g., Food Safety Mitras).

Food Safety and Standards Act, 2006 (FSSA): Inception, Importance, and Key Provisions

Inception and purpose: Before FSSA, India relied on multiple overlapping laws (such as the Prevention of Food Adulteration Act and Milk & Milk Products Order), which created confusion and enforcement gaps. FSSA consolidated these provisions into a single modern statute based on risk-analysis, scientific evidence, and international best practices.

Significance: FSSA provides a unified legal framework that clarifies responsibilities of regulators and FBOs, simplifies compliance, and emphasizes prevention and transparency.

Key provisions (select sections for practical relevance):

1. **Section 3** — Definitions (e.g., “food,” “contaminant,” “additive,” “food business operator”).
2. **Section 16** — Powers and functions of FSSAI.
3. **Section 18** — General principles: risk analysis, transparency and prevention.
4. **Section 26** — Responsibilities of FBOs (hygiene, standards, compliance).
5. **Section 31** — Licensing and registration requirement for FBOs.
6. **Sections 32–67** — Offences, penalties, adjudication, and appeals.

Core FSS Regulations: Areas of Focus

1. **Licensing and Registration** — Categorises FBOs by risk and turnover, prescribes hygiene and infrastructure requirements, and mandates display of FSSAI license numbers on packaged foods.

2. **Contaminants, Toxins and Residues** — Sets maximum limits for heavy metals (lead, mercury, arsenic), mycotoxins (aflatoxin), pesticide residues, and veterinary drug residues to prevent chronic and acute health risks.
3. **Food Product Standards and Additives** — Defines compositional and quality standards across food categories (cereals, oils, dairy, meat, beverages) and lists permitted additives with usage limits.
4. **Laboratory and Sampling** — Standardises sampling protocols, chain-of-custody rules, testing methods, and laboratory accreditation to ensure reliability and legal admissibility of results.
5. **Packaging and Labelling** — Requires mandatory declarations: product name, ingredient list, net weight, batch number, manufacture/expiry dates, nutritional information, allergen warnings, veg/non-veg symbol, MRP and FSSAI license number.
6. **Prohibition and Restriction on Sales** — Prohibits sale of unsafe, adulterated, misbranded, or banned additive-containing foods, and restricts sale in unhygienic locations (near open drains or toilets).

Interacting Laws and Government Bodies

Effective food governance involves multiple ministries and agencies:

1. **Ministry of Health & Family Welfare** — parent ministry for FSSAI.
2. **Ministry of Agriculture & Farmers Welfare** — pesticide regulation and AGMARK.
3. **Ministry of Commerce & Industry** — export quality control and trade facilitation.
4. **Ministry of Consumer Affairs** — weights and measures, BIS, consumer grievance redressal.
5. **APEDA, Export Inspection Council, State Food Authorities** — play sectoral and enforcement roles.

Conclusion

India’s food safety regime combines statutory authority (FSSA and other bare acts), technical regulations (FSS regulations), voluntary standards (AGMARK, BIS, Codex), and institutional mechanisms (FSSAI, laboratories, enforcement wings). While the architecture is robust on paper, implementation challenges persist—notably laboratory capacity, small FBO compliance, traceability, and consumer awareness. Strengthening laboratory networks, digitising traceability, building capacities of small producers, and raising consumer literacy are critical next steps to ensure that legal standards translate into safer food on plates across India.

References

- Bhuvan, K. B., & Shankar, R. (2017). *Food chemistry*. Discovery Publishing House.
- FSSAI. (2023). *Food Safety and Standards Act, 2006 (Bare Act)*. Food Safety and Standards Authority of India.

- Ministry of Health and Family Welfare. (2023). *Food safety regulations*. Government of India.
- Shankar, S., Ram, R., & Hari, H. (2022). Assessment of suitability of water quality in and around Kalaburagi, Karnataka on the basis Water Quality Index (WQI). *Environment Conservation Journal*, 15(3), 65–71.
- Codex Alimentarius Commission. (2023). *General standards for food additives*. FAO–WHO.
- Bureau of Indian Standards. (2022). *Food standards and ISI specifications*. BIS Publications.
- Directorate of Marketing & Inspection. (2023). *AGMARK standards*. Ministry of Agriculture.
- Export Inspection Council. (2022). *Export quality control guidelines*. EIC, India.
- Government of India. (1986). *Environment (Protection) Act, 1986 (Bare Act)*.
- Government of India. (1955). *Essential Commodities Act, 1955 (Bare Act)*.
- Government of India. (1963). *Export (Quality Control & Inspection) Act, 1963 (Bare Act)*.
- Government of India. (1968). *Insecticides Act, 1968 (Bare Act)*.
- Government of India. (1986). *Consumer Protection Act, 1986 (Bare Act)*.
- APEDA. (2022). *Food export standards and protocols*. Agricultural & Processed Food Products Export Development Authority.
- Ministry of Environment, Forest & Climate Change. (2023). *Environmental guidelines for food industries*. Government of India.
- FAO. (2020). *Food safety risk analysis: A guide for developing countries*. Food and Agriculture Organization.
- WHO. (2019). *Foodborne disease surveillance systems*. World Health Organization.
- Ministry of Consumer Affairs. (2021). *Standards of Weights and Measures Act—updates*. Government of India.
- FSSAI. (2022). *Manual of food safety and hygiene practices*. FSSAI.
- Raghuvanshi, R. (2020). Food security and safety issues in India. *Journal of Food Systems*, 12(1), 45–52.
- Singh, S. (2021). Food adulteration trends in India. *Indian Journal of Public Health*, 65(4), 289–294.
- Sharma, P. (2022). Regulatory challenges in Indian food processing. *Journal of Food Regulation*, 9(2), 112–120.
- FAO–WHO. (2021). *International food standards & Codex guidelines*. FAO/WHO Codex.
