

**INTERNATIONAL JOURNAL OF LAW
MANAGEMENT & HUMANITIES**
[ISSN 2581-5369]

Volume 9 | Issue 5

2026

© 2026 International Journal of Law Management & Humanities

Follow this and additional works at: <https://www.ijlmh.com/>

Under the aegis of VidhiAagaz – Inking Your Brain (<https://www.vidhiaagaz.com/>)

This article is brought to you for free and open access by the International Journal of Law Management & Humanities at VidhiAagaz. It has been accepted for inclusion in the International Journal of Law Management & Humanities after due review.

In case of **any suggestions or complaints**, kindly contact support@vidhiaagaz.com.

To submit your Manuscript for Publication in the **International Journal of Law Management & Humanities**, kindly email your Manuscript to submission@ijlmh.com.

Food Adulteration in India: Legal Punishments, Regulatory Enforcement and Public Health Protection

T. SRINIVAS REDDY*  AND LADHVE AKSHAY KUMAR** 

ABSTRACT

Food adulteration is a persistent regulatory problem because the deliberate or negligent alteration, substitution, contamination or misbranding of food can expose consumers to economic loss, nutritional deficiency and serious health risks. In India, the Food Safety and Standards Act, 2006 transformed the earlier fragmented food-control regime by creating the Food Safety and Standards Authority of India and establishing a consolidated framework for food standards, licensing, inspection, sampling, testing, adjudication and prosecution. The statutory framework seeks not merely to punish adulterators but to secure the availability of safe and wholesome food through preventive and regulatory controls. This paper critically examines food adulteration in India from legal, regulatory and public-health perspectives. It analyses the evolution from the Prevention of Food Adulteration Act, 1954 to the Food Safety and Standards Act, 2006, and considers the roles of FSSAI, the Commissioners of Food Safety of the States, Designated Officers, Food Safety Officers, laboratories and adjudicating authorities. Particular attention is given to the statutory meaning of unsafe and sub-standard food, licensing and compliance obligations, inspection and sampling procedures, evidentiary requirements, graded penalties, criminal prosecution and regulatory enforcement. The study also considers the relationship between food adulteration and constitutional protections concerning life, health, consumer welfare and State responsibility. The research adopts a doctrinal and analytical methodology based on legislation, regulations, judicial decisions, official FSSAI materials and secondary legal literature. It argues that the effectiveness of food-safety law depends upon more than severe punishment. Reliable sampling, scientifically accredited laboratories, timely analysis, traceable supply chains, transparent enforcement, trained personnel and proportionate sanctions are essential to deterrence. The paper proposes stronger laboratory capacity, risk-based inspections, digital traceability, coordinated enforcement, faster adjudication and effective prosecution to strengthen India's food-safety system and protect public health.

* Author is a Student at Aurora Deemed to be University, Bhongir, Telangana, India. ORCID: <https://orcid.org/0009-0001-3380-4684>

** Author is a Student at Aurora Deemed to be University, Bhongir, Telangana, India. ORCID: <https://orcid.org/0009-0007-9848-9519>

Keywords: *Food adulteration, Food Safety and Standards Act, FSSAI, food safety, public health, regulatory enforcement, adulterated food, consumer protection, food testing, penalties*

I. INTRODUCTION

Food adulteration is a serious legal and public-health problem because consumers ordinarily cannot independently determine the chemical, microbiological or compositional quality of food before purchase. Adulteration may occur through substitution, dilution, addition of inferior or prohibited substances, contamination, removal of valuable constituents, misuse of additives or misleading presentation. Its consequences range from economic loss and nutritional deficiency to acute poisoning and long-term disease.¹

India's principal contemporary statute is the Food Safety and Standards Act, 2006 ("FSS Act"). The Act consolidated earlier food laws and established the Food Safety and Standards Authority of India ("FSSAI") to prescribe science-based standards and to regulate the manufacture, storage, distribution, sale and import of food. FSSAI describes the legislation as a comprehensive framework intended to ensure safe and wholesome food.²

The existence of a comprehensive statute does not by itself guarantee food safety. Effective enforcement depends upon the ability of Food Safety Officers and other authorities to inspect premises, collect representative samples, preserve them properly, obtain scientifically reliable laboratory analysis and identify the persons responsible for the relevant food business. Current FSSAI materials show continuing regulatory activity involving laboratories, licensing, standards and enforcement notifications.³

The law also recognises that food violations differ in seriousness. A minor technical non-compliance, a sub-standard product and unsafe food causing injury or death cannot rationally receive identical consequences. The FSS Act therefore contains graded penalties and separates certain adjudicatory matters from more serious criminal offences. This approach reflects proportionality while retaining strong sanctions for conduct that creates substantial public-health risks.⁴

¹ WORLD HEALTH ORGANIZATION, *Food Safety*, <https://www.who.int/health-topics/food-safety>.

² Food Safety and Standards Act, No. 34 of 2006, INDIA CODE (2006), pmbi., §§ 3, 4, 16, 31, 38, 42 (India); see FOOD SAFETY AND STANDARDS AUTHORITY OF INDIA, *About FSSAI*, <https://stg-old.fssai.gov.in/cms/about-fssai.php>.

³ Food Safety and Standards Act, No. 34 of 2006, INDIA CODE (2006), §§ 38, 41–46 (India); FOOD SAFETY AND STANDARDS AUTHORITY OF INDIA, *Food Laboratories*, <https://fssai.gov.in/food-testing/food-laboratories>.

⁴ Food Safety and Standards Act, No. 34 of 2006, INDIA CODE (2006), §§ 50–59, 68 (India).

Effective regulation must also account for changing food markets. Packaged foods, online commerce, cloud kitchens, informal distribution and cross-border supply chains create enforcement questions that were less prominent in earlier food-control regimes. Regulatory systems should therefore remain technologically and scientifically adaptable.

Another important consideration is institutional independence. Food-safety authorities routinely regulate businesses that may possess substantial commercial interests. Enforcement must therefore be based on objective standards, documented inspection and scientific evidence rather than informal influence. Transparent allocation of inspection duties, supervisory review and audit mechanisms can reduce opportunities for arbitrary decision-making.

This research examines food adulteration in nine parts. Part II explains the literature, methodology and analytical framework. Part III examines the statutory and regulatory structure. Part IV analyses inspection, sampling, laboratory testing and enforcement. Part V studies penalties, adjudication and prosecution. Part VI examines evidentiary and institutional challenges. Part VII considers constitutional, consumer and public-health dimensions. Part VIII critically assesses the framework and proposes reforms. Part IX concludes.

II. LITERATURE REVIEW, METHODOLOGY AND ANALYTICAL FRAMEWORK

The literature on food adulteration is interdisciplinary. Legal scholarship focuses on statutory standards, offences, penalties and administrative powers; public-health research examines exposure to contaminants and unsafe substances; regulatory studies consider inspection, testing and institutional coordination; and consumer scholarship addresses information asymmetry and access to remedies.

A. Conceptualising food adulteration and food safety

Food adulteration should be examined within the broader concept of food safety. A food product may be unsafe because it contains a harmful contaminant, may be sub-standard because it fails a prescribed quality requirement, or may be misbranded because information supplied to consumers is legally deficient.⁵

B. Evolution of food-adulteration law in India

Before the FSS Act, food control was distributed among several laws and orders, including the Prevention of Food Adulteration Act, 1954 and commodity-specific instruments. The FSS Act consolidated the principal framework and established FSSAI as the central authority. This

⁵ Food Safety and Standards Act, No. 34 of 2006, INDIA CODE (2006), § 3(1)(zf), (zx), (zz) (India).

change was intended to provide a single reference point for food standards and regulation while retaining State-level enforcement responsibilities.⁶

C. Research methodology

The study adopts a doctrinal, qualitative and analytical methodology. Primary sources include the Food Safety and Standards Act, 2006, the Food Safety and Standards Rules, 2011, applicable regulations, enforcement notifications and judicial decisions. Official FSSAI materials concerning standards, licensing, laboratories and enforcement are used to understand institutional practice and regulatory development. Secondary legal and public-health literature provides analytical context.

D. Scope and limitations

The paper focuses on food adulteration and closely connected food-safety violations within the Indian legal framework. It examines statutory regulation, enforcement authorities, sampling, laboratory testing, penalties, adjudication and public-health implications. It does not undertake a comprehensive empirical survey of adulteration across every food category or State. Nor does it treat every media report or consumer allegation as a legally established violation.

E. Analytical framework

The analysis asks five questions: whether the law clearly identifies unsafe and non-compliant food; whether enforcement institutions possess adequate powers and capacity; whether sampling and laboratory procedures produce reliable evidence; whether sanctions create proportionate and credible deterrence; and whether the system effectively protects public health. Food safety is treated as a chain consisting of standards, licensing, inspection, sampling, testing, adjudication, prosecution and monitoring.

III. STATUTORY AND REGULATORY FRAMEWORK GOVERNING FOOD ADULTERATION IN INDIA

The Food Safety and Standards Act, 2006 provides the principal statutory foundation for India's food-safety regime. It aims to consolidate the laws relating to food and to establish FSSAI for laying down science-based standards and regulating manufacture, storage, distribution, sale and import. The Act operates together with the Food Safety and Standards Rules, 2011 and with regulations dealing with licensing, food products, additives, contaminants, packaging, labelling and other matters.

⁶ Prevention of Food Adulteration Act, No. 37 of 1954, INDIA CODE (1954) (India) (repealed with effect from Aug. 5, 2011); Food Safety and Standards Act, No. 34 of 2006, INDIA CODE (2006), § 97 & Second Schedule (India).

A. Food Safety and Standards Authority of India

FSSAI performs central functions including standard-setting, scientific advice, coordination, monitoring and public awareness. The institutional structure also includes the Commissioners of Food Safety of the States, Designated Officers and Food Safety Officers, who undertake enforcement closer to food businesses and consumers. This distribution is necessary because food production and sale occur across diverse local markets. Its success depends on coordination, consistent training, adequate staffing and access to laboratories.⁷

B. Standards, licensing and registration

Licensing and registration provide preventive control by identifying food businesses and placing them within a regulatory system before or during operation. Product standards prescribe requirements concerning composition, additives and other characteristics, while separate regulations address contaminants, toxins, residues, packaging and labelling. Licensing is important not merely as an administrative formality but as a foundation for traceability and enforcement.⁸

C. Offences and graded penalties

The FSS Act adopts a graded approach to liability. It provides consequences for sub-standard food, misbranding, misleading advertisements, unhygienic processing, possession or sale of adulterants and unsafe food, with more serious consequences where unsafe food causes injury or death. Graded liability reflects proportionality and permits authorities to distinguish technical or lower-risk contraventions from conduct creating grave public-health danger.⁹

D. Adjudication and criminal prosecution

The statutory scheme differentiates certain regulatory contraventions suitable for adjudication from offences requiring criminal prosecution. This permits administrative authorities to address appropriate violations efficiently while preserving criminal process for more serious conduct. Adjudicating Officers must act within their statutory powers and observe procedural fairness. Criminal prosecution requires proof of the relevant offence and of the responsibility of the accused.¹⁰

⁷ Food Safety and Standards Act, No. 34 of 2006, INDIA CODE (2006), §§ 16, 30, 36–42 (India).

⁸ Food Safety and Standards Act, No. 34 of 2006, INDIA CODE (2006), § 31 (India); Food Safety and Standards (Licensing and Registration of Food Businesses) Regulations, 2011 (India); Food Safety and Standards (Food Products Standards and Food Additives) Regulations, 2011 (India); Food Safety and Standards (Contaminants, Toxins and Residues) Regulations, 2011 (India).

⁹ Food Safety and Standards Act, No. 34 of 2006, INDIA CODE (2006), §§ 50–59 (India).

¹⁰ Food Safety and Standards Act, No. 34 of 2006, INDIA CODE (2006), §§ 68–76 (India).

E. Food testing laboratories

Scientific testing is central to modern food regulation. Many violations cannot be established by visual inspection and require chemical, microbiological or compositional analysis against prescribed standards. The statutory framework therefore recognises food laboratories and provides procedures for analysis. FSSAI continues to issue notifications concerning accredited and notified laboratories and laboratory procedures. Adequate laboratory capacity is consequently not a secondary administrative matter.¹¹

F. Consumer protection and related remedies

Food-safety regulation overlaps with consumer protection because unsafe or adulterated products cause economic and health consequences. Depending on the circumstances, regulatory action, consumer remedies, criminal law and contractual principles may operate alongside the FSS Act. The food-safety mechanism is distinctive because it combines preventive standards with public enforcement rather than leaving consumers to pursue individual disputes.¹²

IV. REGULATORY ENFORCEMENT, INSPECTION AND DETECTION OF FOOD ADULTERATION

Enforcement is the practical foundation of food-safety law. Food Safety Officers and other authorities must translate statutory standards into field-level supervision through inspections, sampling, record examination and appropriate proceedings. Enforcement should be risk-based because resources are limited and food products differ in potential harm. A high-quality regulatory system should combine routine surveillance with targeted inspections based on product risk, previous violations, complaints and intelligence.¹³

A. Inspection and surveillance

Inspection permits authorities to examine premises, hygiene conditions, storage, manufacturing practices, labelling and records. It can reveal risks that a laboratory sample alone may not capture. High-risk establishments and repeat offenders may require more frequent inspection, while low-risk businesses can be monitored proportionately. Officers require both legal and

¹¹ Food Safety and Standards Act, No. 34 of 2006, INDIA CODE (2006), §§ 43–47 (India).

¹² Consumer Protection Act, No. 35 of 2019, INDIA CODE (2019) (India); Food Safety and Standards Act, No. 34 of 2006, INDIA CODE (2006) (India).

¹³ Food Safety and Standards Act, No. 34 of 2006, INDIA CODE (2006), §§ 37–42 (India); FOOD SAFETY AND STANDARDS AUTHORITY OF INDIA, *Manual for Food Safety Officers* (3d ed. Mar. 2024), https://stg-old.fssai.gov.in/upload/knowledge_hub/7729566bb3f339ffbdFSO%20Manual%20final-8%20web.pdf.

scientific training so that they understand the limits of their powers and the technical significance of what they observe.¹⁴

B. Sampling and representativeness

Sampling is a critical evidentiary stage. A laboratory result is meaningful only if the sample accurately represents the food placed in the market or held at the premises. Statutory and regulatory requirements concerning collection, division, sealing, identification and transmission must therefore be followed carefully. Errors in sample identity, storage or transportation may create disputes about reliability.¹⁵

C. Laboratory analysis

Laboratory analysis converts a regulatory standard into scientific evidence. Analysts may test for prohibited substances, contaminants, composition, residues or other parameters. Laboratories require competent personnel, validated methods, quality control and appropriate equipment. Timeliness is equally important because food may be perishable and regulatory action may be necessary before distribution expands. FSSAI's continuing notifications concerning laboratories demonstrate the importance of maintaining accredited and notified testing capacity.¹⁶

D. Traceability and supply-chain accountability

Food commonly passes through manufacturers, processors, distributors, wholesalers and retailers. Enforcement should therefore determine where a violation originated rather than assuming that the final seller is necessarily responsible for every defect. Licences, invoices, batch numbers, production records, transport documents and digital traceability can connect a product to its source. Effective traceability also permits targeted recalls, reducing unnecessary disruption of lawful trade.¹⁷

¹⁴ Food Safety and Standards Act, No. 34 of 2006, INDIA CODE (2006), §§ 38, 41–42 (India); FOOD SAFETY AND STANDARDS AUTHORITY OF INDIA, *Manual for Food Safety Officers*, *supra* note 13.

¹⁵ Food Safety and Standards Act, No. 34 of 2006, INDIA CODE (2006), §§ 38, 47 (India); Food Safety and Standards Rules, 2011 (India); Food Safety and Standards (Laboratory and Sample Analysis) Regulations, 2011 (India); *cf. State of Kerala v. Alasserry Mohammed*, (1978) 2 SCC 386 (India) (holding, under the Prevention of Food Adulteration Act, 1954, that rule 22 of the 1955 Rules, on the quantity of sample to be sent for analysis, is directory, while stressing that even directory sampling rules are meant to be observed and substantially complied with).

¹⁶ Food Safety and Standards Act, No. 34 of 2006, INDIA CODE (2006), §§ 43–47 (India); Food Safety and Standards (Laboratory and Sample Analysis) Regulations, 2011 (India).

¹⁷ Food Safety and Standards Act, No. 34 of 2006, INDIA CODE (2006), §§ 26, 31 (India); Food Safety and Standards (Licensing and Registration of Food Businesses) Regulations, 2011 (India).

E. Centre–State enforcement coordination

FSSAI establishes national standards and provides central coordination, while State authorities perform much of the direct enforcement. Differences in staffing, laboratory access, training and local priorities can produce uneven implementation. Standardised protocols, shared databases, coordinated training and prompt communication of amendments can reduce these differences. Enforcement notifications and regulatory changes must reach field officers quickly; otherwise, a formally updated legal standard may coexist with outdated administrative practice.

F. Digital enforcement

Digital licensing, inspection records, laboratory reporting, complaint management and traceability can improve regulatory consistency. Data analysis can identify recurring violations and high-risk products or establishments. Digital systems should remain auditable and secure because their records may become evidence. Technology should supplement professional inspection rather than replace scientific and legal judgment.¹⁸

Prevention is particularly valuable because food-related harm may be irreversible. Once a contaminated product has been consumed, later compensation or prosecution cannot fully restore health. Regulatory authorities should therefore prioritise early detection and rapid risk control. Product recalls, public warnings and temporary suspension of unsafe operations may protect consumers more effectively than relying solely upon eventual criminal punishment.

Scientific uncertainty should be managed carefully. Food standards are often expressed through measurable limits, but analytical testing may involve sampling variation and technical limitations. Authorities should use validated methods and competent laboratories, while businesses should have lawful avenues to challenge results where the statute permits.¹⁹ This balance protects public health without treating scientific evidence as immune from scrutiny.

V. LEGAL PUNISHMENTS, ADJUDICATION AND CRIMINAL PROSECUTION

The deterrent value of food law depends on the credibility of sanctions. The FSS Act combines administrative and criminal consequences and links liability to the nature of the violation. The framework recognises that technical non-compliance, sub-standard food and dangerous unsafe

¹⁸ Food Safety and Standards Act, No. 34 of 2006, INDIA CODE (2006), §§ 16, 31, 38, 42 (India); FOOD SAFETY AND STANDARDS AUTHORITY OF INDIA, *Food Laws & Notifications*, <https://www.fssai.gov.in/notifications.php>.

¹⁹ See Food Safety and Standards Act, No. 34 of 2006, INDIA CODE (2006), §§ 46(4), 47(1)(c) (India); *PepsiCo India Holdings (P) Ltd. v. Food Inspector*, (2011) 1 SCC 176 (India) (quashing prosecutions under the Prevention of Food Adulteration Act, 1954 founded on a public analyst's report of pesticide residue in a soft drink, where no validated method of analysis had been prescribed and no tolerance limit then existed for the product, the residue found being within the limit later prescribed for it, and observing that the mere presence of pesticide residue does not *ipso facto* render an article of food adulterated).

food require different responses. Severe punishment has value only when detection is credible and evidence is reliable.

A. Proportionality of penalties

A graduated penalty structure enables authorities to distinguish different levels of risk and culpability. Unsafe food causing injury or death attracts much more serious consequences than lower-level violations because the public-health impact is fundamentally different. Proportionality also protects legitimate businesses from excessive sanctions for remediable technical breaches.²⁰

B. Adjudication

Adjudication provides an administrative route for specified contraventions. It can be faster and more proportionate than criminal prosecution where the statutory scheme treats the matter as a regulatory violation. The Adjudicating Officer must nevertheless follow statutory procedure, consider the evidence and give the affected party an opportunity to be heard. Administrative efficiency cannot justify arbitrary decision-making.²¹

C. Criminal prosecution

Serious offences under the Act may require criminal prosecution. The prosecution must establish the statutory ingredients and connect the accused with the relevant food business and violation. Laboratory analysis, sampling records, licensing information, invoices and witness testimony may collectively form the evidentiary chain. The seriousness of the public-health risk does not remove the requirement of proof.

D. Attribution of responsibility

Food businesses may be companies, partnerships, proprietorships or individual operations, making attribution an important issue. Investigators should identify the legally responsible entity and examine the roles of owners, managers, manufacturers, distributors and other participants under the applicable provisions. Liability should not automatically follow merely from a managerial title where the statute requires proof of a particular role or conduct.²²

²⁰ Food Safety and Standards Act, No. 34 of 2006, INDIA CODE (2006), §§ 49–59 (India).

²¹ Food Safety and Standards Act, No. 34 of 2006, INDIA CODE (2006), §§ 68–74 (India).

²² Food Safety and Standards Act, No. 34 of 2006, INDIA CODE (2006), § 66 (India); *see Mun. Corp. of Delhi v. Ram Kishan Rohtagi*, (1983) 1 SCC 1 (India) (upholding the quashing of a complaint under the Prevention of Food Adulteration Act, 1954 against a company's directors, which alleged that they were in charge of and responsible for its business merely "as such", while restoring the proceedings against its manager, who as manager was "directly incharge of its affairs"); *see also PepsiCo*, (2011) 1 SCC 176 (requiring the complaint itself to show that the directors were in charge of, or responsible to, the company for its day-to-day management).

E. Licence action, recall and prevention

Punishment is only one regulatory response. Licensing measures, withdrawal and recall can stop unsafe products from continuing to expose consumers while adjudication or prosecution proceeds. These preventive measures are especially important where a hazardous batch has already entered the market. Recall procedures should be rapid, traceable and proportionate. Criminal proceedings address liability after the alleged violation, whereas recall addresses continuing risk.²³

F. Deterrence and compliance

Deterrence is strongest when enforcement is predictable, scientifically credible and proportionate. Extremely high penalties that are rarely imposed may deter less effectively than consistent enforcement of reasonable sanctions. Compliance assistance, education, inspection and guidance should therefore operate alongside punishment. The objective is to make lawful production economically rational and adulteration an unattractive practice.²⁴

VI. EVIDENTIARY AND INSTITUTIONAL CHALLENGES IN FOOD-ADULTERATION CASES

Food-adulteration cases depend heavily on scientific and documentary evidence. Unlike cases based mainly on eyewitness testimony, the legal status of food often turns on laboratory findings against prescribed standards. This makes sampling, preservation, testing and documentation central to both adjudication and prosecution. Institutional weaknesses therefore become evidentiary weaknesses. Delayed analysis, inadequate laboratories, incomplete records or poor chain-of-custody procedures can prevent authorities from proving an otherwise genuine public-health violation.²⁵

A. Sample integrity and chain of custody

The sample must remain identifiable and protected from collection through laboratory receipt and analysis. Officers should document the source, date, quantity, sealing, storage and transmission. Each transfer should be capable of verification. Secure digital tracking could reduce clerical mistakes and strengthen later proof.²⁶

²³ Food Safety and Standards Act, No. 34 of 2006, INDIA CODE (2006), § 28 (India); *id.* §§ 31–32.

²⁴ Food Safety and Standards Act, No. 34 of 2006, INDIA CODE (2006), §§ 50–59 (India).

²⁵ Food Safety and Standards Act, No. 34 of 2006, INDIA CODE (2006), §§ 37–47 (India); FOOD SAFETY AND STANDARDS AUTHORITY OF INDIA, *Manual for Food Safety Officers*, *supra* note 13.

²⁶ Food Safety and Standards Act, No. 34 of 2006, INDIA CODE (2006), §§ 38, 42, 47 (India); FOOD SAFETY AND STANDARDS AUTHORITY OF INDIA, *Manual for Food Safety Officers*, *supra* note 13.

B. Scientific evidence

Scientific evidence requires competent laboratories and appropriate analytical methods. A report may establish that a sample failed a prescribed standard, but the reliability of that conclusion depends upon methodology, equipment, competence and sample integrity. Authorities should therefore maintain quality assurance and appropriate accreditation. Courts and adjudicating authorities should evaluate scientific evidence carefully without treating technical terminology as automatically conclusive.²⁷

C. Delay and perishable evidence

Food is often perishable, making delay particularly consequential. By the time proceedings occur, the original product may no longer exist, leaving laboratory and documentary records as the principal evidence. Authorities should prioritise samples presenting immediate public-health risks and monitor laboratory turnaround times. Respondents must still receive statutory opportunities to challenge evidence. Efficient proceedings should therefore be achieved through better systems, not by reducing procedural fairness.

D. Institutional capacity

The effectiveness of the statutory framework depends upon adequate Food Safety Officers, Designated Officers, analysts and support personnel. Enforcement requires knowledge of food science, inspection, evidence, administrative law and statutory procedure. Staff shortages may lead to infrequent inspections, laboratory backlogs and delayed cases. Capacity-building should include recruitment, continuing training and modern equipment.²⁸

E. Informal markets and small businesses

Small and informal food businesses may lack technical knowledge about hygiene, storage, labelling and permitted ingredients. Regulation should therefore combine education with enforcement where non-compliance is capable of correction. Simplified guidance and accessible registration can improve lawful participation. However, deliberate adulteration for profit cannot be excused merely because an operator is small.

F. Consumer complaints

Consumer complaints provide valuable regulatory intelligence. Repeated complaints concerning a product, establishment or locality can help authorities identify risks for targeted

²⁷ Food Safety and Standards Act, No. 34 of 2006, INDIA CODE (2006), §§ 38, 46–47 (India); Food Safety and Standards Rules, 2011 (India); Food Safety and Standards (Laboratory and Sample Analysis) Regulations, 2011 (India).

²⁸ Food Safety and Standards Act, No. 34 of 2006, INDIA CODE (2006), §§ 26, 31, 38 (India); Food Safety and Standards (Licensing and Registration of Food Businesses) Regulations, 2011 (India).

sampling. Complaint systems should be accessible and responsive, with appropriate communication about action taken. Consumers should not be expected to establish adulteration themselves because many violations require laboratory analysis. Public participation should therefore supplement, rather than replace, official sampling and scientific enforcement.

VII. CONSTITUTIONAL, CONSUMER AND PUBLIC-HEALTH DIMENSIONS OF FOOD SAFETY

Food safety has a strong public-interest dimension because unsafe food can affect life, health and dignity. The State's regulatory responsibility is reinforced by constitutional principles concerning protection of life and public welfare. Consumers also face information asymmetry because they cannot ordinarily verify food composition before purchase. Food adulteration is therefore not simply a private commercial wrong.²⁹

A. Article 21 and health

Article 21 protects life and personal liberty and has been interpreted to include the conditions necessary for a dignified existence. Safe food is closely connected with public health and therefore provides a strong constitutional context for regulation. This does not mean that every technical food violation automatically constitutes a violation of fundamental rights.³⁰

B. Consumer rights and information

Consumers need accurate information concerning ingredients, composition, labelling and safety. Disclosure supports informed choice, but it cannot replace minimum safety standards. A prohibited or dangerous substance does not become lawful merely because a seller discloses it. The regulatory system must therefore prevent unsafe food while also ensuring truthful information about products that may lawfully be sold.³¹

C. Vulnerable consumers

Food-safety risks may disproportionately affect children, older persons, persons with medical vulnerabilities and economically disadvantaged consumers. Low-income consumers may also face greater exposure where cheaper products are more susceptible to dilution or substitution. Risk-based regulation should therefore consider both the hazard and the population exposed to it. Public-health protection is strongest when enforcement prioritises products and circumstances in which failure could affect large or particularly vulnerable groups.

²⁹ INDIA CONST. arts. 21, 47; Food Safety and Standards Act, No. 34 of 2006, INDIA CODE (2006) (India).

³⁰ INDIA CONST. art. 21; *Subhash Kumar v. State of Bihar*, (1991) 1 SCC 598 (India).

³¹ Consumer Protection Act, No. 35 of 2019, INDIA CODE (2019) (India); Food Safety and Standards Act, No. 34 of 2006, INDIA CODE (2006) (India).

D. Business rights and due process

Food businesses have legitimate interests in predictable standards, fair inspections and lawful adjudication. Authorities must exercise statutory powers within their legal limits and provide procedural opportunities to challenge evidence. Proportionality is essential because arbitrary enforcement can harm lawful trade and public confidence. Conversely, commercial interests cannot justify practices that expose consumers to serious danger.³²

E. Supply-chain and environmental risks

Food safety may intersect with agricultural practices, environmental contamination, pesticide residues, heavy metals, unsafe water and storage conditions. Regulation must therefore consider the full food chain rather than only the final point of sale. Standards concerning contaminants, toxins and residues reflect this broader approach. Coordination among food, agriculture, health and local authorities can help identify systemic risks before they reach consumers.

F. State responsibility and public trust

Public confidence depends upon the perception that authorities will act when unsafe food is detected. Inconsistent enforcement, delayed action or inadequate communication can weaken that trust. Transparent enforcement statistics, reliable laboratories and accurate public-health communication can strengthen legitimacy. State responsibility is therefore both regulatory and institutional: authorities must maintain standards and ensure that the institutions enforcing them operate competently, fairly and with sufficient independence to command public confidence.

VIII. CRITICAL ASSESSMENT AND RECOMMENDATIONS

India possesses a substantial statutory framework for food safety, but continuing enforcement challenges demonstrate that legal rules require strong institutional support. The principal difficulties include uneven inspection capacity, laboratory constraints, delays, fragmented information and difficulties in tracing responsibility through complex supply chains. Reform should strengthen the existing framework rather than simply create additional offences. The emphasis should be on prevention, detection, scientific reliability, timely proceedings and credible accountability.

A. Risk-based inspection

Inspection resources should be allocated according to product risk, previous violations, business history, complaints and potential consumer impact. High-risk establishments should receive closer scrutiny, while low-risk operators can be monitored proportionately. Risk-based

³² Food Safety and Standards Act, No. 34 of 2006, INDIA CODE (2006), §§ 38, 42, 68–76 (India).

regulation should not mean weaker protection for small businesses; it should ensure that limited enforcement resources are directed where intervention can prevent serious harm. Digital inspection records can support consistent prioritisation and supervisory review.³³

B. Laboratory capacity

Food-testing laboratories require adequate staff, modern equipment, validated methods and quality-assurance systems. Accreditation should be supported by continuing assessment and transparent performance standards. Referral laboratories should have capacity for technically complex or disputed samples. Turnaround time should be monitored because delay can weaken both public-health intervention and prosecution. Laboratory investment is therefore an enforcement priority rather than merely a scientific expenditure.³⁴

C. Digital traceability

An integrated digital platform could connect licensing, inspection, sample identification, laboratory results, complaints and enforcement outcomes. Secure chain-of-custody records would reduce documentation errors and facilitate audit. Batch-level traceability could identify the source of unsafe products and permit targeted recalls. Access controls and audit logs are necessary where digital records may become evidence. Technology should increase transparency while respecting legitimate commercial confidentiality and personal-data protection.

D. Faster adjudication and prosecution

Authorities should monitor the time between sampling, laboratory analysis, adjudication and prosecution and identify avoidable delays. Cases involving serious public-health risks should receive appropriate priority. Adjudicators and prosecutors require training in food-safety law and scientific evidence. Faster proceedings must not reduce procedural fairness. Efficiency should result from better case management, laboratory coordination and digital records rather than from eliminating opportunities to challenge evidence.³⁵

E. Training and professionalisation

Food Safety Officers and other enforcement personnel require continuing training in sampling, evidence preservation, food science, statutory powers and courtroom presentation. Scientific and legal competencies should be integrated because an early procedural error can affect the

³³ FOOD SAFETY AND STANDARDS AUTHORITY OF INDIA, *Manual for Food Safety Officers*, *supra* note 13; Food Safety and Standards Act, No. 34 of 2006, INDIA CODE (2006), §§ 37–42 (India).

³⁴ Food Safety and Standards Act, No. 34 of 2006, INDIA CODE (2006), §§ 43–47 (India); Food Safety and Standards (Laboratory and Sample Analysis) Regulations, 2011 (India).

³⁵ Food Safety and Standards Act, No. 34 of 2006, INDIA CODE (2006), §§ 68–76 (India).

entire later case. Professionalisation can reduce avoidable defects and improve public confidence. Common training standards and central coordination can also reduce variations in enforcement quality between jurisdictions.

F. Consumer awareness

Consumers should receive accessible information about licensing, labelling, complaint mechanisms and safe purchasing practices. Awareness campaigns should avoid suggesting that every adulterant can be detected through simple home tests. Instead, consumers should be encouraged to report suspicious products and preserve relevant packaging or purchase information where possible. Complaint data should feed into risk-based surveillance so that repeated concerns generate targeted sampling and investigation.

G. Recall and emergency response

When unsafe food is detected, authorities should have clear procedures for withdrawal, recall and public communication. Manufacturers, distributors, retailers, laboratories and public-health authorities should know their respective responsibilities. Recall information should identify affected products and batches accurately while avoiding unnecessary alarm. Effective recall protects consumers immediately, while adjudication or prosecution can establish legal responsibility afterwards. These functions should operate together rather than sequentially.³⁶

H. Integrated food-safety accountability model

A strong model can be organised into seven stages: science-based standards; traceable licensing; risk-based inspection; secure representative sampling; timely laboratory analysis; proportionate adjudication or prosecution; and continuous monitoring with consumer participation. Each stage should create records capable of audit and legal scrutiny. Punishment remains necessary, but prevention and rapid risk control are equally important.³⁷

Coordination between enforcement agencies is especially important where a food-safety incident affects multiple jurisdictions. A contaminated product may be manufactured in one State, stored in another and sold across several markets. Information-sharing can permit authorities to identify the common source and prevent fragmented investigations.³⁸

³⁶ Food Safety and Standards Act, No. 34 of 2006, INDIA CODE (2006), § 28 (India); *id.* §§ 31–32.

³⁷ Food Safety and Standards Act, No. 34 of 2006, INDIA CODE (2006), §§ 16, 31, 38, 42, 50–59, 68–76 (India).

³⁸ Food Safety and Standards Act, No. 34 of 2006, INDIA CODE (2006), §§ 29–42 (India).

IX. CONCLUSION

Food adulteration remains a serious challenge because it combines commercial incentives, information asymmetry, scientific complexity and direct risks to public health. India's transition from the fragmented Prevention of Food Adulteration framework to the Food Safety and Standards Act, 2006 created a comprehensive system centred on science-based standards and FSSAI. The present framework extends across licensing, product standards, inspection, sampling, laboratory analysis, adjudication, prosecution and consumer protection.

The central conclusion is that effective enforcement depends upon the reliability of the entire regulatory chain. Strong statutory penalties cannot protect consumers if unsafe products are not detected, samples are not representative, laboratories cannot provide timely analysis, or proceedings cannot establish responsibility. Conversely, reliable inspection and laboratory systems create the foundation for proportionate adjudication and prosecution.

Institutional capacity is equally important. Food Safety Officers, Designated Officers, laboratories and adjudicating authorities require adequate resources, training and professional competence. Digital licensing, traceability and evidence-management systems can improve accountability, while risk-based inspection can direct limited resources toward serious hazards. Consumer complaints and awareness can supplement official surveillance, but scientific testing and lawful procedure must remain the basis for determining whether food violates prescribed standards.

Ultimately, the effectiveness of India's food-safety regime should be measured not merely by the number of inspections, penalties or prosecutions, but by its ability to prevent unsafe food from reaching consumers and to respond rapidly when violations occur. A credible system must combine science-based standards, effective licensing, representative sampling, reliable laboratories, coordinated recalls, proportionate sanctions, timely proceedings and transparent oversight.
