

COMMITTEE ON HEALTH AND FAMILY WELFARE**The Functioning of Food Safety and Standards Authority of India****(Ministry of Health and Family Welfare)****ONE HUNDRED TENTH REPORT****CHAPTER 1: INTRODUCTION**

The Report delved into the challenges and issues with food safety in India. It underlines the importance of food safety to the country's economic growth and progress. The growing population, booming economy, and fast urbanization all pose difficulties to food safety. Excessive pesticide use, growth hormones, and exposure to hazardous waste are all mentioned in the text as contributing factors to food contamination. As probable sources of dangerous food, it also cites additives, toxins, chemicals, environmental pollutants, adulterants, poisonous colorants, and preservatives.

Food contamination can spread more than 200 diseases, including diarrhea and cancer. South East Asia, particularly India, suffers from a huge burden of foodborne infections, which kill millions each year. Food poisoning incidents are widespread, according to the Ministry of Health and Family Welfare's Integrated Disease Surveillance Programme (IDSP), especially in sites where food is cooked in bulk, such as canteens, hotels, and wedding venues.

The Food Safety and Standards Act of 2006 created the Food Safety and Standards Authority of India (FSSAI) as the apex authority in charge of developing standards and ensuring consumer safety. However, enforcement of food safety regulations remains difficult.

Recognizing the importance of safe and nutritious food for public health, Health Ministers from various states adopted a joint resolution. It stressed the importance of better coordination between the National Health Mission (NHM) and the FSSAI's Safe and Nutritious Food programs. The resolution called for new food safety solutions as well as an effective regulatory structure to ensure that India's enormous population has access to safe and healthy food.

The Food Safety and Standards Act, 2006 (FSS Act) in India contains numerous notable provisions aimed at ensuring food safety and compliance. These characteristics include a shift from multi-level and multi-departmental control to an integrated line of command, an integrated response to strategic issues such as novel/genetically modified foods and international trade, decentralization of licensing for food product manufacturing, the establishment of a single reference point for food safety matters, the promotion of self-compliance through Food Safety Management Systems, and the responsibility placed on food business operators to comply with domestic and international regulations.

FSSAI has participated in initiatives such as setting horizontal and vertical standards for a variety of food products such as health supplements, organic food, and genetically modified food. It has formed scientific and technical panels made up of specialists and scientists to create science-based standards and guideline materials. FSSAI also focuses on food testing via a network of food labs, capacity building efforts, and compliance requirements for both domestic food control and food imports.

FSSAI is made up of a chairperson, members from various Central Government ministries and departments, representatives from the food industry and consumer organizations, eminent food technologists or scientists, representatives from states and union territories, representatives from farmers' and retailers' organizations, and the CEO of FSSAI.

To improve efficacy, FSSAI needs to be reorganized and hire technical experts with domain knowledge and competence in the food business.

The Central Advisory Committee (CAC) is critical in establishing coordination between the Food Authority and law enforcement. However, the CAC's composition has been criticized for being Delhi-centric and for the lack of openness in the selection process. Formal norms need to

be developed for CAC member selection, making the selection criteria clear, and ensuring a broad-based membership that represents knowledge from across the country's food sector. FSSAI also has advisory and scientific committees/panels that are in charge of developing standards and offering scientific advice. **Adequate procedures need to be implemented for the selection of Scientific Committee members, including those with industrial experience, in order to incorporate varied perspectives from various sectors.**

Overall, the FSSAI needs to have the tools, capacities, and knowledge to properly regulate food safety in India. Professionals with domain expertise need to be assigned in the food sector to key roles and taking cues from regulatory processes in other developed countries.

It is governed by the Food Safety and Standards Act, as well as a number of rules that aid in its execution. These regulations address topics such as food company license and registration, packaging and labeling, food product standards and additives, sales prohibition and restrictions, pollutants, toxins, and residues, and laboratory and sampling analysis.

The Ministry of Health and Family Welfare is in charge of assessing existing food standards and bringing them in line with international best practices. To analyze dangers and provide scientific frameworks, scientific panels and committees have been established.

Food safety enforcement is carried out by designated officers at the district level and food safety officers at the sub-district level in the states and union territories (UTs), with the Food Safety Commissioner overseeing the machinery at the state level. Most state governments have nominated Food Safety Commissioners and put in place structures to enforce the Act.

The Food Safety and Standards (Licensing and Registration) Regulations of 2011 establish the licensing and registration procedures for food businesses.

Through specific programs and the use of data from multiple state agencies, efforts are being made to identify and bring more food business operators (FBOs) into the jurisdiction of FSSAI.

The establishment of advisory committees, appellate tribunals, and steering committees in various states and UTs is a step forward in enforcement efforts. Furthermore, 35 states and UTs have implemented online licensing and registration systems.

Multiple problem areas in the food business need to be addressed. These include :

- Absence of a comprehensive database on food businesses, overuse of pesticides and their residues in the food chain,
- Increased incidences of food-borne diseases and toxins, regulation of farming operations and livestock,
- Irregularities in monitoring and cancellation of licenses,
- Insufficient number of laboratories and testing infrastructure,
- Lack of accreditation of food testing laboratories,
- Shortage of staff and technical expertise in food safety,
- Ambiguous and multiple food safety standards,
- Non-harmonization of domestic standards with international standards,
- Lack of information and clarity on compliance with food safety regulations,
- Ineffective enforcement of norms,
- Non-compliance with international trade agreements,
- Inadequate regulatory framework for novel foods and genetically modified crops, inefficient grievance redressal systems,
- Regulation of the unorganized food sector, lack of training for food handlers and vendors, absence of guidelines for nutrient tolerances based on food categories,
- Absence of a regulatory body at ports,
- Lack of documented policies and procedures on risk analysis, assessment, communication, and management.

A significant increase in FSSAI's budgetary allocation was recommended. A federally funded program to upgrade state manpower, infrastructure, and surveillance systems was needed. FSSAI's challenges include legacy concerns, insufficient enforcement in certain states, and staffing, budget, and infrastructure issues. There is a regulatory staff shortfall, insufficient food testing laboratories, and a need to simplify procedures and strengthen punishments.

Efforts are being undertaken to solve these difficulties, including **suggestions to sanction new positions, the development of recruitment regulations, capacity-building efforts, and improved registration and licensing procedures. The necessity for better-equipped laboratories, as well as the construction of a national reference lab system and testing IT platform, was emphasized.**

FSSAI has proposed boosting FSSAI employees and coordinating with states and union territories (UTs) through letters, video-conferences, and meetings to promote food safety law compliance and enforcement.

A performance assessment done by the Comptroller and Auditor General (CAG) in 2017 that showed numerous flaws in the implementation of the Food Safety and Standards Act, 2006. The audit discovered regulatory delays, incomplete licensing and registration documents, a lack of risk-based inspections and a database on food businesses, inadequate accreditation of food laboratories, a shortage of qualified manpower and equipment, delays in case finalization, and staff shortages at various levels. They advocate for the appointment of technically competent personnel with food science competence to guarantee the successful application of the FSS Act of 2006. **It was proposed to conduct a national-level awareness campaign to educate all segments of society about food safety and develop a comprehensive food policy to solve the flaws of the current act.**

CHAPTER 2: EFFICACY OF THE REGULATORY FRAMEWORK

The FSSAI has been tasked with the responsibility of improving India's food safety status. However, the FSSAI failed to ensure successful execution of the framed regulations..The CFSS study is a thorough and critical examination of FSSAI's regulatory system. The report presents many recommendations that, if followed, would help to improve FSSAI's performance.

Flaws in the FSSAI, according to the CFSS report :

- Excessive delays in the development of regulations and standards
- Standards from other regulatory agencies overlap
- A lack of coordination and cooperation between the FSSAI and the governments of the states/UTs
- A general lack of understanding about good eating
- Inadequate food safety machinery in the Department of Food Safety
- Some states lack a State Level Steering Committee (SLSC) or a State Advisory Committee (SAC),
- Many states lack a separate food safety department
- A lack of consistency in the country's food safety infrastructure
- The concept of "food" excludes drinking/potable water
- The definition of "unsafe food" excludes food containing colorants or preservatives other than those specified.

Recommendations made by the CFSS to increase the efficiency of FSSAI.

- FSSAI should examine the performance of the FSS Act, its rules, and regulations on a regular basis.
- FSSAI should draft and publish the remaining regulations within a year.
- The FSSAI should develop internal timetables for uniform processing.
- The FSSAI should improve its scientific and administrative infrastructure.
- The FSSAI should revoke the permits given under the now-defunct product approval system.
- The FSSAI should oversee product recalls.
- The FSSAI should enhance public knowledge about healthy eating.
- The FSSAI should strengthen the food safety mechanism in the States Food Safety Department.
- FSSAI should establish a State Level Advisory Committee in each state, chaired by the Food Safety Commissioner and composed of all stakeholders.
- The FSSAI should establish a distinct agency or Department of Food Safety in each state to enforce a strong food safety mechanism in the country.
- The Central Government should collaborate with the State Government to build a standard food safety regulatory regime in the country.
- The concept of "food" should be expanded to include drinking water. The definition of "unsafe food" should be expanded to cover food that contains colorants or preservatives that are not listed.

Implementing these recommendations would assist to enhance India's food safety status and protect the Indian people's health.

CHAPTER 3: LICENSING, REGULATION, INSPECTION AND SAMPLING

According to the FSSAI, criminal sanctions are required to address noncompliance and defaults by food business operators (FBOs). An SMS/email alert system is currently in place to keep FBOs informed about renewal and yearly reporting. FBOs can apply for licenses for one to five years, as a lifetime license would be impractical and difficult to monitor.

Independent licensing and enforcement authorities would strengthen the execution of the Food Safety and Standards Act (FSS). Due to a staff deficit, the responsibilities of licensing and enforcement are currently shared by a single officer, limiting their efficacy. These jobs should be separated to ensure better compliance with the FSS Act.

Inspections to ensure food safety need to be undertaken prior to the issuance of any license. Food business operators (FBOs) need to provide a detailed emergency plan. There is no set frequency for inspections of licensed FBOs, risk-based inspections and surprise inspections to prevent evasion need to be implemented. **The importance of computerized databases of food failures and testing results in order to improve inspection deployments and pinpoint the source of failures was underlined and establishment of a national food safety database that would be accessible to consumers, the food sector, and health organizations.**

The number of samples lifted was insufficient in comparison to the number of permits and registrations issued. Sampling method irregularities, a lack of training for food safety officers (FSOs), and infrastructural difficulties were highlighted. FSSAI's introduction of the FoS CoRIS system to verify food safety compliance and advocate its nationwide implementation. **Sampling protocols, sufficient training for FSOs, and time restrictions for submitting samples for analysis were advocated, faster development of appropriate guidelines for the disposal of seized items, as well as the training of food officials in the disposal process.**

In terms of training, the **importance of educating Food Business Operators (FBOs)** on cleanliness and safety standards was highlighted. They propose offering industry-specific and short-term training at several FBO-friendly locations. Stakeholders propose that the FSSAI or the Food Department give free training led by experienced officials to increase FBOs' awareness and compliance with the legislation.

The FSSAI's initiatives to improve food safety standards and training programs. FoSTaC system, which consists of 17 short-duration training modules for various types of food enterprises, has been adopted by the FSSAI. This approach has trained over 25,000 people, including food handlers and managers.

The necessity for industry-specific training modules for manufacturers, importers, sellers, distributors, and other food business operators (FBOs) is emphasized in the research. Regular training programs should be implemented to provide FBOs and small businesses with the knowledge and skills needed to meet food safety regulations. The training program can also be used to monitor FBO compliance, validate licenses, and keep them up to date on food safety regulations updates.

A significant barrier to implementing the FSSAI's mandate has been a lack of manpower. Due to staff restrictions, the FSSAI has outsourced enforcement authority to the State Food Authorities. However, this delegation has resulted in inadequate systems for controlling central licenses, allowing unregistered and unauthorized food companies to continue operating, posing public health dangers.

To address the labor shortfall, recruitment regulations need to be publicized and filling openings as soon as possible. To solve staffing concerns, an action plan needs to be drafted in collaboration with state and union territory administrations. As a short-term solution, professionally qualified employees should be hired on short-term contracts and require them to follow ethical norms. 1 Designated Officer (DO) for each district, one Food Safety Officer (FSO) for each development block in rural areas, and one FSO for every 1000 FBOs in urban areas.

CHAPTER 4: EFFICACY OF FOOD TESTING LABS

Food testing labs' effectiveness in maintaining food safety and preventing contamination is critical. The FSSAI Act mandates the creation of food testing laboratories, which plays an important role in examining food samples for human consumption. However, there are issues with lab infrastructure and capacity building.

FSSAI currently maintains a network of 249 laboratories, which includes primary testing laboratories as well as referral food testing laboratories. Under the transition clause, the principal testing laboratories are state food laboratories, central government institutes/autonomous bodies, commercial laboratories, and government laboratories. The referral food testing laboratories are made up of central government institutes/autonomous entities as well as FSSAI's own laboratories.

Concerns have been expressed by stakeholders concerning the insufficient number of labs, poor lab infrastructure, inadequate testing methodologies, accrediting standards, and a labor shortage. For accurate findings, testing methodologies and procedures must be consistent throughout all labs. Stakeholders offer rules for macro and micronutrient tolerances based on food categories, microbiological testing training, and time restrictions for referral labs to receive and test samples. They also underline the importance of thoroughly testing all necessary parameters. The Ministry clarifies that the process of recognizing and notifying labs is underway. However, given the population size and food safety problems, the current number of labs is woefully inadequate. **The government should offer financial help to develop state food regulation systems, ensuring adequate labs in proportion to the population of each state.**

Efforts are being made to create a network of **National Reference Laboratories (NRLs)** to develop standards, validate testing procedures, and ensure proficiency. FSSAI has been identifying NRLs with the goal of improving reliability, standardization, and conformance to international laboratory procedures. Improving infrastructure, increasing the number of labs, guaranteeing uniform protocols, and investing in research and development would help India build a strong food safety ecosystem.

Most food laboratories, including those recognized by the National Accreditation Board for Testing and Calibration Laboratories (NABL), lack the requisite equipment and resources to test food goods on all parameters, according to the report. **The necessity of specialized training for microbiological analysis and testing was underlined, as well as the requirement for uniform processes and parameters across the country's food testing labs.**

The promotion of National Referral Laboratories was advocated to ensure consistency in food testing standards and methodology. The necessity of NABL accreditation for labs in order to improve testing credibility, reliability, and correctness.

The absence of technical manpower in labs due to a lack of designated Food Analysts as well as a technical staff shortage in some laboratories. To strengthen food safety compliance, it advocates for an increase in the number of government food laboratories and competent technical food analysts. The FSSAI must examine, monitor, and investigate labs on a regular basis to guarantee their effectiveness in testing samples. **The importance of well-equipped and appropriately staffed food testing labs, consistent processes and parameters, NABL accreditation, and necessary technical manpower to ensure India's stringent food safety regime was underlined.**

The serious lack of technical staff in both the States/UTs and the FSSAI, impedes the efficient operation of food testing laboratories. Despite the prevalence of food adulteration in the country, the country has a scarcity of food experts. Even if modern devices are provided to the laboratories, they are not used due to a lack of competent employees. **Each State/UT must create recruitment regulations based on population size and conduct periodic exams to hire qualified individuals for food testing laboratories.** The country has a large pool of talent, with over 250 colleges offering courses in food science, meat science and technology, dairy technology, and microbiology. The issue, though, is a scarcity of employable graduates. **To enhance skill development, the importance of collaboration between educational institutions and industry was stated.** Graduates should receive practical training to equip them with the requisite skills for work. By preparing graduates in Food Science and Technology to take on technical duties in laboratories, the twin challenges of unemployment and a labor shortage may be addressed.

The food testing laboratories must have a mandatory minimum number of certified workers, notably food analysts, and that these analysts deliver their reports within set time restrictions.

Concerning the strengthening of State Food Testing Laboratories (SFTLs), FSSAI has adopted a Central Sector Scheme to improve the country's food testing system. The strategy comprises components such as improving state laboratories, establishing mobile food testing labs, increasing personnel capacity, and motivating states/UTs to use facilities offered through FSSAI-notified labs. Grants have been available for upgrading equipment and infrastructure, and getting NABL accreditation within a specific term is a requirement for receiving grants. So far, the plan has disbursed '109.95 crore, and various laboratories have been updated and accredited.

The Food Safety on Wheels (FSW) concept is considered as a remedy to the lack of food testing infrastructure in distant places while still meeting customers' analytical needs. The FSWs are mobile laboratories that can conduct qualitative tests on a variety of food items. The group suggests using FSWs for surveillance, public awareness, sample transportation, and consumer education. They believe that FSWs can help unemployed kids find work and advocate for substantial training programs for those in charge of these labs. The importance of realistic assessment and advise assigning one FSW to each district to improve outreach, necessity of providing safe and healthy food and highlights the importance of India having a robust food safety regime that matches international standards.

CHAPTER 5: REGULATION OF FOOD ITEMS

Food regulation is critical to guaranteeing food safety, and the FSSAI has been given the authority to create regulations and guidelines to ensure the safety of food goods on the market. Food adulteration is a widespread problem, whether it is done to enhance quantity and profit or to protect food quality and freshness. Food adulteration is also caused by cross-contamination during handling and noncompliance with acceptable manufacturing practices. As a result, food item regulation is critical for guaranteeing food safety.

Milk adulteration has been a major issue in India, with reports of widespread adulteration. FSSAI has launched a third-party-assisted survey due to inconsistency in sampling, to obtain more accurate and standardized data. For routine analysis and supervision, the FSSAI has also provided electronic milk adulteration testers and modern milk testing machines.

Another source of worry is edible oil adulteration, as the quality of oil deteriorates over time and the usage of adulterated oil carries health hazards. FSSAI regulations restrict the sale of loose edible oil, yet illicit sales continue to occur in several states, resulting in adulteration and compromised consumer safety. Certain stakeholders stressed the importance of strictly enforcing the restriction on loose oil sales, which allows unscrupulous elements to engage in adulteration. The reuse of tins for repacking edible oils was also a point of contention, with some arguing for their permissibility on the basis of affordability and convenience, while others underlined the hazards and the need to use new tins.

Overall, the required revisions to the FSS Act and Indian Penal Code to strengthen sanctions for adulteration. It also recommended the Ministry of Health and Family Welfare to ensure that future surveys have acceptable sample sizes and uniform methodologies. In addition, the significance of establishing a regulatory structure for spot testing milk and controlling the sale of edible oils in order to protect consumer health.

The paper addresses a number of concerns with the regulation of edible oils, preservatives/chemicals used in storage, and artificial ripening of fruits and vegetables. Under its regulations, the FSSAI emphasizes the ban of the sale of loose edible oil, citing concerns about adulteration and the difficulties in tracking the source of tainted oils. **Edible oils should be sold**

only in packaged form to protect consumers' interests. However, in order to meet the needs of small consumers, the FSSAI should encourage smaller edible oil containers of 100 ml and 200 ml. The FSSAI should guarantee that indigenous mustard oil extraction machinery in rural regions are tested to avoid contamination with harmful compounds. The standards of edible oils have not been changed since the 1960s, FSSAI must speed up the revision process, taking into account changes in oilseeds and worldwide benchmarks. The research also recommends labeling changes for blended oils, such as mandating producers to include the actual mix % on the box.

The need for better enforcement of food safety legislation in relation to the use of harmful chemicals such as formalin for fish preservation and calcium carbide for artificial fruit ripening was underlined. The FSSAI is being requested to publish alerts in order to monitor and respond to the usage of these chemicals. The paper suggests promoting safer alternatives and limiting the production of such harmful substances. **A National Consumer Awareness Campaign with many partners to educate consumers about the dangers of harmful chemicals in fruits and vegetables was underlined.**

Concerning plastic packaging, the report recognizes the negative consequences of plastic on the environment and human health. It suggests that the Ministry of Health and Family Welfare form a high-level committee to decide whether to prohibit the use of plastic and PET packaging for food items.

In terms of genetically modified (GM) foods, there was emphasis on the import of GM food goods without adequate FSSAI authorisation. FSSAI should strengthen the testing infrastructure and finalize regulations for GM food safety assessment, there should be obligatory labeling of genetically modified foods and the supply of explicit information to consumers, as is done in China, Australia, and the European Union, the importance of strict laws, capacity building, and public awareness campaigns to safeguard food safety, promote safer alternatives, and protect consumers from the dangers of harmful chemicals, plastic packaging, and genetically modified foods

FSSAI has established obligatory compliance rules for the clearance, storage, inspection, sampling, labeling, and other elements of imported food. To avoid the import of low-quality or expired food goods, the committee advises that FSSAI verify adherence to existing standards and develop special recommendations for food products banned elsewhere. It also underlines the importance of closely monitoring imported food items and the timely transmission of information regarding restrictions or quality issues.

In terms of organic food regulation, the importance of monitoring and regulating organic products to assure authenticity was highlighted. The Food Safety and Standards (Organic Foods) Regulations, 2017, requiring conformity with national organic production programs or the Participatory Guarantee System, have been notified. Organic food certification for domestic supply and a separate certification method for small growers who may face financial constraints. **The significance of fortification in combating malnutrition was underlined. It emphasizes the prevalence of malnutrition in children and women and claims that food fortification can close the nutritional gap. The fortification efforts can help reach dietary targets and fortification programs should be implemented effectively.**

The importance of timely regulation and monitoring of several areas of food safety was emphasised, such as genetically modified foods, imported food items, organic food, and fortified food. It underlines the need of raising public knowledge and hiring skilled professionals to ensure food safety and nutritional standards in the country.

The FSSAI has launched a number of efforts to address the country's food safety and nutrition challenges. **FSSAI has developed standards for fortifying important food staples such as edible oil, double fortified salt, milk, wheat flour, and rice in order to tackle widespread micronutrient shortages. A logo has been created to distinguish fortified goods, and voluntary fortification of these basics has begun.** The Mid-Day Meal and Integrated Child Development Scheme have enforced the use of fortified wheat flour, oil, and salt across the country, ensuring that underprivileged segments of society obtain appropriate nourishment. The Ministry of Food and Public Distribution has suggested that fortified wheat flour and edible oil be distributed via the Public Distribution System.

In terms of food control in restaurants, FSSAI has advocated the voluntary publishing of calorie counts on restaurant menus, similar to the practice in the United States. **Restaurants must now employ at least one technical person or food safety supervisor as a result of changes to food industry license and registration. Cases of non-compliance with basic hygiene measures, on the other hand, have been documented, emphasizing the importance of timely inspections and maintaining compliance with FSSAI recommendations.**

FSSAI has undertaken efforts to regulate street food vendors in the unorganized food sector through campaigns, training programs, and registration activities. **The goal of Project Clean Street Food is to promote health, cleanliness, and safety standards among street food sellers.** The FSSAI, in partnership with state governments, should implement systems to teach registered street sellers and gather data on the hygienic challenges they confront and should develop criteria for regulating street food vendors within a year.

The issue of duplication of standards and certifications enforced by many agencies is brought up. The FSSAI has its own standards, while the Directorate of Marketing and Inspection and the Bureau of Indian Standards (BIS) impose their own. To reduce confusion among stakeholders and consumers, BIS and AGMARK requirements should be combined with FSSAI norms. **Harmonizing norms and standards across agencies is viewed as critical to establishing a single regime under FSSAI and expediting processes for the food and beverage industry.** The FSSAI has worked to fortify staple foods, regulate eateries, promote street food safety, and resolve standards duplication. FSSAI establishes mandatory science-based standards for food articles, while the Bureau of Indian Standards (BIS) enforces voluntary quality standards and AGMARK standards are grading-based quality standards. The need to resolve the overlap between these standards suggests studying the BIS and AGMARK Standards to see whether they may be incorporated into the FSS Act Standards regulations. The emphasis should be on streamlining the rules without sacrificing safety. FSSAI, BIS, and the Directorate of Marketing and Inspection (DMI) should have distinct tasks and mandates. Based on worldwide standards such as those of the Codex Alimentarius Commission, one norm should be created for one product, this convergence would streamline the industry's certification process and eliminate the need for different certificates.

CHAPTER 6: MISCELLANEOUS

Food packaging and labeling are critical components of food safety and consumer education. The FSSAI acknowledged the need to update legislation governing packaging, labeling, and advertising in order to close gaps and protect consumers.

The regulations have been divided into three sections: advertising and claims, packaging, and labeling and display.

The proposed regulations seek to promote justice and responsibility in food claims and promotions, to assure the safety of packaging materials, and to provide customers with simple and informative labeling. The standards cover a wide range of topics, including nutrition claims, bans on deceptive ads, package material requirements, ingredient lists, nutrition information, and expiry date labeling.

Given the country's illiteracy rate, the FSSAI could try **experimenting with innovative kinds of labeling, such as symbol-based labeling and the traffic light labeling system, to improve consumer understanding of nutritional information and establish a food advertising monitoring unit to investigate and prosecute incorrect or deceptive marketing.**

Concerning standards for exported and imported foods, the FSSAI and the Export Council of India should share responsibilities. Through inspection, certification, and training programs, the Export Council of India plays a critical role in promoting Indian goods' access to worldwide markets.

The proposed regulations aim to improve food safety, provide consumers with correct information, and control food advertising. To provide consumer protection and informed choices, measures such as toxicity specifications for packaging materials, symbol-based labeling, and an effective monitoring system for commercials

The absence of consistency in standards and enforcement among regulatory organizations such as the ECI and FSSAI, resulting in non-conforming food products being openly produced and marketed in the market. **All food items, whether exported, imported, or made domestically, comply with similar standards and be tested using the same parameters.**

Concerning grievances, the FSSAI maintains an online portal called "**Food Safety Connect**" where consumers can submit complaints and provide input on food safety issues. All food safety complaints need to be handled seriously and that a timetable for their resolution be set. The FSSAI has created the **Safe and Nutritious Food (SNF)@ School program**, which aims to promote food safety among school children through age-appropriate messages and activities.

Concerning the processing of food business operators' (FBOs') concerns and explanations, the establishment of a specialized cell inside the FSSAI was suggested that responds to FBOs' queries and gives clarifications.

The importance of developing standards and rules for locally produced and traditional beverages and foods was underlined and it was suggested that the FSSAI establish standards for these items in order to ensure their safety and quality. Furthermore, **the FSSAI must collaborate with state food departments to monitor food items manufactured by small-scale companies to verify compliance with fundamental food safety standards.**

Poor enforcement of food rules has resulted in pervasive food adulteration and jeopardized the fundamental right to pure and safe food. The importance of reforming FSSAI and hiring technical specialists with domain knowledge and skills in the food business to successfully administer the agency was underlined. **The low budgetary allocation for FSSAI was a cause of concern and recommended a major increase in financing to develop food safety infrastructure at both the federal and state levels.** It advises that the Ministry of Health and Family Welfare adopt a completely Centrally Sponsored Scheme for modernizing staff, food safety infrastructure, and state monitoring systems. It proposes the creation of indicators to assess the effectiveness of food safety regulations and institutions.

The need of developing regulations in unresolved areas, requesting FSSAI to notify the remaining regulations within one year. It also emphasizes the importance of avoiding delays in notifying amendments in accordance with the recommendations of the Lok Sabha Committee on Subordinate Legislations.

Each state should construct State Level Advisory Committees, with the Food Safety Commissioner serving as Chairperson and stakeholders represented. Monthly meetings and collaborating with local governments and the Food Safety Administration to improve food safety surveillance. Furthermore, **Food Safety Appellate Tribunals** should be established in states where they do not currently exist.

One major source of worry is the lack of a dedicated food safety department in many states, which leads to issues such as food adulteration, a lack of quality checks, misleading labeling, and the selling of faulty food products, **each state must establish a separate agency or Department of Food Safety to enforce a rigorous food safety regime.**

The Commissioner of Food Safety should be a full-time official having a background in food science and technology in order to carry out the tasks outlined in the Food Safety and Standards Act effectively. A lack of consistency in the country's food safety architecture, including the absence of food safety departments and food safety appeal tribunals in several states. They advocate for the creation of a unified food safety regulatory regime in partnership with the federal and state governments. Furthermore, food testing laboratories should adhere to consistent protocols and guidelines to achieve consistent results.

The lack of definitions and rules for food products advertised as 'health food' or with claims such as 'contains added,' 'fortified with' and so on, these terms should be defined in the Act or by rules, that scientific evidence or data be required to back up assertions, and that verification criteria and reporting mechanisms should be established. Overall, the importance of a dedicated and robust food safety apparatus, uniformity in food safety infrastructure, food labeling claim regulation, primary food production inclusion, and measures to prevent corruption and ensure effective enforcement of food safety standards.

The need for fast case completion and all states strictly adhere to the standards, ensuring that final orders are issued within 90 days of the initial hearing date. It advises assigning full-time adjudicating officers with food safety competence and applying technical solutions for record digitization. In terms of licensing and registration, the necessity of maintaining an up-to-date Food Licensing and Registration System, as well as the construction of interconnected databases for effective monitoring. Low conviction rates in cases involving adulteration and misbranding was a cause of worry, the Ministry should explore the underlying causes and take corrective action.

Strict measures are required to ensure food business operators' (FBOs) compliance with the Food Safety and Standards (FSS) Act and lifelong licenses are neither practical nor desirable because timely updates and inspections of food enterprises are required. **There is a need for separation of licensing and enforcement actions, and an emphasis on the importance of addressing staff shortages and developing solutions to ensure effective enforcement, timely surveys at both the federal and state levels, with the option of outsourcing the work if necessary.** Analyzing license renewal applications, developing compliance histories, and conducting thorough inspections was also advised.

The importance of R&D and attracting the best expertise to provide highly standardized and trustworthy food testing facilities was stated. India's present number of food testing labs is drastically inadequate, and the central government should provide financial help to develop state food regulatory systems, allowing each state to have a sufficient number of labs proportional to its population.

The lack of facilities in many food labs to test food articles for heavy metal contamination, pesticide residues, microbiological contamination, and toxic compounds. It was recommended to have **standardizing testing methodologies across all labs, setting nutrient tolerance limits based on food categories, and establishing a laboratory quality audit mechanism.**

The FSSAI should develop a list of mandatory food safety parameters to be verified, as well as emphasizing the importance of inspecting all imported food items for all parameters. Food testing protocol manuals should be created to ensure consistency and standardization.

The importance of National Referral Laboratories in standards development, testing, and validation was stated and promoting the labs to maintain consistency in testing and parameter prescription, which would improve the credibility and dependability of outcomes.

To successfully evaluate food samples for viruses, chemicals, toxins, heavy metals, and pesticide residues, India's State Food Testing Laboratories (SFTLs) require a considerable renovation and update in terms of staff and equipment shortages. The Food Safety and Standards Act, 2006 is essentially the responsibility of State/UT Food Regulatory Authorities, and it is critical to provide them with modern technology. However, the Central Sector Scheme for "Strengthening of Food Testing System" has moved slowly, with only a quarter of the funds budgeted being distributed. The Ministry of Health and Family Welfare should address implementation concerns and speed up the process through corrective actions and monitoring. Instead of constructing new laboratories, the existing ones be strengthened and upgraded, taking into account the scarcity of educated personnel and financial constraints. The paucity of food analyzers in State Drug Testing Labs impedes operations, resulting in laboratory closures. The Ministry is being urged to devise a strategy to address the shortage and expand the pool of food analyzers.

Mobile Food Testing Labs, also known as Food Safety on Wheels (FSW), have enormous promise for improving food safety, particularly in rural areas. The labs should be used to raise awareness, transport samples, educate consumers, and provide on-the-spot testing services. The FSSAI should provide extensive training programs for youth to handle these mobile labs, creating job opportunities and addressing the need of vocational training for science and technical graduates. The number of FSWs should be raised to ensure public access to food testing facilities, with one FSW recommended for each district. Concerning food regulation, the government is being pushed to change the FSS Act and the Indian Penal Code to make milk adulteration a more serious offense.

The FSSAI and state food safety authorities should take tangible measures to prevent milk and food adulteration, and suitable sample sizes and uniform methodologies were recommended for national milk quality surveys and to prevent contamination of locally derived mustard oil, the FSSAI's oil fortification project is laudable, but suitable infrastructure for testing fortified oil, as well as proper monitoring and inspections by the food authority, are required. Overall, the importance of a thorough revamp of India's food safety regime, ensuring the application of food laws and regulations to protect consumer interests and public health was recommended.

The shortage of food inspectors and underscore the significance of increasing consumer understanding of food safety requirements. **To address safety concerns about dangerous chemicals in fruits and vegetables, the establishment of a national consumer awareness campaign including multiple stakeholders and issuing alerts to track the usage of these substances and to promote safer alternatives.**

Concerning the regulation of plastic in food and water, **The Ministry of Health and Family Welfare should convene a high-level committee to decide whether to prohibit the use of plastic and PET packaging in food products.** In India, there exists a regulatory vacuum in genetically modified (GM) foods. Rules requiring importers to submit mandatory declarations on labels showing whether a food product is GM-free were advocated. **The FSSAI should develop rules for assessing the safety of GM foods, modernize testing infrastructure, and train staff involved in GM food regulation.**

The importance of closely monitoring imported food goods and disseminating information about banned items with industry and consumers as soon as possible was highlighted, reduced import clearance times without sacrificing quality or safety and dedicated food safety officials be appointed at all food importing ports around the country, the necessity of rewriting standards, maintaining food safety, developing consumer knowledge, and regulating many elements of the food sector.

Several significant recommendations are highlighted for the regulation of organic food, fortified food, food in restaurants, the unorganized sector, duplicity of standards/certification, and packaging.

- Concerning organic food, the committee applauds recent legislation requiring certification for domestic producers, and suggests establishing a separate certification procedure for small farms. In terms of fortified food, the need for timely provision and distribution of fortified foods through safety net programs, standards be followed in the distribution of fortified wheat flour and edible oil through the Public Distribution System.
- Concerning food in restaurants, all restaurants disclose mandatory information on packaging and labeling, such as calorie information and portion size, timely inspections of restaurants, with an emphasis on adherence to fundamental hygienic measures. The committee recommends that the design of restaurant premises and floor plans take food safety and cross-contamination into account.
- Concerning the unorganized sector, Project Clean Street Food project could be replicated across the country to maintain food safety standards and collect data on sanitary challenges experienced by street sellers. Furthermore, FSSAI should develop guidelines to govern street food vendors within a year.
- To reduce standard/certification duplication, unification of certification procedures under the FSS Act and examining BIS and AGMARK standards for possible merger into FSS Act standards.