



# INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

## CRITICAL ANALYSIS OF FOOD ADULTERATION IN INDIA

K. Jyotsna, Ambalika Aditi Dubey

Law Student's, Amity Law School

Raipur (C.G) India

**Abstract:** Food is indispensable for humans for their growth and survival. However, the food which is being consumed nowadays is adulterated. Food adulteration is the act of intentionally debasing the quality of food offered for sale either by the admixture or substitution of inferior substances or by the removal of some valuable ingredient. In 2020 adulteration of food increased due to panic demand of the consumers, as lockdown was imposed people started buying foods in large quantity which resulted into food being adulterated. Food adulteration leads to various health problems, as it is very toxic for the human body. Food adulteration leads to various diseases such as liver disorder, diarrhea, food poisoning, cancer etc. Lack of nutrition is also one of the impacts of food adulteration as the food is being mixed with substances, for example, water is mixed with milk, artificial color and sugar is being added to fruits. As the impurity in food has increased it has affected the growth of people and resulted in various diseases, even the food of infants is being adulterated which can impact their growth and development. Adulteration not only affects the economy but also the health of millions, even with the enactment of various acts food adulteration is still a big issue in India. In these past few years India has modernized its laws regarding food, as earlier there were 8 different acts for different types of food but by 2006 The Food Safety and Standards Act, 2006 was introduced to consolidate the laws relating to food and to establish the Food Safety and Standards Authority of India. This paper puts an idea about how food laws were modernized in India and it also provides an overview.

**Keywords:** Food Adulteration, Consumers, challenges, Threat, Impact.

## **I. INTRODUCTION**

Food is the basic need of every living human being, food works as fuel for the human body to function; it is also responsible for the growth and nourishment of the body. According to WHO<sup>1</sup>, Food is one of the basic needs of every living being and is composed of carbohydrates, water, fats and proteins, which can be eaten or drunk by animals, including humans, for nutrition or pleasure. Food has somehow become an affliction to humans due to adulteration. Food adulteration is the act of intentionally debasing the quality of food offered for sale either by the admixture or substitution of inferior substances or by the removal of some valuable ingredient. For example, water or synthetic chemicals are being mixed with milk to increase the quantity, also sugar is mixed in honey and it has sold under the category of pure honey. The 2018-2019 Food Safety Standards Association of India (FSSAI) Report alarmingly revealed that 28% of food samples were adulterated and that adulteration had doubled since 2012.<sup>2</sup> Food adulteration has become a serious challenge in India as it has resulted in health risks, even though laws have been enforced by the Indian government and also FSSAI the adulteration of food has only doubled. In India the Prevention of Food Adulteration Act, 1954 was enforced to fortify that the food is pure and has not been adulterated, and also to provide punishment for import, export, manufacture, sale etc. of any food article which has been adulterated. FSSAI was introduced to lay down the standards and guidelines in relation to articles of food and specifying appropriate system of enforcing various standards thus notified.<sup>3</sup> There were eight different acts for specific type of foods to prevent food adulteration such as:

- The Fruit Products Order, 1955
- The Meat Food Products Order, 1973
- The Vegetable Oil Products (Control) Order, 1947
- The Edible Oils Packaging (Regulation) Order, 1998
- The Solvent Extracted Oil, De oiled Meal, and Edible Flour (Control) Order, 1967
- The Milk and Milk Products Order, 1992
- Essential Commodities Act, 1955
- Prevention of Food adulteration Act, 1954

All these acts were not suitable for time being due to increases in adulteration of food, The Food Safety and Standards Act, 2006 was introduced to consolidate the laws relating to food and to establish the Food Safety and Standards Authority of India for laying down science based standards for articles of food and to regulate their manufacture, storage, distribution, sale and import, to ensure availability of safe and wholesome food for human consumption and for matters connected therewith or incidental thereto.<sup>4</sup> The main aim of the act is to prevent the consumers from consuming adulterated food which could harm their health and to deal with the issue of adulteration broadly. Laws have been repealed and changed with change in time, the prevention of food adulteration act was introduced by repealing all the acts before it but it was also repealed due to various inadequacies, The food safety and standards act, 2006 was introduced to deal with the adulteration issue at large.

## **II. CONSPECTUS OF FOOD ADULTERATION**

The process by which the quality or the nature of a substance is reduced through the addition of a foreign or an inferior substance and removal of vital element is known as adulteration. A food is considered adulterated if it

<sup>1</sup>FAO/WHO. Joint FAO/WHO food standards programme FAO/WHO coordinating committee for Africa, seventeenth session, Rabat, Morocco, 2007, 23-26

<sup>2</sup><https://www.femina.in/food/sustainable-kitchen/how-food-adulteration-in-india-is-fueling-business-at-the-cost-of-health-192161.html>

<sup>3</sup><https://old.fssai.gov.in/AboutFSSAI/introduction.aspx>

<sup>4</sup><https://fssai.gov.in/cms/food-safety-and-standards-act-2006.php>

contains any poisonous or deleterious substance which is injurious to health. The major reasons for food adulteration are to get more profit, to increase the weight of the substance, to make food look more fresh and natural, and mostly to increase the food production. Food adulteration may occur at any stage of food processing from production to selling. The adulteration in food is done either for financial gain or it is done due to carelessness and lack of proper hygienic condition of processing, storing, transporting, and marketing. Adulteration is quite common in developing countries and backward countries to increase the food production or to gain more profit. A food can be adulterated by various means i.e. subtraction, which means removal of some of the necessary substances from the food, for example removing milk fat from milk, which may be done by concealment (hiding the low quality of ingredients or product).

There are mainly two types of adulteration (a) Intentional Adulteration / Economic Adulteration, which means deliberate addition of adulterants to gain greater profits. Main motive behind this type of adulteration is to gain more profit from the consumers. (b) Incidental Adulteration / Unintentional Adulteration, which means when a substance or foreign material added to food due to accident or ignorance or due to improper hygiene conditions is called as incidental / unintentional adulteration. A substance may be considered incidental or unintentionally adulterated if there is pesticide residue in food, metallic contamination, rodent droppings or fertilizers in food.

### **i. Food Safety and Standards Authority of India**

The Food Safety and Standards Authority of India (FSSAI) has been established under Food Safety and Standards Act, 2006 which consolidates various Acts and Orders that have hitherto regulate food related issues in various Ministries and Departments. FSSAI has been created for laying down science based standards for articles of food and to regulate their manufacture, storage, distribution, sale and import to ensure availability of safe and wholesome food for human consumption. The main functions of FSSAI are<sup>5</sup>:-

- Framing of regulations to lay down the standards and guidelines in relation to articles of food and specifying appropriate system of enforcing various standards.
- Laying down guidelines and procedures for accreditation of laboratories and notification of the accredited laboratories.
- Contribute to the development of international technical standards for food, sanitary and phyto-sanitary standards.
- To provide scientific advice and technical support to Central Government and State Governments in the matters of framing the policy and rules in areas which have a direct or indirect bearing of food safety and nutrition.

### **ii. Sources of Food Adulteration**

Food safety is an aim to provide nutritious and safe to the consumers. The prime objective of food is not to succumb to the menace created by the food adulteration. The food can be incidentally adulterated by various sources like pesticide residue, metallic impurities, polluted water, fertilizers, unhygienic conditions, etc. Whereas, in intentional adulteration the various sources could be the unapproved additives/ chemicals, the goods may contain filth and foreign matter, preservatives, or the quantity of preservative is more than the prescribed limit, or it contains any substitute or inferior items like water in milk.

FSSAI has also campaigned for consumer awareness regarding food adulteration and has given resources like DART book<sup>6</sup> which will help the consumers to detect food adulteration at home. The implementation of FSS Act (2006)<sup>7</sup>, there has been nationwide campaigning against food adulteration and penalizations have been declared

<sup>5</sup>FSSAI :- <https://www.fssai.gov.in/cms/about-fssai.php>

<sup>6</sup><https://foodsmart.fssai.gov.in/DART.pdf>

<sup>7</sup> <https://fssai.gov.in/cms/about-fssai.php>

who violate the standards. It is trying its level best to identify the roots of this menace. It must be made sure that the sources of food adulterants should also be identified and penalized as only detection of food adulteration is one side of the coin.

According to a survey conducted, adulteration were detected in milk to the tune of 70% with water, turmeric powder 43% with chalk powder, red chilli powder-100% with artificial color, sugar 37% with chalk powder etc.<sup>8</sup> The adulteration in food is done either for financial gain or it is done due to carelessness and lack of proper hygienic condition of processing, storing, transporting, and marketing. Another motive for adulteration of goods and services is outsourcing to offshore producers.<sup>9</sup> Outsourcing became possible because comparatively labour is cheap in some countries and this is also what makes product faking easy since the cost of producing is far less compared to the super normal profits being made.<sup>10</sup>

### III. MENACE TO CONSUMERS

Food is the basic necessity of each and every individual for the survival. 'Admixture' and 'substitution' are some of the synonyms which helps to define the word adulteration. Adulteration of food is defined as "the addition or subtraction of any substance to or from food so that the natural composition and quality of food substance is affected". Adulteration can be deliberate by either removing substances to food or varying the existing natural properties of food intentionally. Adulteration can also be unintentional due to ignorance, carelessness or lack of amenities for maintaining food quality.<sup>11</sup>

"Consumer" means persons and families purchasing and receiving food in order to meet their personal needs.<sup>12</sup> A consumer is a person who purchases a product or avails any services for a consideration, for the personal use or to earn his livelihood by means of self employment.

Adulterated food can have a range of harmful effects on health. It can lead not only to the toxicity in the body but can also lead the body to paralysis or may eventually cause death. Some of the adulterants are very highly toxic for the body which may lead to heart failure, kidney disorder, liver, disorder and many more body diseases. Therefore, it is very important to detect these adulterants. Food adulteration is a major threat to a consumer, which is faced regularly. Therefore, detection of adulterants is an essential requirement for ensuring the safety of foods consumed by people. Nowadays, the more expensive the food product, a greater incentive is to be had for evolving suitable strategies to imitate the unique product with reasonably-priced alternatives. Various measures have been taken to protect the consumers from the intake of adulterated food and also, to bring awareness among the consumer associations and individual consumer about the adulteration of food and to know the legal provisions to protect the rights of the consumer. The protection of consumers Right is not solely the responsibility of the state, it is also the responsibility of each consumers. The consumers must take care by themselves with the help of recognised consumer association and authorities.

According to the FSSAI Annual Report (2018-19)<sup>13</sup>, 28.56 percent of food samples assessed by FSSAI were found to be adulterated or misbranded. 1,06,459 food samples were analyzed by FSSAI's Public labs in the year

<sup>8</sup>Afzal A, Mahmood MS, Hussain L, Akhtar, Masood. Adulteration and Microbiological Quality of Milk (A Review). Pak J Nutrit. 2011; 10(12):1195.

<sup>9</sup>Hamburg MA. Food and Drug Partnership for Safe Medicines Interchange 2010. <http://www.fda.gov/downloads/Drugs/ResourcesForYou/Consumers/BuyingUsingMedicineSafely/CounterfeitMedicine/UCM235240.pdf>.

<sup>10</sup>Sicpa. Injury or Death from Fake Drugs, Expired Drugs, Adulterated Drugs, Mislabeled Drugs and Unauthorized Medicinal Products - NGP Pharmaceuticals; GDS Publishing, 2012.

<sup>11</sup>Punishment for Food Adulteration- FSSAI, India Filings, <https://www.indiafilings.com/learn/punishment-food-adulteration-fssai/>.

<sup>12</sup>[https://www.indiacode.nic.in/bitstream/123456789/7800/1/200634\\_food\\_safety\\_and\\_standards\\_act%2C\\_2006.pdf](https://www.indiacode.nic.in/bitstream/123456789/7800/1/200634_food_safety_and_standards_act%2C_2006.pdf)Section 3 of The Food Safety and Standards Act, 2006

<sup>13</sup>FSSAI Annual Report (2018- 19)[https://fssai.gov.in/upload/uploadfiles/files/Annual\\_Report\\_2018\\_19\\_English\\_28\\_10\\_2020.pdf](https://fssai.gov.in/upload/uploadfiles/files/Annual_Report_2018_19_English_28_10_2020.pdf)

2018-19. As per the report, the highest food adulteration was found in Uttar Pradesh, Jharkhand and Tamil Nadu. The report clearly indicates a consistent rise in food adulteration in the country. The proportion of the adulterated food or misbranded food sold in India has almost raised double in the last 8 years. In the year 2012-13, fifteen percent of the food samples tested were found non-confirming to the prescribed standards. Over the years, this has gradually raised and now it stands at 28.56 percent, as per the latest report. The penalties imposed for violations has risen compared to the year 2017-18. The penalties imposed for violations in 2018-19 stood at rupees 32.57 crore to rupees 26.35 crore in the year 2017-18. The lowest food adulteration was found in Arunachal Pradesh, Goa and Uttarakhand.

As per the FSSAI annual report 2018-19<sup>14</sup>

State with highest adulteration (2018-19)	%	State with lowest adulteration (2018-19)	%
1. Uttar Pradesh	52.32%	1. Arunachal Pradesh	3.78%
2. Tamil Nadu	45.39%	2. Goa	5.67%
3. Jharkhand	41.68%	3. Uttarakhand	4.63%

#### **IV. LEGISLATION GOVERNING THE POTRAYED CONCERN**

The Indian food industry has emerged as a high profit sector in the recent times. The food industry is one of the largest industries in India and is ranked fifth in terms of production, consumption, export and expected growth.<sup>15</sup> The basic food laws are intended to assure consumers that the food items are pure, safe to eat, and produced under sanitary conditions. Generally, food laws prohibit distribution of products that are adulterated, or have labels that are false or misleading in any context. Food laws are related to the production, manufacturing and selling of a food item. It begins from the production and continues till the labeling or packaging of a food product. To meet country's sanitary and phyto-sanitary requirements, food must comply with the local laws and regulations to gain market access. These laws ensure the safety and suitability of food products for consumers. The Indian food industry is controlled by several laws in India, that govern the aspects of sanitation, licensing and other authorizations which are necessary to run a food industry

The Indian Parliament has passed the Food Safety Standards Act, 2006 (FSSA) that overrides all other food related laws such as:-

- The Prevention of Food Adulteration Act, 1954
- The Fruit Products Order, 1955
- The Meat Food Products Order, 1973
- The Vegetable Oil Products (Control) Order, 1947
- The Edible Oils Packaging (Regulation) Order, 1998
- The Solvent Extracted Oil, De oiled Meal, and Edible Flour (Control) Order, 1967
- The Milk and Milk Products Order, 1992
- Essential Commodities Act, 1955

<sup>14</sup>FSSAI Annual Report (2018-19)[https://fssai.gov.in/upload/uploadfiles/files/Annual\\_Report\\_2018\\_19\\_English\\_28\\_10\\_2020.pdf](https://fssai.gov.in/upload/uploadfiles/files/Annual_Report_2018_19_English_28_10_2020.pdf)

<sup>15</sup>Indian Food Processing:<https://www.ibef.org/industry/indian-food-industry.aspx#:~:text=The%20Indian%20food%20processing%20industry,consumption%2C%20export%20and%20expected%20growth.>



The adulteration of food is a subject in the concurrent list of the Indian constitution<sup>16</sup>. There were various state laws to regulate food safety prior to 1954, but due to variance in the provisions of different states it posed problems in trade between different provinces. Thus, this was the reason; the need for Central legislation was felt. So, The Prevention of Food Adulteration Act, 1954 was enacted to solve the problems which transpire due to the different state laws. This Act had been in place for over fifty years, and there was a need for a change due to varied reasons which includes several defects and the changing requirements of our food industry. Along, with this Act several other orders were also repealed by The Food Safety and Standards Act, 2006 such as The Milk and Milk Products Order, 1992, The Meat Food Products Order, 1973, The Food Products Order, 1955, etc.

The Prevention of Food Adulteration Act, 1954, was promulgated by Parliament in the year 1954 to make provision for the prevention of adulteration of food. This Act covers food standards, general procedures for sampling, analysis of food, powers of authorized officers, nature of penalties and other parameters related food. This Act, also deals with the parameters relating to food additives, coloring, matters, preservative, prohibition and regulations of sales, packaging and labeling, etc. The provisions of PFA Act and rules are implemented by State Government and local bodies as provided in the rules. This Act clearly defines "What is food adulteration and what is the punishment given to person/manufacturer involved in such acts".<sup>17</sup> As there was a need for a change due to varied reasons which includes several defects and the changing requirements of our food industry, the Parliament enacted the Food Safety and Standards Act, 2006. The food laws in India have been formulated with a view to check the rampant cases of food adulteration.

Apart from these Acts and Regulations, under The Indian Penal Code, 1860 there are provisions which deal with the food adulteration which is provided under chapter XIV of the code, which lays down provisions dealing with the 'offences affecting the public health, safety, convenience, decency and morals. Section 272<sup>18</sup> and 273<sup>19</sup>, of the code deal with the food or drink adulteration or sale of such food or drink is an offence punishable with an imprisonment which may extend to six months or fine or both. However, some states like West Bengal and Uttar Pradesh considered it to be insufficient punishment and made the amendments in the provisions with respect to punishment in the year 1970. The state amendment made the offence punishable with imprisonment for life along with the liability of fine.

---

<sup>16</sup> Indian Constitution. Schedule VII, List III, Entry 18.

<sup>17</sup>The Prevention of Food Adulteration Act & Rules (as on 1.10.2004)

<https://fssai.gov.in/upload/uploadfiles/files/pfa-acts-and-rules.pdf>

<sup>18</sup>**Section 272 of Indian Penal Code, 1860 -Adulteration of food or drink intended for sale.** Whoever adulterates any article of food or drink, so as to make such article noxious as food or drink, intending to sell such article as food or drink, or knowing it to be likely that the same will be sold as food or drink, shall be punished with imprisonment of either description for a term which may extend to six months, or with fine which may extend to one thousand rupees, or with both.

<sup>19</sup>**Section 273 of Indian Penal Code, 1860 -Sale of noxious food or drink.** Whoever sells, or offers or exposes for sale, as food or drink, any article which has been rendered or has become noxious, or is in a state unfit for food or drink, knowing or having reason to believe that the same is noxious as food or drink, shall be punished with imprisonment of either description for a term which may extend to six months, or with fine which may extend to one thousand rupees, or with both.

## **V. PUNISHMENT FOR FOOD ADULTERATION UNDER FSSAI**

The FSSAI regulations provide for various punishments to persons who adulterate food or food products as under:<sup>20</sup>

- Import, manufacture, storage, sale or distribution of any food article which is adulterated by allowing its quality or purity to fall below the prescribed standard, or is misbranded, or in contravention of any provision of the Act or Rules. The penalty for this offense is a minimum imprisonment of six months that may extend up to 3 years and a minimum fine of Rs 1000.
- Import, manufacture, storage, sale or distribution of any adulterant not injurious to health. Penalty is minimum imprisonment of six months that may extend up to 3 years and minimum fine of Rs 1000.
- Preventing a Food Inspector from taking a sample or exercising his Penalty is minimum imprisonment of six months that may extend up to 3 years and minimum fine of Rs 1000.
- Giving a false warranty in writing in respect of any food article. Penalty is minimum imprisonment of six months that may extend up to 3 years and minimum fine of Rs 1000
- Import, manufacture, storage, sale or distribution of any food article which is adulterated or any adulterant which is injurious to health is being used is punishable under Law. Penalty is minimum imprisonment of one year that may extend up to 6 years and minimum fine of Rs 2000
- Sale or distribution of any food article containing any poisonous or other ingredients injurious to health, which is likely to cause death or grievous bodily harm. Penalty is minimum imprisonment of three years that may extend up to life and minimum fine of Rs 5000.

## **VI. CONCLUSION**

Food adulteration laws have been modernized with changing times and the need for society. There were eight acts for different foods which were repealed after the enforcement of the Prevention of Food Adulteration Act, 1954. As the Prevention of Food adulteration act, 1954 was not effective it was again repealed and The Food Safety and Standards Act, 2006 was introduced to consolidate the laws relating to food and to establish the Food Safety and Standards Authority of India for laying down science-based standards for articles of food and to regulate their manufacture, storage, distribution, sale and import, to ensure availability of safe and wholesome food for human consumption and matters connected therewith or incidental thereto. This act was effective as it promoted public health and supervision of food safety. Food is the basic need of humans which is responsible for the growth of the Human body with changing times food adulteration has also been increased, even after enforcement of The food safety standards act, 2006 the adulteration has not stopped and no severe changes as been seen, On the other hand, adulteration of food has been elevated due to COVID-19 pandemic. In Punjab 70 thousand liters of adulterated milk was seized in mid-April, the milk which was seized contained water and also chemicals.<sup>21</sup>The reason for such adulterations is panic demand when the lockdown was imposed in India.

---

<sup>20</sup>Punishment for Food Adulteration - <https://www.indiafilings.com/learn/punishment-food-adulteration-fssai>.

<sup>21</sup><https://www.foodnavigator-asia.com/Article/2020/06/02/COVID-19-and-food-safety-Food-adulteration-and-wastage-continues-unthwarted-in-Pakistan-despite-supply-concerns>