PROJECT REPORT ON "TRENDS OF FOOD ADULTERATION IN INDIA AND ITS REMEDIES"



SUBMITTED TO:



Inspiring Trust, Assuring Safe & Nutritious Food

BY

ANUSREE BHOWMICK

CII-SKA ASIAN QUIZ COMPETITION FINALIST

BATCH: MAY – JUNE

INTERN TRAINEE AT FSSAI (ER), BENFISH TOWER, 6TH FLOOR, 31 GN BLOCK, SECTOR V, SALTLAKE CITY, KOLKATA-700029.

ACKNOWLEDGEMENT

The internship opportunity I had with Food Safety and Standards Authority of India was a great chance for learning and professional development. Therefore, I consider myself very lucky as an individual as I got the opportunity to be a part of it. I am also thankful for having a chance to meet so many wonderful people and professionals who led me through this internship period.

First and foremost I take this opportunity to thank the CEO of FSSAI, Sri. Pawan Agarwal who gave us this internship offer right after our performance in the CII-SKA QUIZ. Bearing in mind the previous I am using this opportunity to express my gratitude and special thanks to Dr. D.P Guha, Senior Technical consultant, FSSAI(ER), who inspite of being extraordinarily busy with his duties, took time out to hear, guide, and keep me on the correct path and allowing me to carry out the project.

I express my deepest thanks to Mr. Rajesh Singh, Director, FSSAI(ER) for giving necessary advices and arranging for facilities. It is my radiant sentiment to place on record my best regards, deepest gratitude to Mr. Soumalya Banerjee whose undying support has made this project a reality.

In the process of data collection of different adulterated samples found and the grounds of non –compliance I received a lot of help from the Joint Food Commissioner of Food Safety Smt.S.Mitra Deb and the Public Food Analyst, Dr.Arup Datta Gupta. Without their cooperation, this project wouldn't have been possible.

I perceive this opportunity as a big milestone in my career development, I will strive to use gained skills and knowledge in the best possible way, and I will continue to work on their improvement in order to attain desired career objectives.

INDEX

TOPIC	PAGE NO.
Acknowledgement	1
About FSSAI	3-4
Initiatives by FSSAI	5
Preface	6-7
Method of study	8
Results and observations- data on non-compliant samples from Karnataka and West Bengal	9-10
Cause analysis of the non-compliant samples	11-14
Remedies for food adulteration	15-16
Lessons from around the globe on the ways to fight food adulteration	16-17
Session on food import clearance system	18
Session on registration and licensing	19-20
Visits to sea port, airport, Budge Budge oil refinery	21
Conclusion	22

ABOUT FSSAI

The Food Safety and Standards Authority of India (FSSAI) has been established under Food Safety and Standards, 2006 which consolidates various acts & orders that have hitherto handled 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.

Highlights of the Food Safety and Standard Act, 2006

- Various central Acts like Prevention of Food Adulteration Act,1954,Fruit Products Order, 1955, Meat Food Products Order,1973,
- Vegetable Oil Products (Control) Order, 1947, Edible Oils Packaging (Regulation) Order 1988, Solvent Extracted Oil, De- Oiled Meal and Edible Flour (Control) Order, 1967, Milk and Milk Products Order, 1992 etc will be repealed after commencement of FSS Act, 2006.

The Act also aims to establish a single reference point for all matters relating to food safety and standards, by moving from multi- level, multi- departmental control to a single line of command. To this effect, the Act establishes an independent statutory Authority – the Food Safety and Standards Authority of India with head office at Delhi. Food Safety and Standards Authority of India (FSSAI) and the State Food Safety Authorities shall enforce various provisions of the Act.

Establishment of the Authority

Ministry of Health & Family Welfare, Government of India is the Administrative Ministry for the implementation of FSSAI. The Chairperson and Chief Executive Officer of Food Safety and Standards Authority of India (FSSAI) have already been appointed by Government of India. The Chairperson is in the rank of Secretary to Government of India.

FSSAI has been mandated by the FSS Act, 2006 for performing the following functions:

- Framing of Regulations to lay down the Standards and guidelines in relation to articles of food and specifying appropriate system of enforcing various standards thus notified.
- Laying down mechanisms and guidelines for accreditation of certification bodies engaged in certification of food safety management system for food businesses.
- Laying down procedure and guidelines for accreditation of laboratories and notification of the accredited laboratories.
- 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.
- Collect and collate data regarding food consumption, incidence and prevalence of biological risk, contaminants in food, residues of various, and contaminants in foods products, identification of emerging risks and introduction of rapid alert system.
- Creating an information network across the country so that the public, consumers, Panchayats, etc receive rapid, reliable and objective information about food safety and issues of concern.

- Provide training programmes for persons who are involved or intend to get involved in food businesses.
- Contribute to the development of international technical standards for food, sanitary and phyto-sanitary standards.
- Promote general awareness about food safety and food standards

FEW INITIATIVES BY FSSAI



PREFACE

Adulteration is the act of degrading food quality by incidental or intentional means through the addition of chemicals, extraneous matter, etc. In a country like India where there is a huge population to feed and there is lack of monitoring of what reaches the consumer, the act of adulteration isn't quite surprising. Items of daily consumption like grains and milk, etc are found to be adulterated much to our disregard.

Food adulteration is done for the selfish interest of food vendors for monetary gains and not only compromises on the health of the consumer but also results in wastage of food which are discarded if found adulterated. The country which faces a gap in the supply and demand goes several steps back again due to this. Quite unknowingly, most of the times, the food vendors indulge into such malpractices with callous disregard to the health interests of the consumer by all possible means.

Food safety is an aim to bring safe and nutritious food to the plate of the consumer. Hence the prime objective of food is not sufficed due to the menace created by food adulteration.

Though with implementation of the FSS act (2006), there has been nationwide campaigning against food adulteration and penalizations have been declared who violate those standards. FSSAI has also campaigned for consumer awareness regarding food adulteration and has given resources like the DART Book which will help them to detect food adulteration at home. It is trying its level best to identify the roots of this menace. Well, but added that only detection of food adulteration is one side of the coin, it must be made sure that the sources of such adulterants are also identified and penalized.

Still there are a huge number of products, both packaged and unpackaged that are found adulterated by food laboratories and those foods go into waste as they are unfit for consumption. Thus, in this way, the food grown by the farmer by use of a multitude of resources doesn't reach the consumer or makes way to his plate as a poison. This is a clear case of food wastage and violation of the interests of the consumer who pays for the product as well the farmers who work hard to grow the crop. In a country of 1.3 billion people and where a massive chunk of the population struggles to get two square meals a day and remains unfed there a large proportion of food grains produced ends up in the bin, it is ironical how such a situation has now become a reality. Unfortunately, it is the middlemen who finally earn profit from such heinous acts.

Thus, there stands a need to take a strict control over the food items sold to the consumer and also address the major causes behind food adulteration so that it can be brought down to nil and instead there is protection given to the customer in terms of provision of safe foods. Not to disregard, that such efforts will also alleviate food adulteration and prevent food wastage.

This project aims at bringing out the answers to the following questions:

• what are the basic reasons behind why food samples are found non-compliant to FSSAI guidelines,

- What are the routes of food adulteration seen in the country,
- What are the reasons behind food adulteration
- And finally it focuses on the remedies to the problem of food adulteration after detailed cause analysis
- One unattended aspect of the impact of food adulteration is that it also leads to food wastage as the non-compliant samples are unfit for human consumption. Even though a lot of resources go into the production of such grains, still they find their way into the bin.
- In addition to this, through this project, we take in account of what has been done by the countries around the globe to prevent food adulteration and take lessons on how we can address the problem of adulteration in a more advanced way.

METHOD OF STUDY

The project is developed on the lab reports obtained from the Central Combined Laboratory, West Bengal and the official website of the state of Karnataka between 2017- 2019.

Then cause analysis of the data was conducted to figure out the reasons underlying the cases of non-compliance of food samples. In detail probing into adulteration of each food item was conducted and function of each adulterant and the reasons behind the use was also stipulated.

The cause analysis helped to find out the gaps in the existing system of prevention of food adulteration. After this, with each gap was addressed with a different approach keeping in mind the least involvement of manpower and making the food supply system more transparent and least loop holes.

The study brings about the good aspects of food adulteration laws of countries around the globe and what from those laws can be adopted into the food adulteration laws of India.

DATA ON NON-COMPLIANT SAMPLES IN KARNATAKA (2017-18)

NO.OF SAMPLES	COMMODITY	GROUNDS OF NON- COMPLIANCE
1	Sooji	Living worm and web formation
2	Rusk	Added colour (Tartazine)
8	Jaggery	Colour present, less sugar and sucrose content
37	Moong whole	Living and dead insects found
83	Wheat	Living insects
2	Channa whole	Extraneous matter, presence of insects
1	Groundnut	Insects present
2	Sugar	Dead ants
8	Toor dal	Damaged grains, presence of insects.
1	Rawa	Foreign starch and less gluten
11	Rice	Living insects and edible grains
4	Tomato sauce	Low TSS and non-permitted colours present
4	Sugar boiled confectionery (apple cake, honey cake, etc.),sweets	Fungus infestation, presence of non-permitted colours.
8	Ragi	Living insects and edible grains, lumps and extraneous matter like jute threads , stones, etc
3	Buffalo milk	Low fat and SNF
4	Toned milk	Sugar and NaCl detected
5	Green gram	Unclean, insects present
3	Tea powder	Colour
2	Mixed milk	Less fat and added sugar
5	Standardized milk	Low fat and SNF
1	Butter	Baudouin test positive
1	Ghee	Baudouin test positive
3	Full cream milk	Low fat and SNF
4	Jowar	Living and dead insects
2	Curd	Less fat
1	Rasgulla	Added colour
1	Sambar powder	Common salt
2	Khowa	Low fat, low total solids
1	Masala powder	High moisture,added salt
1	Horse gram	Living insects and edible grains
3	Milk	Added sugar, NaCl

DATA ON NON-COMPLIANT SAMPLES IN WEST BENGAL

(YEAR 2018-2019)

FOOD GROUP	TOTAL NO. OF SAMPLES RECEIVED	SAMPLES FOUND UNSAFE OR SUBSTANDARD	GROUNDS FOR NON- COMPLIANCE
MILK	36	13(SUBSTANDARD) 1(UNSAFE)	Low SNF , Low Milk Fat, Presence of foreign proteins, Presence of neutralizers, and detergents.
CURD	2	1 (SUBSTANDARD)	Low SNF, Low Milk Fat.
GHEE	18	10	High BR value, Low Reichert Value
TUMERIC POWDER	11	2(UNSAFE)	Metanil Yellow, Rice Starch present.
MUSTARD OIL	18	6	High BR value, High Saponification Value, High Belliar Turbidity Temperature.
RICE BRAN OIL	1	1	High acid value.

CAUSE ANALYSIS OF NON COMPLIANT SAMPLES:

FOOD GROUP	GROUNDS FOR NON- COMPLIANCE	REASONS/INDICATIONS
CEREALS,FOOD	GRAINS AND THEIR PRODUCT	'S
Rice, Wheat, Ragi, Jowar, Rusk, Sooji, Rawa	Living worm and web formation, Living and dead insects	Improper storage facilities(high humidity), Careless handling (insects might be present while harvesting from fields)
	Extraneous matter like jute threads, stones, mud, etc.	Economic benefits are derived by increasing the weight with mud and stones. Lack of proper handling practices might act as an entry point f extraneous matter.
	Foreign starch	To add bulk
	Less gluten	This acts as an indication of poor quality of grains.
LEGUMES AND P	ULSES	
Moong whole, Bengal Gram whole, Toor dal, Horse gram, Green gram	Presence of extraneous matter	Economic benefits are derived by increasing the weight with mud and stones. Lack of proper handling practices might act as an entry point f extraneous matter
	Living and dead insects found	Improper storage facilities(high humidity), Careless handling (insects might be present while harvesting from fields)
	Damaged grains	Improper handling practices while harvesting, processing, etc cause such defects.

GROUNDS OF NON-	REASONS/INDICATIONS
COMPLIANCE	
Insects present.	Improper storage facilities(high humidity), Careless handling (insects might be present while harvesting from fields)
PRODUCTS	
Low fat and SNF	There is a huge gap between demand and supply in the dairy industry; hence the water is added to increase the quantity of milk. Sometimes, water is also added to have monetary gains by selling low-quality milk at the price of good milk.
Sugar and NaCl detected	Sugar is added to improve taste and mask defects in taste. Sugar may also be added to increase consistency. Salt is added as way to increase the solid non-fat in milk.
Baudouin test positive	Butter and ghee which is Baudouin test positive indicate that they have adulterated with vanaspati. The cost of ghee being higher and gap between demand and supply makes manufacturers to opt for such methods of adulteration.
Presence of foreign proteins	
Presence of neutralizers	Middlemen add neutralizers like alkali bicarbonates, carbonates and hydroxides which improve the shelf life of milk by neutralizing the developed acidity.
	COMPLIANCE Insects present. Insects present. PRODUCTS Low fat and SNF Sugar and NaCl detected Baudouin test positive Presence of foreign proteins

	GROUNDS OF NON COMPLIANCE	REASONS/INDICATIONS
Milk and milk	Presence of detergents	Detergent has been found to be the youngest entry among the list of
products		adulterants in milk; used for the emulsification of externally added vegetable fat.
		by adding detergent to emulsify and dissolve oil in water to give frothy solution the characteristic white colour of milk, followed by addition of caustic soda to neutralise acidity which prevents it from turning sour during transportation.
	High BR value	Indicates adulteration with vegetable oils and fats. The reason behind this is to have monetary gains and a gap in demand and supply.
	Low Reichert Value	Indicates that palm oil or even sheep body fat is added in ghee.
SUGAR AND SUGA	AR PRODUCTS	
Jaggery, sugar,	Less sugar and sucrose content	
sugar-boiled	Dead ants, Fungus infestation	Poor storage conditions.
confectionery, Rasgulla	Presence of non-permitted colours	To make the sweets more appealing to the customers.
SPICES AND CON	DIMENTS	
Turmeric powder,	Metanil Yellow	To enhance colour
Masala powder,	Presence of rice starch	To add bulk
Sambar powder	Added salt	To add bulk
	High moisture content	Poor storage conditions
FRUIT AND VEGE	TABLE PRODUCTS	
Tomato sauce	Low TSS	To make the product low cost and have monetary gains
	Non permitted colours present	To improve appearance

FOOD GROUP	GROUNDS OF NON- COMPLIANCE	REASONS/INDICATIONS
FATS AND OILS		
Mustard oil, Rice bran oil	High BR value High Saponification Value High Belliar Turbidity Temperature	Addition of palm oil Presence of free fatty acids, indicating rancidity Presence of groundnut oil and gingelly oil
BEVERAGES	High acid value	Presence of free fatty acids, indicating rancidity
Tea leaves	Colour present	

WAYS TO PREVENT FOOD ADULTERATION

A REMEDY FOR THE MENACE NAMED "FOOD ADULTERATION"

Through the detailed cause analysis, various reasons behind the adulteration of food were revealed. The major problems seen in this sector are related to and the possible remedies to them are as follows:

1. Improved Storage facilities

One of the biggest problems seen in the food grains, legumes and spices is insect infestation due to the humid and unhygienic conditions of the store house.

Remedy proposed: we need close monitoring of the storage conditions of food grains by professional individuals

There is a scope to improve the quality of grains by keeping in track the incoming and outgoing samples along with their dates so that "first in first out" can be applied here as well.

Additional care must be given to check that insect infested grains from the fields do not reach the storehouse as it might turn out to be threat for the healthy grains.

During the months of monsoon, and also in highly humid areas, extra care must be taken so that grains are not spoiled.

2. Improved Handling practices

The food handlers have to be well trained on how to handle grains to prevent damage to the grains or quality loss.

3. Prevention of Addition of extraneous matter, other oils, rice starch and other substances for monetary gains by selling cheaper quality food at a higher price Economically motivated food adulteration is widespread in our country. This can be handled in a three-fold technique by joint efforts of the consumer, food vendor and the government.

First, the consumer should be encouraged keep a keen eye on the food they are buying or consuming. The DART book must be popularized among the public through advertisements and housewives can be motivated to conduct those tests. The public must be taught to any slightest of the cases of food adulteration that they encounter. All such efforts will be possible only if the consumer knows the ill-effects of consuming adulterated food.

Second, **the FOSTAC training** must be given to the food vendors so as to educate them about the ill effects of adulterated food, inform them about the penalties they have to pay if found guilty and therefore encourage them to carry out fair trade practices.

Third, the government can open "adulteration awareness cells" where people can report cases of food adulteration directly. The government can also conduct raids or sudden visits to the godown or places where food is stored so as to check if the conditions are suitable. Random sampling of foods from different vendors should be analyzed and if found adulterated then strict measures must be taken.

4. Introduction of newer technologies for detection of food adulteration:

Food apps should be developed such that consumers can easily report cases of food adulteration.

Newer machines can be developed to detect the level of food adulteration in different food items.

For example, "Ksheer Scanner', which instantaneously detects urea, salt, detergent, liquid soap, boric acid, caustic soda, soda and hydrogen peroxide, was developed by CSIR-CEERI. Such improved machinery will help to efficient detection of food adulteration.

Development of well-developed laboratories with developed equipments for carrying out advanced detection techniques for food adulteration

5. Encouraging food vendors who are found to be fair:

The food vendors who are found to sell good quality foods must be rewarded in various ways so that the others are motivated to sell good quality products.

Positive motivation can act better than penalizations and prosecutions.

6. Education to food vendors and all middle men:

The food vendors must be given training and told about the ill effects of adulteration. They must be made aware that the adulterated foods also harm their own family members.

LESSONS FROM AROUND THE GLOBE ON THEY HAVE FOUGHT FOOD ADULTERATION

• <u>FDA PROTECTS THE FOOD SUPPLY FROM INTENTIONAL</u> <u>ADULTERATION</u>

First, facilities must conduct a vulnerability assessment, which means finding the points in their processes that pose the greatest risk for intentional adulteration. Second, facilities must put in place mitigation, or preventive, strategies to address these vulnerabilities. Third, a system must be put in place for food defense monitoring, food defense corrective action, and food defense verification, which together ensure the system is working as intended to address vulnerabilities. Fourth is the recordkeeping. Finally. there are training requirements. Personnel, and their supervisors, working at the most vulnerable points in a facility are required to take food defense awareness training and to have the education, training, or experience to properly implement mitigation strategies. In addition, preparing the food defense plan, conducting vulnerability assessments, identifying mitigation strategies, and engaging in reanalysis activities must be done or overseen by personnel with additional training or experience.

Their main aim they have is to "educate and regulate".

• <u>PwC HONG KONG'S MEASURES TO PREVENT FOOD</u>

PwC, in cooperation with SSAFE, Wageningen University and the Vrije Universiteit of Amsterdam has launched a food fraud vulnerability assessment tool that helps companies analyse these three aspects in order to better understand the food fraud vulnerability for any food product or ingredient.



Opportunity: The opportunity to commit fraud reflects the ease of adulteration and difficulty of detection. For a food ingredients, these are determined by composition, physical qualities, complexity of production processes, control of supply chains, as well a geographic origins.

Motivation: High value food items for which subtle characteristics create large price differences can be enticing targets for fraudsters. Intense price competition creates incentives to replace high value ingredients with cheap substitutes. A company with a valuable brand is usually less motivated to commit fraud, while the motivation to commit economic crimes is often higher when a company or an individual is facing a financially desperate situation.

Control Measures: A food company's primary fraud controls are its food safety management and quality control systems, as well as its managers and staff. External controls include food safety agencies, anti-fraud regulations and law enforcement. Vigilant suppliers also play a role in preventing food fraud.

• AUSTRALIA'S FIGHT WITH FOOD ADULTERATION:

Inspection and surveillance are the most common bases of identifying specific breaches of food laws Further survey data indicates that, in conducting inspection programs, most agencies undertake systematic rather than random inspections; inspection frequency is in most cases weighted according to the assessed risk involved in particular classes of premises; and general inspections patterns are preferred to blitzes on particular areas or problems.

Public complaints received a lower rating as a means of identifying specific breaches, but this reflects limits on the number of complaints received rather than the importance attached to them by the agencies. Indeed, 84 percent of agencies indicated that they give priority to public complaints, reflecting underlying notions of 'customer service' in many cases.

The table shows that education and warnings are the most commonly used tools for rectifying specific breaches and are often used together. On identifying a breach, an enforcement officer will often issue a warning and also advise the proprietor on how to deal with the problem.



written

warning

fine/

prosecute

20

educate

verbal

warning

Fines and prosecutions are used less frequently, and adverse publicity is rarely used.

adverse

publicity

Further breakdown of the survey data demonstrates that the agencies generally take a graduated approach to rectifying breaches. In terms of warnings, verbal warnings are more commonly used when a breach is first identified, whereas written warnings are favoured if no remedial action is taken by a proprietor following a first warning. Likewise, fining or prosecuting immediately after a breach is detected is rarely or never used. Indeed, only nine agencies indicated that they actually have the power to issue on-the-spot fines and survey responses indicate that it is rarely used in the first instance. However, the majority of agencies indicated that they would be willing to resort to fining or seeking prosecution if initial attempts to have problems rectified were to fail.

These graduated approaches are reflected in formal or informal hierarchies of measures. Nearly all agencies (47 out of 49) indicated that they do use a hierarchy of measures. Of those that do, most used an informal approach (29 out of 49) whilst the remainder have formal procedures.

Typically, the hierarchies used involve some or all of the following elements:

- education/advice on the nature of the problem and how to rectify it;
- a verbal warning is given;
- a written warning is issued;
- a formal clean-up notice is issued; and
- fines are imposed, prosecution commences, or closure orders are served.

If action on the first level of the hierarchy fails to bring about the desired results, the agencies will escalate up to the next level.

That said, some agencies also indicated a willingness to immediately use higher level mechanisms in certain circumstances, such as where fraud has occurred or where a major public health risk results from a breach.

Overall, these survey results suggest that agencies adopt a more cooperative than combative posture when dealing with breaches in food laws.

CONCLUSION

The study brings out a clear picture of the present scenario of food adulteration in India. It also highlights what are the main areas on which the government should focus so that the menace of food adulteration can be put to control.

Through the cause analysis, it is clear that the major areas India should focus on is to combat intentional food adulteration for economic benefits, as most of the cases of non-compliance were due to that. The ignorance and selfish interests of the middlemen have led them into such malpractices.

The key points that rose out of this study is as followed:

- Education and regulation go hand in hand.
- Prevention of food adulteration in turn prevents food wastage.
- Digitalization and improved technology can revolutionize the present scenario of food safety.

It requires close monitoring and strategic planning to combat such a wide spread problem. But the boon at present is the rapid advancement of technology which can be utilized to against food adulteration. Food safety apps for consumers, improved labs under the government and trained personnels for supervision will together form a great weapon to fight food adulteration.

TRAINING SESSIONS CONDUCTED FOR TRAINEES

SESSIONS ON FOOD IMPORT CLEARENCE

We had a session on how food import takes place through coordinated efforts between FSSAI and Customs Department.

Section 25 of the Food Safety & Standard Act, 2006, stipulates that all imports of articles of food are subject to the provisions of the Act. The procedure and requirements for import of food articles are regulated by FSS (Import) Regulations, 2017.

FSSAI has its Authorised Officers at 6 locations namely Chennai, Kolkata, Mumbai, Delhi, Cochin, Tuticorin covering 21 points of entries for ensuring compliance to the provisions of FSSA Act, 2006 and Regulations made thereunder. Further, there are another 396 locations throughout the country where Customs officials have been notified as Authorised Officers by FSSAI.

FSSAI has an online system for clearance of food imports, Food Import Clearance System (FICS) which is seamlessly integrated with the Customs ICE-GATE (Indian Customs Electronic Commerce/Electronic Data interchange (EC/EDI) Gateway) under SWIFT (Single Window Interface for Facilitating Trade). Selective sampling & testing of food articles on the basis of risk profiling done by FSSAI is implemented at the Customs ICEGATE.

The food articles when referred to FSSAI for clearance by the Customs Authorities are subjected to scrutiny of documents, visual inspection, sampling and testing in order to determine whether or not they conform to the safety and quality standards established and laid down under various Food Safety and Standards Regulations. If sample is found conforming then No Objection Certificate (NOC) is generated and if not conforming, then Non-Conforming Report (NCR) is generated.

SESSION ON LICENSING AND REGISTRATION

Registration

As per Section 31(1) & 31(2) of FSS Act, 2006 every Food Business Operator in the country is required to be licensed/registered under the Food Safety &Standards Authority of India. The licensing and registration procedure and requirements are regulated by Food Safety & Standards (Licensing and Registration of food Business) Regulations, 2011.FLRS (Food Licensing and Registration system) is an online system launched by FSSAI to facilitate FBO in India to apply for License/ Registration certificate and can track their applications during the course of processing. 35 States/UTs have been issuing License/ Registration certificate online.

Registration is meant for petty food manufacturers that includes petty retailer, hawker, itinerant vendor or a temporary stall holder or small or cottage scale industry having annual turnover up to 12 lacs. All food businesses having income more than this limit are required to take a license.

Registration Process



Licensing

As per Section 31(1) of FSS Act, 2006 every Food Business Operator in the country is required to be licensed under the Food Safety &Standards Authority of India. The licensing and registration procedure and requirements are regulated by Food Safety & Standards (Licensing and Registration of food Business) Regulations, 2011. Food Licensing and Registration System (FLRS) is an online system launched by FSSAI to facilitate FBOs in India to apply for license / registration certificate and help them track their applications during the course of processing. As of date 35 States / UTs issue license / registration certificate online.

Eligibility criteria

1. State License-

- Food Businesses with Annual Turnover between 12 lakh and 20 crore.
- All grain, cereal and pulses milling units irrespective of turnover.

2. Central License-

- Food Businesses with Annual Turnover more than 20 crores.
- Operating business in two or more States.
- Food business covered under Schedule 1 of FSS (Licensing and Registration of Food Businesses) Regulations,



VISIT TO SEA PORT

We were taken to Khiderpore port where we got an exposure on how sampling is done of different food items, how the package labels are checked for different specifications of the food items imported. The food items imported are sampled and a pair of samples are collected per food item , one is kept at FSSAI office incase of rejection of the previous sample sent to the lab. The lab to which the food sample is to be forwarded is chosen by default by a software. The food items that were sampled that day were chickpeas, apples of two varieties namely Red Delicious and Rosso , tangerine from Egypt .

VISIT TO AIRPORT

I also went to the Kolkata Airport Cargo Complex for sampling. That day 7 samples of different fruits came, namely mangosteen, longan, pomelo, and tea came. The labels were checked. The samples were taken and the details were uploaded right from the airport since fruits are easily perishable items.

VISIT TO BUDGE BUDGE OIL REFINERY

I went to Budge Budge Oil Refinery where palm oil was sampled and was directly sent to the lab for analysis.