

**A study report on  
TRACEABILITY- GLOBALLY  
and  
Regulatory Work**

**on  
Section 22-Labeling and RDA**

*submitted by*

**SHELINA J**

*in partial fulfillment of Internship*

**at**

**Food Safety and Standards Authority  
of India**

**SRO- Chennai**



**JULY 2019**

## BONAFIDE CERTIFICATE

This is to certify that **Ms Shelina J** has submitted a study report on “**Study of Traceability – Globally**” carried out during the Internship at “**Food Safety and Standards Authority of India-Chennai**”. This work is a record of student’s own work under the guidance and supervision of the undersigned.

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FSSAI- Chennai

## **DECLARATION**

I hereby declare that the study report entitled “Traceability-Globally” is a work done in partial fulfillment of Internship at Food Safety and Standards Authority of India (FSSAI)- Chennai. All sources of work has been duly acknowledged.

DATE:

.....

(SHELINA J)

PLACE:

## **ACKNOWLEDGEMENT**

I would like to thank at first The Almighty for his bountiful support and his blessings.

At first, I would like to thank The CEO of FSSAI Shri Pawan Kumar Agarwal and Dr Sanjay Dave the Chairperson of Surakshit Khadya Abhyan for giving this opportunity of Internship at FSSAI-Chennai.

I would like to extend my sincere gratitude to the Director of FSSAI-Chennai and Mumbai “ Shri P Muthumaran” for his support during the internship.

Heartiest thanks to “Dr M Kannan” the Deputy Director of FSSAI-Chennai for his humble support ,his endeavours during the complexities and his timely guidance which has helped a lot to enlighten and grow and learn.

Deepest thanks and sincere appreciation to “Ms W Lydia Sona Lizzy” Technical Officer at FSSAI-Chennai for all her distinguished efforts to make me well equipped with the norms and give a lot of real time experience in understanding the regulations and importance.

At last, great thanks to the entire office members of FSSAI-Chennai as well as the supporting staff and the Interns for all the help they have rendered during the period of internship.

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## CHAPTER 1

### INTRODUCTION

#### 1.1 INTRODUCTION

FSSAI has been established under the FSS Act 2006 which was passed by Anbumani Ramodass. The FSSAI has been appointed the duty of forming the Regulations. It's a sole body responsible for Ensuring safety in food. The body is autonomous to Ministry of Health and Family welfare which has been the parent body of the newly formed young regulatory.

Before the existence of FSSAI, the Prevention of Food Adulteration Act 1954 had its hand on the food commodities. The main objective of PFA was into the concept of Admixture i.e adulteration, there were not much provisions for improvement. The entire section of the act was based on Penalties. There were also nine different ministries and eight different laws. Therefore there was a need for ease in the law and a change to be made so as to allow improvement chances in the food industry along with the removal of overlapping of such laws which made the roots for the formation of FSSAI.

Table 1.1 Laws and Ministries before FSSAI

Prevention of Food Adulteration Act 1954
Edible Oil Product Order
Vegetable Oil Packaging Order
Milk and Milk Product Order
Meat Product Order
Fruit Product Order
Standard Weight and Measures Act
Any Order under essential Commodities Act



The FSSAI was formed in 2011, where the act was passed in 2006. The FSSAI had being formulated so as to have

- Removal of Multiple laws
- Harmonizing with International laws
- Scientific Evaluation and Risk based assessment approach
- Trade without affecting consumer safety

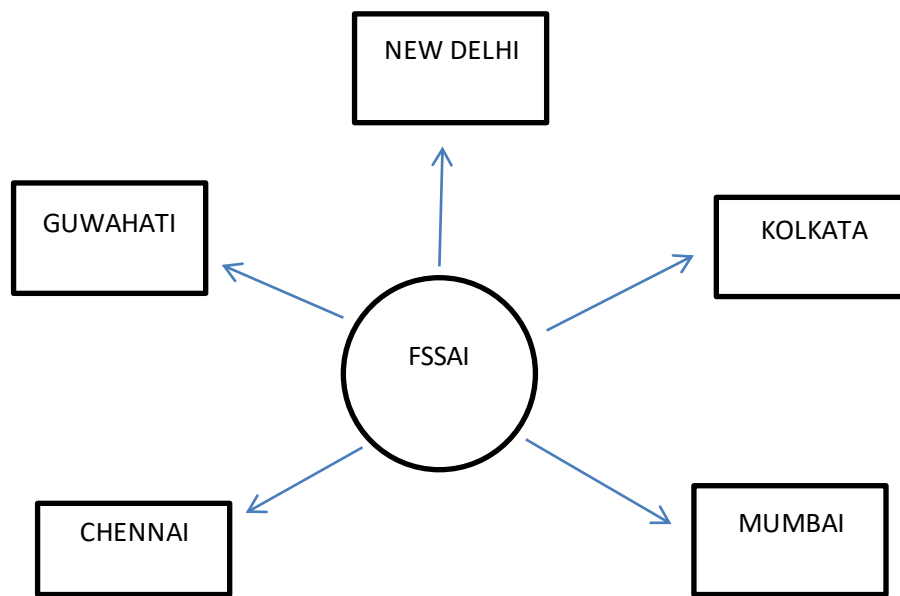
## 1.2 SALIENT FEATURES OF FSSAI

- The FSSAI has Science based standards
- The Standards of FSSAI are based on some international standards such as Codex, so as to promote International Trade
- The major initiative is to ensure consumers safety
- To provide legal provisions for consumer health
- Focuses more on Food Safety and Management System
- Timely update on the Regulations and formation of regulations based on the need of the Indian Market

## 1.3 NETWORK OF FSSAI

The FSSAI is led by the Chief Executive Officer who has the highest authority. There are about five Regional Offices with Headquarters at New Delhi and the other quarters at Mumbai, Kolkata, Chennai, Tuticorin.





## 1.4 THE INDIAN FOOD LAW

### 1.4.1 FSS Act

The FSS Act was passed in 2006. The act has all the sections which give the definitions and the pros and cons. It gives an idea about the responsibility and the provisions for understanding the Regulation. There are about 101 sections in the act which covers the entire food law.

### 1.4.2 FSS Rules

The Rules speak about the amenities to be provided.

### 1.4.3 FSS Regulations

The regulations reveal the scientific aspect of the law and there can be changes and amendments made according to the need of the hour.

#### 1.4.3.1 FSS Regulations

There are timely updates and changes as well as if the need of New Regulation is required is made. At first a draft is notified and after the scientific analysis a Gazette Notification is made which becomes the land of the law.

## 2011

- Food Safety and Standards (Licensing and Registration of Food Businesses) Regulation
- Food Safety and Standards (Food Product Standards and Food Additives) Regulation
- Food Safety and Standards (Prohibition and Restriction on Sales) Regulation
- Food Safety and Standards (Packaging and Labelling) Regulation
- Food Safety and Standards (Contaminants, Toxins and Residues) Regulation

- Food Safety and Standards (Laboratory and Sampling Analysis) Regulation

## 2016

- Food Safety and Standards (Food or Health Supplements, Nutraceuticals, Foods for Special Dietary Uses, Foods for Special Medical Purpose, Functional Foods and Novel Food) Regulation

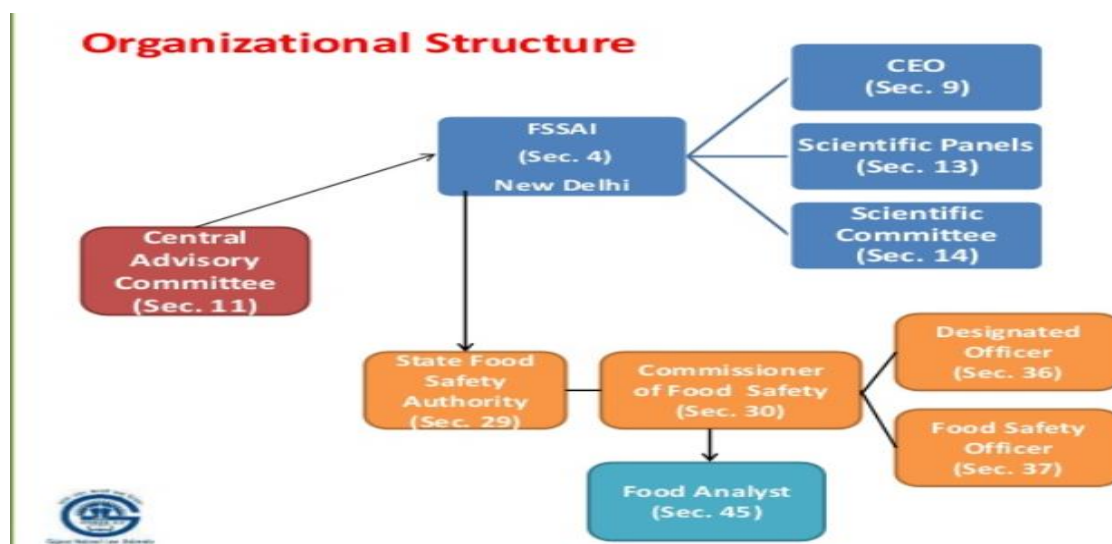
## 2017

- Food Safety and Standards (Food Recall Procedure) Regulation
- Food Safety and Standards (Import) Regulation
- Food Safety and Standards (Approval for Non-Specified Food and Food Ingredients) Regulation
- Food Safety and Standards (Organic Food) Regulation

## 2018

- Food Safety and Standards (Alcoholic Beverages) Regulation
- Food Safety and Standards (Fortification of Foods) Regulation
- Food Safety and Standards (Food Safety Auditing) Regulation
- Food Safety and Standards ( Recognition and Notification of Laboratories) Regulation
- Food Safety and Standards ( Advertising and Claims) Regulation
- Food Safety and Standards (Packaging) Regulation

### 1.5 THE AUTHORITIES IN FSSAI



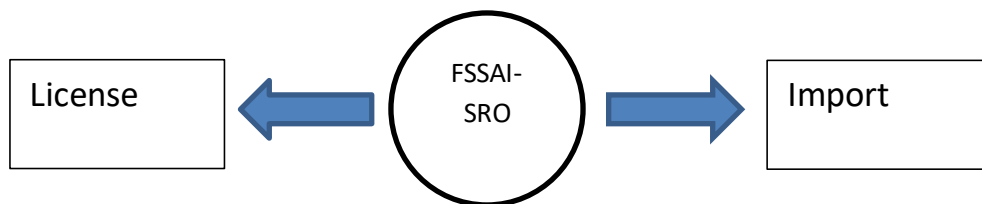
## 1.6 FSSAI SOUTHERN REGIONAL OFFICE- CHENNAI

The FSSAI- Chennai is the Southern Regional Office which holds the following states

- Tamil Nadu
- Kerala
- Telangana
- Karnataka
- Andhra Pradesh
- Pondicherry
- Lakshwadeep

The following two divisions are held under in FSSAI Chennai

1. Licensing
2. Import



## CHAPTER 2

### FOOD LICENSING AND REGISTRATION OF FOOD BUSINESS

Section 31 of the act deals with the Licensing and Registration of the FBO. The food licensing and Registration Regulation gives instructions, criteria to attain License, the process of obtaining license, the various forms involved in the attaining of license, the hygiene requirements to be maintained by various Food Business Operators (FBO).

All Food Business Operator involved in the Food Business are required to get Licensed by the Food Authority based on the following criteria.

TABLE 2.1 CRITERIA FOR FOOD BUSINESS

CRITERIA	REGISTRATION	STATE LICENSE	CENTRAL LICENSE
Form	Form A- Schedule 2	Form B- Schedule 2	Form B Schedule 1
Fees- Schedule 3	Rs 100	Rs 5000 or 3000	Rs 7500
Turnover/ year	Less than 12 lakhs	12 lakhs - 20 crores	More than 20 crores
Mandatory	Schedule 4	Schedule 4	Schedule 4

Schedule 1 – Criteria of Food Business under Central Licensing Authority

Schedule 2- Various forms for the application of License/ Registration

Schedule 3- Fess for the applied license/ Registration

Schedule 4- General Hygiene Practices

TABLE 2.2 SCHEDULE IV PARTS

Part 1	General Hygiene and Sanitary Practices to be followed by FBO for Registration
--------	---

Part 2	General Hygiene and Sanitary Practices to be followed by FBO for License
Part 3	Hygiene and Sanitary Practices of Milk and Milk Products
Part 4	Hygiene and Sanitary Practices of Meat and Meat Products
Part 5	Caterers

## **2.1 CRITERIA FOR CENTRAL LICENSING AUTHORITY**

The following list of FBO's come under CLA

- Dairy Units- 2500 MT / day
- Slaughter house- 50 large animals, 150 small animals, 1000 poultry birds/day
- Vegetable Processing Unit- 2MT /day
- Meat Processing Unit- 500 kg / day , 150 MT per annum
- 100% Export Oriented Units
- Companies operating in more than two or more state
- Catering services such as for Central Government Agencies such as Railways, Airways

## **2.2 CRITERIA FOR STATE GOVERNMENT LICENSE**

- Manufacturer- above 1 MT
- Dairy- 2500 MT per annum
- Hotels- 3 star and above

## **2.3 CRITERIA FOR REGISTRATION**

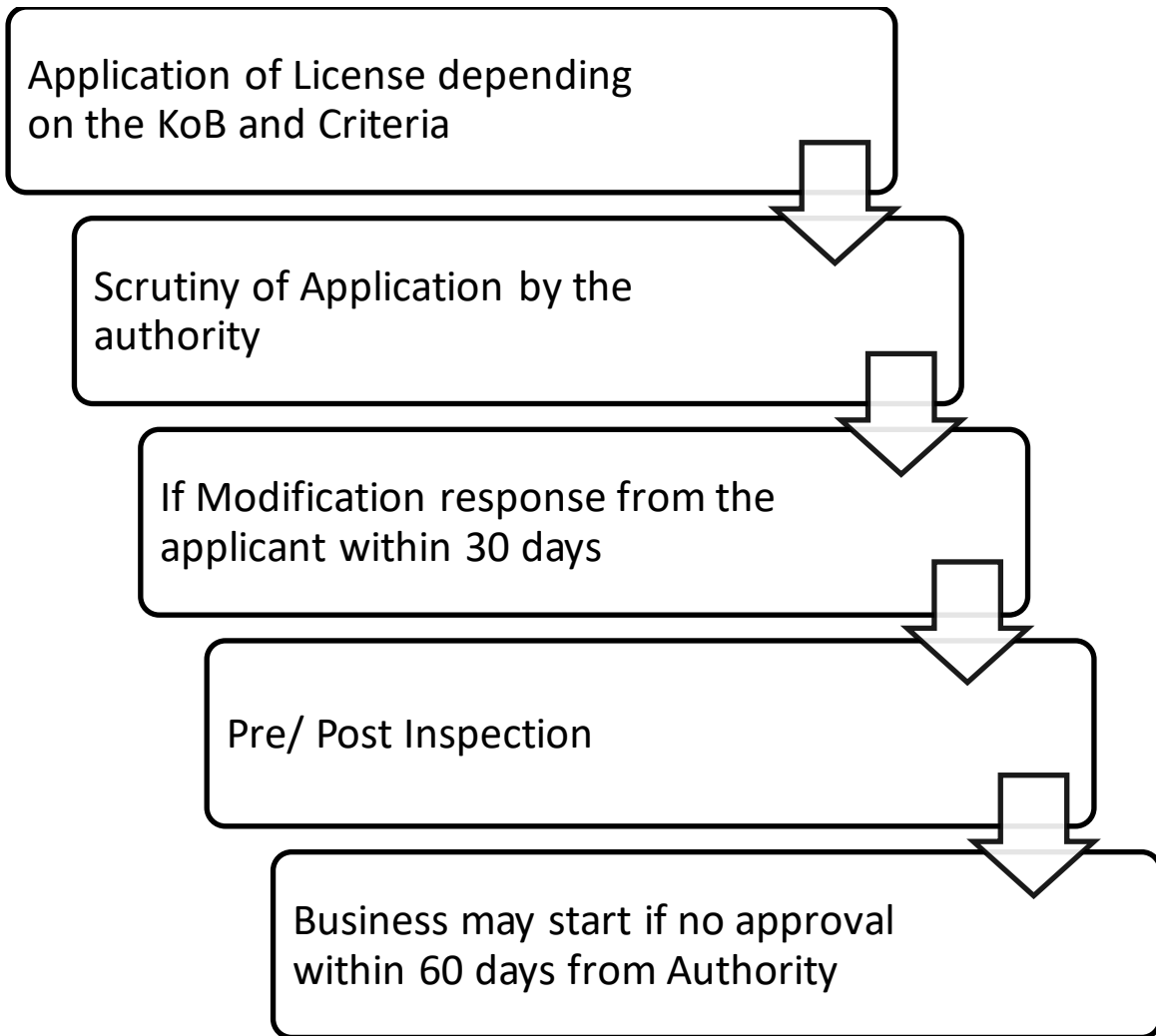
The criteria not fulfilled by 2.1 and 2.2 come under Registration category

## **2.4 FOOD LICENSING AND REGISTRATION SYSTEM (FLRS)**

The FLRS is an online platform which was introduced by FSSAI to promote the application for license via the online platform.

The screenshot displays the FSSAI Licensing and Registration System V3.0 website. At the top, the FSSAI logo is accompanied by the text 'Food Safety and Standards Authority of India' and 'Licensing and Registration System V3.0'. Navigation links for 'Home', 'About FLRS', 'FSSAI', 'Help', and 'FAQ' are visible. A central banner titled 'Are You Eligible for?' features three green circular buttons labeled 'CENTRAL LICENSE', 'STATE LICENSE', and 'REGISTRATION'. To the right, a 'How to Apply?' section includes an 'Apply Now' button and a 'Click for CSC Connect' link. Below this is an 'Existing Users Login' section with input fields for 'Username', 'Password', and 'Enter Captcha Code', along with a 'Sign In' button and a 'Forgot User ID/Password | Sign Up' link. The main content area is divided into 'New Food Business Operator' and 'Latest Announcements'. The 'Latest Announcements' section lists several updates, including tips to avoid delay in license/registration, registration of FBOs using the CSC platform, definition of KoBs, eCommerce KoB functionality deployment, and a list of mandatory documents.

## 2.4.1 STEPS INVOLVED IN APPLICATION OF LICENSE



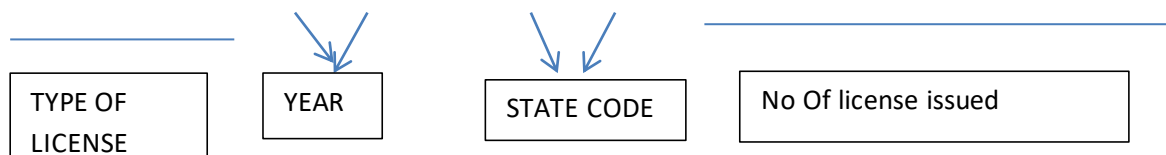
**2.5 MANDATORY DOCUMENTS**

- ✓ Form B filled and Signed
- ✓ Blueprint of the Layout
- ✓ List and Address proofs
- ✓ List of Food Category
- ✓ Analysis Report
- ✓ DGFT if applicable
- ✓ FSMS Plan
- ✓ NOC wherever applicable

**2.6 FSSAI LICENSE NUMBER AND ITS DENOTATION**

The FSSAI License number is a 14 digit number where each digit holds a denotation to it

1	0	0	1	8	0	4	1	0	0	1	6	0	6
---	---	---	---	---	---	---	---	---	---	---	---	---	---



Central License –The number start with 1 followed with 0

State License- The number starts with 1 followed by 2 and other valued numeral

Registration- The number starts with 2

## 2.7 SECTION 22- REGULATORY WORK ON LABELLING, RDA AND CLAIMS

The section 22 speaks about Genetically modified foods, functional foods, organic foods, proprietary foods etc

This section deals with the various types of food under this category cannot be sold as such by the manufacturer in any case and there has to be adherence of the product with respect to pertaining Regulations.

Currently, Proprietary Foods are foods which do not have standards set by the Regulatory but their ingredients should be mentioned in any of the Regulations.

The other categories such as that of the Nutraceuticals, Food for Special Medical Purpose, Health Supplement, Foods for Special Dietary Use, Prebiotics, Probiotics have the newly set Standards in the year 2016, with Implementation on 2018.

The products in this categories have to the Additives only from the Schedules mentioned below

TABLE 2.7 SCHEDULES

Schedules	Description
Schedule I	List of vitamins and minerals and their components
Schedule II	List of Amino acids and their Components



Schedule III	Values for vitamins, minerals and trace elements allowed to be used in food for special dietary use and food for special medical purpose (other than those intended for use in infant formula)
Schedule IV	List of Plant or botanical ingredients
Schedule V	Additives
Schedule VI	Nutraceutical Ingredient
Schedule VII	Probiotic ingredients
Schedule VIII	Prebiotic Ingredients

### **2.7.1 LABELING , RDA , CLAIMS COMPLIANCE**

The labeling of the products was done in accordance to the Regulation by following the list of additives, ingredients mandatory with respect to the category of the food in order to make a claim pertaining to the respective food. The ingredient and additive list was also verified- a mandatory document in Form B.

The RDA was estimated by following the Dietary Allowance chart as suggested by the FSSAI regulatory. In certain cases the RDA of compounds not mentioned here were calculated with respect to ICMR, Codex guidelines. The RDA was calculated in respect to that of Sedentary work for the category not mentioned, if the category and the age is mentioned the verification was done by calculating the RDA given by the category laid by the FBO in label. Permissible Overages were also calculated if mentioned in the label and verification was done accordingly.

The claims made in the label was checked in accordance with The Advertisement and Claims Regulation 2018 and implementation on 1<sup>st</sup> July 2019.

### **2.7.2 LIST OF COMPANIES SCRUTINIZED**

- Indo French Laboratories

- Ceego Labs
- Shine Pharma Enterprises
- Pharmafabrikron
- Aurea Labs
- Apex Pvt Ltd
- Livelong
- Sevenhills Softgels
- Vin Biomed
- Giosun Healthcare Ltd
- Geltech Pvt Ltd
- Sri Nuthatch Nutricare

### **2.7.3 INFERENCE**

The labels were checked for the above and it was found that many Food Products were in the License of Proprietary Food category, therefore would be requested by the Regulatory to make a modification. The non compliance of RDA as well any misleading claims were scrutinized and were Informed to the FBO for compliance.

## **CHAPTER 3**

### **SAFETY OF STREET FOOD- MEASURES AT VARIOUS STAKEHOLDER LEVEL - ASSIGNMENT**

Street Food: Street food is the food which has been prepared, eaten, sold by street vendors.

There are basically Three Stakeholders in a Street Food safety

- Raw material supplier
- Food Handler
- Food Regulator
- Consumers
- Local Bodies

#### **3.1 RAW MATERIAL SUPPLIER**

The Local food production includes the Distributers, Retailers, Suppliers of the raw materials for the food production. It could be either a raw material as such or any intermediate food which might require further processing.

##### **3.1.1 SAFETY AT THE RAW MATERIAL SUPPLIER LEVEL**

The any Kind of Business above has to follow the FSSAI standards of the Supply Chain following Good Hygiene Practices (GHP), Good Manufacturing Practices (GMP), Hazard Analysis Critical Control Point (HACCP) for ensuring the safety of the raw or processed food to be traded.

Basic requirements is to meet up with Audits, get the level of Food Safety Assured by providing timely training , giving information on scientific data , training the employees in GHP,GMP

#### **3.2 FOOD HANDLER**

The food handler is one of the prime member for ensuring Safety in the Street Food


The food handler procures the raw material from the respective KoB's and converts it into Food which is served and eaten in street.

##### **3.2.1 SAFETY AT THE FOOD HANDLER LEVEL**

- The Food Handler has to first get knowledge on the Aspect of Registration, the Food Regulatory can make use of people and make the at most use of Students from branches related to food to create a camp where the Food Handlers are

made aware of the Registration process to start a Food Business and at that moment the Food Handler is given the basic requirement of Food Safety. The students involved in the camp should be given some valid certification from the FSSAI which would help them in future

- The Food Handler should also be made aware of the timely inspection with aspects related to Food Safety
- The food handler has to be given training on the Good Hygienic Practices by communication in their local language, by visual displays, street plays and dramatic plays
- The food handler has to follow the 12 Golden Rules
- The importance of Food Safety has to be portrayed to the handlers by showing them cases of outbreaks and their impact due to the improper safety
- By using the power of competitiveness The Regulatory Body can use the idea concepts of “Rate Me” Card offline and online basis also, which would have feedback from customers for each Basic Food Safety Parameter if sufficient points attained from an average number of Customers a Reward in any way from the Regulatory Side can be given

 License No. \_\_\_\_\_ (Please Mention Your License no.) ■ Restaurant

### With Us You Will Get Safe Food We Follow These 12 Golden Rules

Hygiene Rule Codes		Hygiene Rule Codes	
1	Keep premise clean and have regular pest control 	7	Wear clean clothes/ uniform 
2	Use potable water for food preparation 	8	Wash hands before & after handling food and after using toilets, coughing, sneezing, etc. 
3	Cook food thoroughly. Keep hot food above 60°C and cold food below 5°C 	9	Use water proof bandage to cover cuts or burn wounds 
4	Store veg & non veg food, raw & cooked food in separate containers 	10	Do not handle food when unwell 
5	Store cold food below 5°C and frozen products at -18°C or below 	11	Use clean and separate dusters to clean surfaces and wipe utensils 
6	Use separate chopping boards, knives, etc. for raw/ cooked & veg/non veg food 	12	Keep separate & covered dustbins for food waste 

If any concern

Give your Feedback to Company Name

**Call toll free**  
**1800 112 100**

**SMS or Whatsapp**  
**9868686868**

Always quote FSSAI Number for quick action

**(Company Name)**

**(Contact Details)**

**Download FSSAI APP**  
or Logon to <https://foodlicensing.fssai.gov.in/cmsweb>

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- Initiatives of certain programs such as “Master Chef” for the Food Handlers keeping in mind Food Safety should be kept on a monthly basis to increase the curiosity of Food Handlers and as an appreciation
- Continuing with the programs such as “STREET FOOD FESTIVAL or MELA” to attract the consumers as well as increase the interest of Handlers

### **3.3 FOOD REGULATOR**

Food Regulator is the major link between these various channels of stakeholders. Food Regulator is the one who carries the various initiatives to ensure food safety.

### **3.4 LOCAL BODIES/NGO/SHG's**

The local bodies such as NGO, SHG's are one of the important stakeholders in the channelizing Food Safety at Street Food.

- These bodies are important in helping the street food handlers in providing sources such as Water
- Providing provisions for the Waste Disposal
- For helping the regulatory body to provide amenities for making facilities in order to give training and other measures to give Food Safety

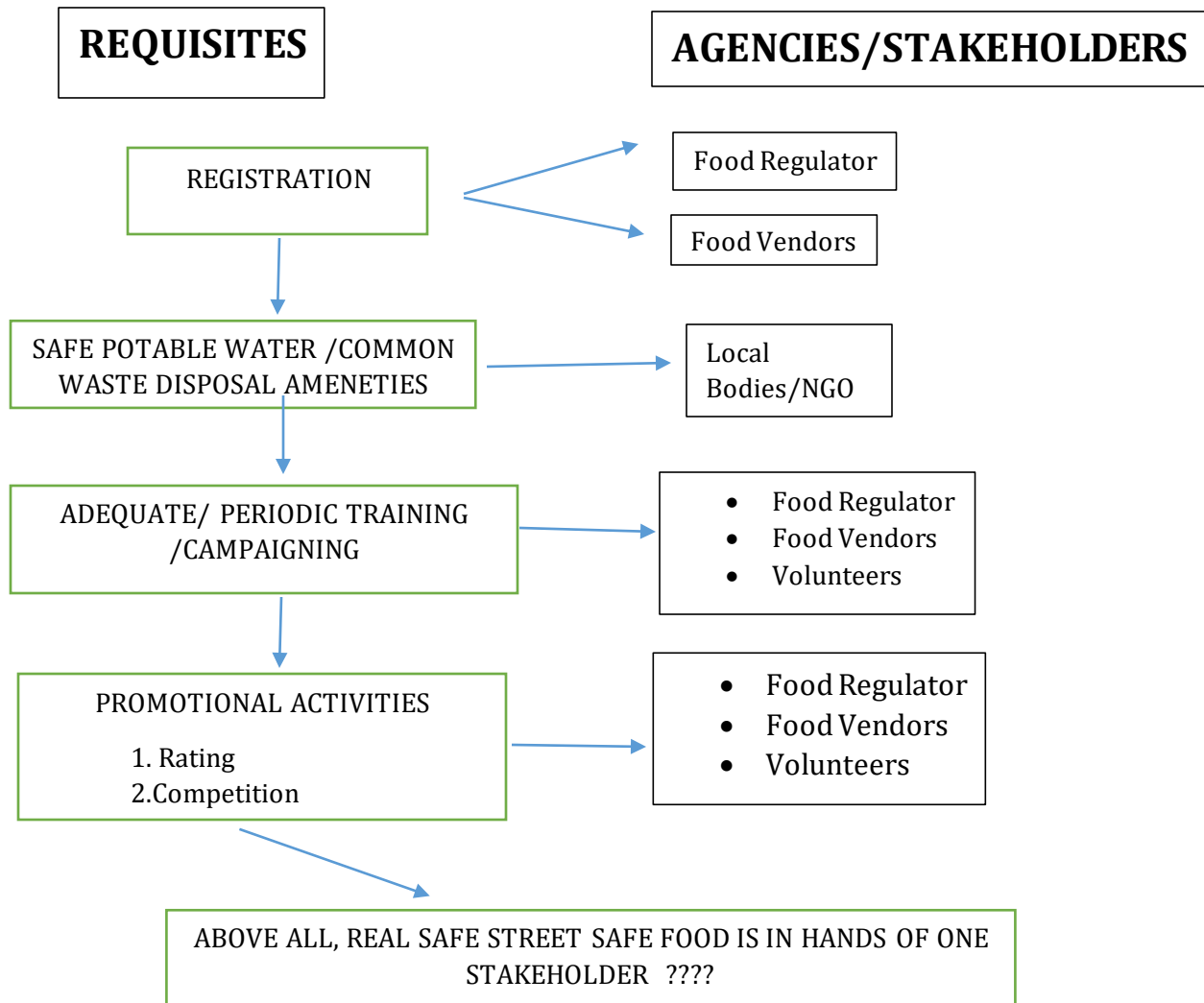
### **3.5 CONSUMERS**

The consumers are the buyers. Street Food has consumers such as from humble or mediocre and to a lower level also a standard living background. These consumers make the street food market a much dominating one and pave way for the income of this Business

#### **3.5.1 FOOD SAFETY AT CONSUMERS LEVEL**

- The Food Safety definition to the consumers should not be just Taste, but the binge of the level of safety, cleanliness, the way the food is prepared and the habits of the handler
- The consumers should be made aware of the Food Safety by the use of advertisements, audio, visual displays of the safety
- The consumers should be made aware of the Consequences of the non-food safety compliance situations and promote their eating towards Safe Food
- The consumer should rate the handler from the “RATE ME” card which would disclose and ensure the level of food safety in the food prepared

- The consumer awareness on the Food Safety i.e the judgment of Food Safety should be defined properly
- The consumers should concentrate on the aspect of the balance of quality=quantity



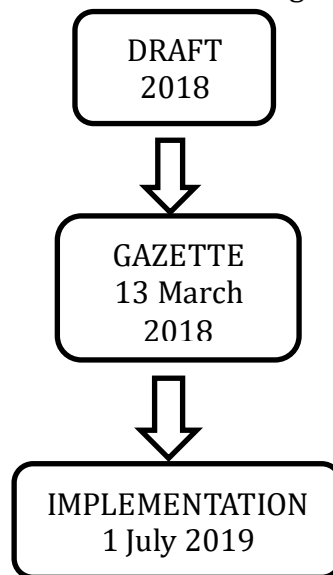
## CHAPTER 4

### ADVERTISEMENT AND CLAIMS REGULATION 2018

An assignment was carried out to understand the Advertisement and Claims Regulation 2018. This regulation is a very new one with draft proposed on 2018 and has its implementation on July 2019. This regulation tells the FBO on the different types of claims which can be made on the food, the criteria for the claims to be made, the penalties, the approach of making claims in the product as well as the redressal of non-compliance.

#### 4.1 THE FORMATION OF REGULATION

Section 92 – gives provisions on the formulation of Regulations



#### 4.2 NEED FOR THE REGULATION

- Fairness and Accountability of Claims/Advertisements by Food Business Operator or any Marketer
- Protection of Consumer Interest

#### 4.3 HEALTH CLAIMS

The health claims speak about relationship between food or its constituent on health

Health Claim= Substance + Disease or Health Condition

There are three types of Health Claims

- Nutrient Function Claims



- Other Function Claims
- Reduction of Disease Risk Claims

The products containing the health claims should have

- Target group to be mentioned
- Directions of usage should also be mentioned
- Health benefit related to product should have a statistically scientific data

#### 4.3.1 Nutrient Function Claims

- Description of Physiological Role of nutrient in growth, development and normal functions of the body
- They are based on the extensive review of scientific literature

Eg: Calcium helps in the bone development

Calcium- nutrient

Bone development- physiological condition

#### 4.3.2 Other Function Claims

- Specific beneficial effects of the food in context with the total diet
- This claim states the weight of food promoting a better diet i.e the amount of nutrient obtained from food

#### 4.3.3 Reduction of Disease Risk Claims

- Consumption of food or its nutrient reduces the risk of developing a disease
- Requires an emerging evidence for a relationship between food substance and reduced risk of disease
- The evidence has to be evaluated

#### 4.3.4 CONDITION OF HEALTH CLAIMS

Need to be made according to Schedule III of the regulation

Nutrient/Food-Health Relationship	Conditions for claim	Claim Statement
Calcium or Calcium and Vitamin D and osteoporosis	<ul style="list-style-type: none"> <li>the food is a source or high in calcium or in calcium and vitamin D and</li> <li>a statement that the beneficial effect is obtained with a daily recommended intake (RDA)</li> </ul>	Adequate Calcium (or Calcium and Vitamin D) intake throughout life, through a balanced diet are essential for bone health and to reduce the risk of osteoporosis

#### 4.4 NUTRITION CLAIM

Nutrition Claim speaks about food having particular nutritional properties but not limited to energy value or content of nutrients

There are two types of nutrition claims

- Nutrient Content Claim
- Nutrient Comparative Claim

##### 4.4.1 Nutrient Content Claim

- Describes the level of nutrient in the product
- Terms used can be “free, high and low”
- Follows Schedule I – gives criteria for the nutrition claim
- For food falling under Section 22 category they must comply with the minimum energy requirement

*% energy of the nutrient*

$$= \frac{\text{grams of nutrient per 100g of product} * \text{conversion factor of the product}}{\text{total energy per 100g of the product}} * 100$$

Eg: low sugar, low salt, “only 200mg of sodium”

##### 4.4.2 Nutrient Comparative Claim

- Compares the level of nutrition with similar products
- The products shall vary with at least 25% in the energy value or nutrient value
- At least 10% of RDA difference
- The difference shall be given in close proximity of the claim

Eg 2 times ..... Than

#### 4.4.3 CRITERIA FOR NUTRITION CLAIM

The following **does not** contribute to nutrition claim

- ❖ mention of substances in the nutrition labeling
- ❖ mention of substances in the list of ingredients
- ❖ mandatory declaration of nutrients made by the FSS Act 2006

#### 4.5 NON ADDITION CLAIM

It states that the food has not have been added with an ingredient or additive but its presence can be judged naturally by the consumers

eg: A soy milk having protein is commonly understood

##### 4.5.1 NON ADDITION CLAIM OF SUGARS

1. If there is no added sugar (or)
2. If no ingredients contain sugars or substitute sugar(or)
3. Sugar content of food has not been increased

If sugars are present naturally then

“CONTAINS NATURALLY OCCURRING SUGARS”

##### 4.5.2 NON-ADDITION CLAIM OF SALT

1. If the food contains no added salt
2. If no ingredient contains salt

##### 4.5.3 NON-ADDITION CLAIM OF ADDITIVE

1. Has not been added to food
2. Is not contained in the ingredients
3. Used in particular products as specified in regulation
4. Is not substitutes by another additive

#### 4.6 CLAIMS RELATED TO DIETARY GUIDELINES OR HEALTHY DIETS

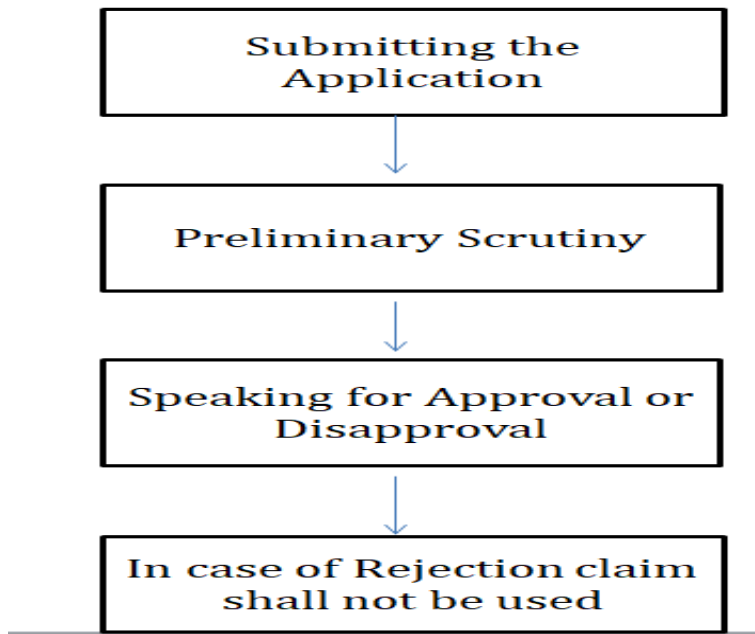
- Claims related to “healthy diet” should be in accordance with the eating patterns as suggested by ICMR

- Healthy diet or balanced diet described foods shall satisfy the criteria of food for ICMR

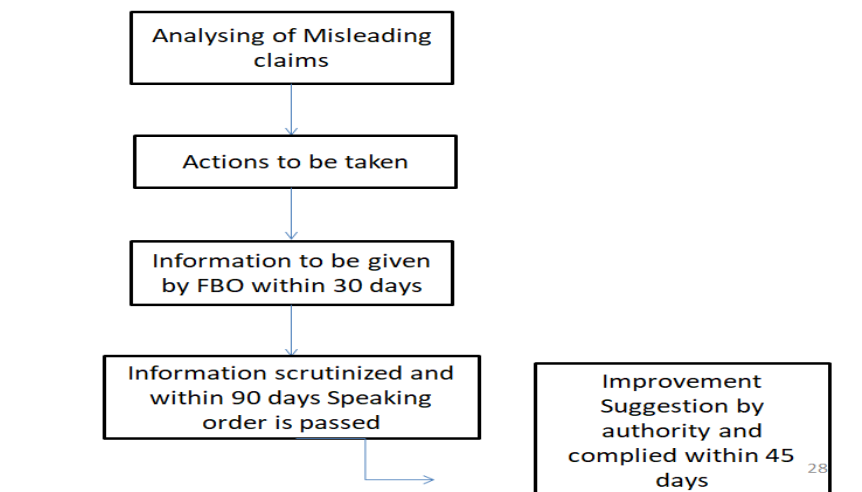
#### 4.7 APPROVAL OF CLAIMS

The claims can be made based on the Regulation without getting approval from the Regulatory body except for with Reduction of Disease Claim

#### 4.8 PROCEDURE FOR APPROVAL OF CLAIM



#### 4.9 REDRESSAL OF NON COMPLIANCE-SECTION 53



#### 4.10 Corrective Advertisement

If any misleading advertisement found can be stopped immediately and within 30 days corrective advertisement should be issued

## **CHAPTER 5**

### **IMPORT**

Section 25 speaks about the Import. The import regulation was introduced in 2017. The regulation was introduced as there are various products introduced into India and therefore in order to provide safe and wholesome food the regulation was introduced to make its way through various entries inside the country. Importer is the person who imports food the buyer of such goods and services is referred to an "importer" who is based in the country of import whereas the overseas based seller is referred to as an "exporter".

#### **5.1 LICENSING BY FOOD AUTHORITY**

- The license for Import is got by the Central Licensing Authority
- The shelf life of product should be at least 60% or 3 months
- Directorate General of Foreign Trade Registration along with a valid Import Export Code

#### **5.2 FOOD IMPORT CLEARANCE**

STEP 1: Arrival of Food Consignment at the Customs

STEP 2: Form forwarded from Customs to Food Import Clearance System (FICS)

STEP 3: Scrutiny of document (FICS) and fee payment

STEP 4: Visual Inspection by the Officer – FORM 1

STEP 5: Two Samples collected- i. Representative sample ii. Referral sample

STEP 6: The labels are checked in with accordance to the Packaging and Labeling Regulation

STEP 7: The product is analyzed and clearance of Laboratory result is essential

In case of Non-Compliance

STEP 8: The referral sample is tested at a Referral Lab and if it clears then IMPORTED PRODUCT IS ACCEPTED

IF NOT REJECTED

#### **5.3 FOOD IMPORT CLEARANCE SYSTEM**

The FICS is an online system where a food product to be cleared by the authority is scrutinized and essential documents are uploaded online.



### 5.3.1 MANDATORY DOCUMENTS

Mandatory Document(s)

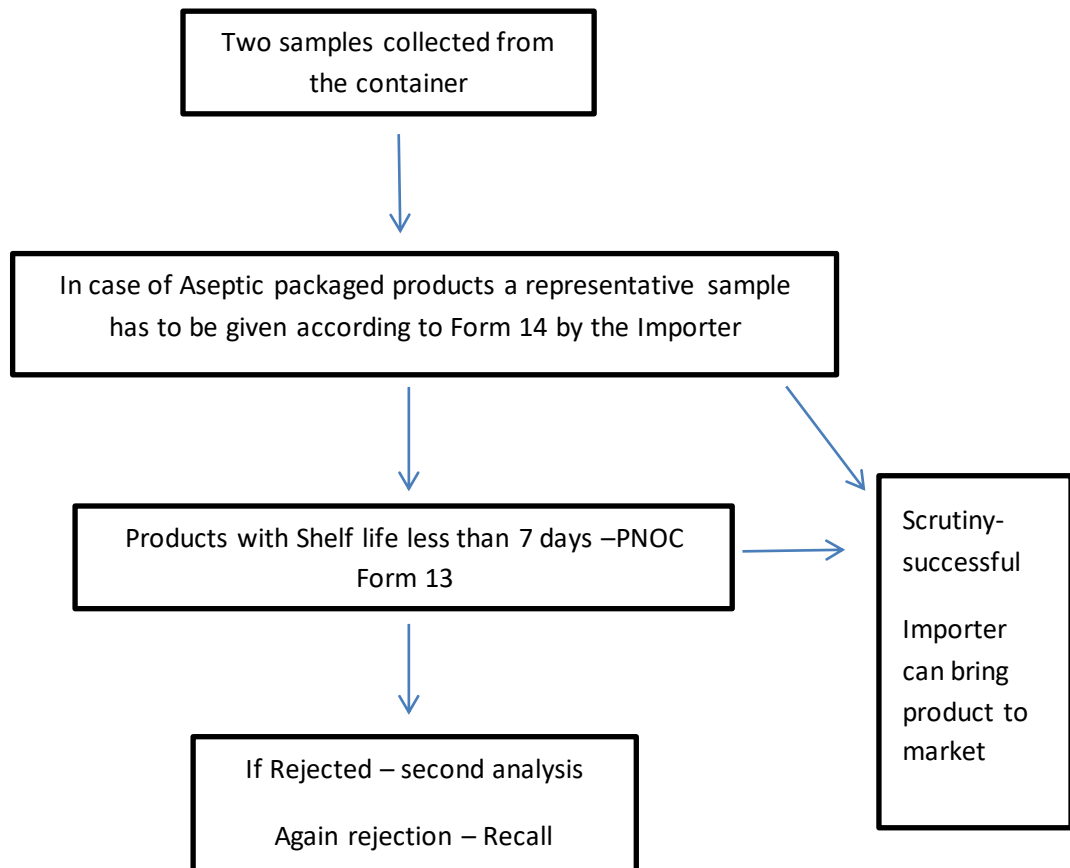
1	DGFT Certificate – IEC Code
2	Importer License from FSSAI
3	Country of Origin license
4	Specimen of labels
5	High Sea Sales Agreement (if applicable)
6	Certificate of Analysis
7	Bill of Lading
8	Bill of Entry
9	Ingredients list
10	Phytosanitary Certificate
11	Examination Order
12	Invoice

### 5.4 VISUAL INSPECTION

The visual inspection is recorded in FORM 1. The inspection is done visually for moulds or rots or any offensive smell. If the sample passes the Visual Inspection only then the sample is collected.

## 5.5 SAMPLING AND ANALYSIS

The product at the Container Freight Station (CFS) under the control of Customs or in the warehouse of custom can be taken out to the market only if it clears the Entire Scrutiny of FSSAI- documents, labeling and Analysis report by the laboratory



## 5.6 STORAGE OF IMPORTED FOOD /SAMPLES

The products shall be stored in Custom bounded area or warehouse undertaken by custom and can be kept for about 15 days, an addition of above 15 days has high amount of tax leverage. The customs or the storage facility shall ensure safe storage.

In case of Chilled or Retail packages or products having less than 07 days shelf life shall have a Provisional NOC according to Form 12 and shall store their products in cold storage so as to maintain the temperature.

Only after the analysis report the imported product gets cleared and out in the market

## 5.7 PACKAGING COMPLIANCE OF IMPORTED PRODUCTS

The necessary i.e the non rectifiable parameters essential in imported product are

1. Name of Product
2. Labeling language
3. Nutritional Information
4. Ingredients list
5. Date of Manufacturing
6. Use by/ Expiry date/ Best Before date
7. Net Weight
8. Lot no, batch no
9. Country of Origin

### RECTIFIBALE

- 10.FSSAI logo and license number
11. Manufacturer Details
12. Veg and Non veg logo

## 5.8 VARIOUS FORMS IN IMPORT REGULATION

<b>Form</b>	<b>Denotation</b>
Form 1	Visual Inspection Report
Form 2	Report of Laboratory Analysis
Form 3	No Objection Certificate
Form 4	Non Conformance Report
Form 5	Mandatory Destruction Order
Form 6	Review Application to the Review Order
Form 7	Declaration and Undertaking by Importer – Personal Use
Form 8	Declaration and Undertaking by Importer- Re Import
Form 9	Declaration and Undertaking by Importer – Research and Development Purpose
Form 10	Declaration and Undertaking by Importer – Display Purpose
Form 11	Declaration and Undertaking by Importer- Sports Event
Form 12	Declaration regarding issue of provisional no objection certificate for frozen and chilled imported food consignment
Form 13	Declaration regarding issue of provisional NOC for imported food



	consignment with less than 07 days' shelf life
Form 14	Declaration and undertaking by Importer- Having Representative Sample
Form 15	Declaration and undertaking by Importer- Not having Representative Sample

## 5.9 INSPECTION- IMPORT

The Container Freight Station (CFS) were inspected for the following list of Food Products

S No	CFS	COUNTRY OF ORIGIN	PRODUCT NAME
1	German Express	Malaysia	Salsalito Tortilla Multigrain
2	Sical Distriparks Limited	Egypt	Pitted Green manzanilla Olive
3	Sical Distriparks Limited	Egypt	Whole Black Alamata Olive
4	Sical Distriparks Limited	Egypt	Artichokes Heart
5	Balmer Laurie and Co Ltd	Indonesia	Mace
6	Sanco	Myanmar	Chick peas



The consignment was initially checked for Bill of Lading and the sample would be opened only in the presence of Customs Agent, FSSAI Officer and the Custom's House Agent (CHA)

In case of the consignment already opened, then an Opening Order is required.

The import products were randomly sampled on a basis of passing the visual inspection. If the products fail at this check then the consignment is rejected.

Two samples were taken hygienically and placed in separate containers one for referral analysis.

Then form 1 was completed in the presence of CHA.

## CHAPTER 6

### STUDY ON TRACEABILITY

With rising issues in the food safety has become crucial to be maintained by the Food Business Operators. With increasing globalization, the need for food safety increases with the increasing consumer demands which adds more difficulty in creating safety at all supplies of the food chain.

The concept of traceability started with the outbreak of Bovine Spongiform Encephalopathy (BSE) in 1980's initiated the need for a regulation towards traceability whose role is to trace and track food safety towards its various supply chains.

#### 6.1 DEFINITION OF TRACEABILITY

The International Organization for Standardization defines traceability as:

“ability to follow the movement of a feed or food through specified stage(s) of production, processing and distribution”

ISO 22005:2007 comprehensively explains the principles and requirements for the design and implementation of a feed and food traceability system. This standard allows organizations operating at any step of the food chain to:

1. Trace the flow of materials (feed, food, their ingredients and packaging)
2. Identify necessary documentation and tracking for each stage of production
3. Ensure adequate coordination between the different actors involved
4. Improve communication among the involved parties, and most importantly
5. Improve the appropriate use and reliability of information, effectiveness and productivity of the organization

#### 6.2 FOOD POISONING CASES IN INDIA

Traceability is “one step back” or “one step forward” process to identify the loopholes and ensure safety in the chain of food process but to ensure this as a system is difficult as there is no proper database management system, which could make a traceability a step higher in its achievement.

Traceability is followed by the recall of products. Most often recall is not a solution for many Companies, but in certain cases due to haste and improper management and negligence certain cases of food borne diseases happen such as

- In December 2018, there were about 11 people died in a Temple festival in Karnataka suspecting the food offered there to be the cause of it as it had an immediate action on people who consumed it as well as the cats, dogs who ate had died due to such a serving of food.

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## ***11 Die in India After Suspected Food Poisoning at Temple Ceremony***

By The Associated Press

Dec. 15, 2018



The police in southern India arrested three people on Saturday after at least 11 died of suspected food poisoning following a ceremony to celebrate the construction of a Hindu temple.

More than 130 sick people, including children, were recovering

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- Bihar case recently on 26 June 2019 highlighted another food poisoning case where the school children were affected by having mid-day meal scheme

The most common causes for food poisoning are due to the presence of microbes such as E.Coli, Salmonella, Staphylococcus. These outbreaks make a light for traceability to be done at each step of the process so as to ensure safety.

Food safety cannot be just ensured with General Hygiene Practices but a transparent system of traceability is required so as to ensure swift actions by identifying and responding towards unsafe food. It also helps in identifying the source of raw materials.

Traceability system allows an organization to document and/or locate a product, creating visibility, through the stages and operations involved in the manufacturing, processing, distribution, and handling of food, from primary production to consumption. It can also facilitate identification of the potential cause of nonconformities in a product, and improve the ability to withdraw or recall such a product, if necessary, so as to prevent unsafe food from reaching consumers.

This will allow food businesses, including trading partners, to have complete transparency over the product's supply chain journey through capturing relevant information at each stage by each trading partner.

Below is a list of some often-recognized benefits of an effective traceability system:

- Determine the origin of a product, ingredient or component
- Simplify problem-solving in event of defective or contaminated product, ingredient or component
- Identify issues quickly, contain them, and resolve them
- Limit losses and lower costs
- Protect public health and safety



## **b) EU 178/2002**

This Regulation requires brand owners to establish a traceability system for food, feed, food-producing animals, and any other substance incorporated into food or feed. This Regulation also laid down general principles and requirements of food law, established by the European Food Safety Authority, and procedures in matters of food safety.

It requires food business operators to:

(1) be able to identify from whom and to whom a product has been supplied

(2) have systems and procedures in place that make this information available to the competent authorities on request.

## **c) FSMA**

United States Section 201 of the Food Safety Modernization Act (FSMA), published by the US Food and Drug Administration (FDA), contains several components that address food safety problems through traceability. This act aims to ensure the food supply chain is safe by shifting the focus from responding to contamination, to preventing it. It calls for enhanced food traceability; and also enhances FDA's infrastructure and reporting systems to incorporate it.

## **Other Regulations across the globe**

Other European countries such as Norway and Switzerland, have also adopted rules that are similar to EU regulations and have established their own system for tracking and tracing food products.

**China Food Safety Law**, 2015, imposes stricter controls and supervision on food production and management, besides granting more enforcement powers to regulators (CFDA and local FDA) in addressing food safety issues. It places more emphasis on the supervision and control in every step of food production, distribution, sale, and recall. Special provisions are set out for food trading activities, including food sold on a third-party trading platform and food imported through e-commerce channels.

**Australia and New Zealand** regulate food contact substances through a single bi-national agency – Food Standards Australia New Zealand (FSANZ) – under the joint Australia New Zealand Food Standards Code. The code was revised in 2016 with an objective to lower the incidence of foodborne illness by strengthening food safety and traceability throughout the food supply chain, from paddock to plate. It specifies food handling controls related to the receipt, storage, processing, display, packaging, transportation, disposal, and recall of food. It covers the 'one-step back' and 'one step forward' elements of traceability.

**Canada** under the *Safe Food for Canadians Regulations* (SFCR), traceability requirements apply to most food businesses that:

- import food
- export food
- distribute or send food products across provincial or territorial borders
- manufacture, process, treat, preserve, grade, store, package or label food to be exported or sent across provincial or territorial borders
- grow and harvest fresh fruits or vegetables to be exported or sent across provincial or territorial borders
- slaughter food animals from which meat products are derived, where the meat product is exported or sent across provincial or territorial borders
- store and handle edible meat products in their imported condition for inspection by the Canadian Food Inspection Agency (CFIA)
- sell food to consumers at retail, which would need to be traced one step back but not forward to the consumer

### **Food safety Regulation in India**

Until the recent Food Safety and Standards (Food Recall Procedure) Regulations, 2017, food safety in India was governed by Section 28 of the Food Safety and Standards Act, 2006.<sup>8</sup> Under the FSS Act 2006, the responsibility of the food safety majorly lies on brand owners. However, the recent Regulation has exceedingly widened the scope of recall by covering all food business operators and making each trading partner responsible for food safety. The only exceptions are restaurants, caterers, and takeaway joints, unless they have multi-outlet food business chains with integrated manufacturing and distribution network. The objective of the Regulation is to ensure removal of food under recall from all stages of the food chain, ensure dissemination of information to concerned consumers, and ensure retrieval, destruction or reprocessing of food under recall.<sup>9</sup> This Regulation is applicable to food or food products that are determined or prima facie considered unsafe and/or as may be specified by FSSAI from time to time.

Most of the countries hold regulations and a recall procedure for the food items. They insist on food products of companies to have Certain Systems within the industry and encourage certifications which enable traceability systems at effect

### **6.4 CERTIFICATIONS ENHANCING TRACEABILITY**

The certifications such as

- GFSI (Global Food Safety Initiative)
- BRC (British Retail Consortium)
- GS1
- SQF (Safe Quality Food)



- IFS (International Featured Standards)
- HACCP (Hazard Analysis Critical Control Point)
- ISO 22000:2007

## 6.5 Technologies supporting traceability

To implement traceable food supply chains, technological innovations are needed for product identification, data capture, and information sharing. Since a traceability system spans across the entire supply chain, it is essential that it accommodates every trading partner in the most efficient manner to be effective. Some of the technologies used for product identification and data capture are:

A. Alphanumeric codes: These are the sequences of numbers and letters displayed in various sizes on package or product labels.<sup>10</sup> Writing and reading codes is done manually which requires significant human resources and cost. Manual management of data leads to duplication errors and poor performance. There is no particular standard for Alphanumerical codes and are usually generated by company or organization itself.<sup>5</sup> Due to this, there is a high risk of data integrity corruption in alphanumeric codes

B. Barcodes: Initially patented in 1952 in Philadelphia (first used in around 1970), barcodes can be described as a series of parallel bars and spaces of varying widths printed on an item or product. This automatic, high reading speed, precise technology provides simpler, more economical, and accurate traceability systems.

C. RFID: Radio frequency identification (RFID) is a technology that uses radio waves to identify, classify, and locate 'articles' (objects, people or animals). Being in use since Second World War, this technology is yet new in food sector. The main characteristic of RFID is that there is no requirement of physical contact or line of sight orientation between reader and tags. Electronic Product Code (EPC), a unique serialized code, is one of the common types of data stored in a tag.

D. Product Markers: Markers placed on food products can be chemical, physical, or biological. Physical markers include unique molecules or atoms that can be detected easily by UV rays, X-rays, fluorescence, etc.. Chemical markers include those that create a distinct flavour, aroma or absorbance. For example, vitamin placed in alcoholic beverage.

Among the above mentioned technologies, the most cost effective technology is barcodes. It needs to be used with global standards to enable all trading partners in the supply chain to communicate seamlessly with each other

## 6.6 IMPLEMENTATION REQUIREMENTS

Barcodes are one of the most cost effective technologies but to use this across all parties, requires a system of standards. The GS1 System of Standards provides a comprehensive set of standards to identify, capture, and share information about objects throughout their lifecycle, providing the core foundation for interoperability:

- Supply chain partners identify business objects and locations using standardised identifiers.
- Supply chain partners capture an object's identity and any additional attributes (e.g. expiry date) that have been encoded in a standardised manner in a data carrier (barcodes). This ensures the object can be read automatically and consistently throughout the supply chain. Thereby, also the time (when), location (where), and other data (who and why) are recorded.
- Once supply chain partners are using a common language for identification and data capture, the gathered data is refined and enhanced with business context, to transform it into data that can be shared using standardised semantics, in a standardised format, and using standard exchange protocols.

GS1 traceability standards have been implemented for traceability from upstream suppliers to consumers. It allows an end-to-end traceability system, linking the flow of information to physical products. In an event of food outbreak, sharing of traceability information between trading partners in the supply chain is critical to ensure a targeted and effective recall.

## **6.7 DESIGNING TRACEABILITY SYSTEM**

Step 1: Set traceability objectives

Step 2: Gather traceability information

Step 3: Analyse business process

Step 4: Define identification requirements

Step 5: Perform gap analysis

Step 6: Establish components of the traceability system

Step 7: Testing and Pilot

Step 8: Roll-Out

Step 9: Documentation and Training

Step 10: Monitoring and Maintenance

## **6.8 EXISTING TRACEABILITY SYSTEM**

The traceability system existing in other countries concentrate in livestock traceability and continuous work is made to implement the system work for the traceability for the other types of food items.

## **6.9 INFERENCE**

The Regulatory in the other countries insist more on BRC, GFSI, GS1 certification as necessity to have in their system of working, therefore it makes traceability more efficient in place ensuring safety, but as such there's no such system in practice to bring other food items into practice.

The regulatory in India has to ensure certain documentation necessary such as raw material origin, its procurement as well as till the consumer level by using Software technologies such as paperless technologies of METRO Cash and Carry System. In this way a transparency can be made and system generated when in comparison with the manual and man powered interpretation can save a lot of time and errors and can have a proper database management of the necessary details for the commodity.

## **CHAPTER 7**

### **CONCLUSION**

On the whole, it is seen that FSSAI as a very young body has made its implementation stand a better and it has been globally accepted that India is an emerging economy but has its way yet on a longer run to go. Certain aspects of Post Inspection followed in FSSAI is a step if implemented as Pre-Inspection would ensure much safety but lack of manpower is witnessed. The labeling surveillance of nutraceutical has given more knowledge in making complex decisions on claims, health benefits. Apart from that the steps of ensuring traceability by getting the FBO's involved in Certifications such as GS1, GFSI would help a way to get much better and efficient traceability. A system to traceability can enhance its way and make more compatibility and efficiency of recall. Overall it was a learning experience with good insights to take away, which in future will definitely ensure Food Safety in India.