

FOOD ADULTERATION IN INDIA CHALLENGING THE BASIC
CONSTITUTIONAL IMPERATIVES: A STUDY



Dissertation submitted to National Law University and Judicial Academy, Assam
in partial fulfillment for award of the degree of
MASTER OF LAWS

Supervised by:

Dr. Anirudh Prasad

Professor of Law

National Law University and Judicial Academy

Assam

Submitted by:

Sujata Sarma

UID- SF0217015

LL.M

Academic year- 2017-18

National Law University and Judicial Academy, Assam

July, 2018

DECLARATION

I, Sujata Sarma, pursuing Master of Laws (LL.M.) from National Law University and Judicial Academy , Assam, do hereby declare that the present dissertation titled “FOOD ADULTERATION IN INDIA CHALLENGING THE BASIC CONSTITUTIONAL IMPERATIVES: A STUDY” is an original research work and has not been submitted, either in part or full anywhere else for any purpose, academic or otherwise, to the best of my knowledge.

Date :

Sujata Sarma

UID: SF0217015

ACKNOWLEDGEMENT

I feel proud to acknowledge the able guidance of our esteemed and highly knowledgeable guide, Dr. Anirudh Prasad, Professor of Law, NLUJA, Assam.

I acknowledge with pleasure unparalleled infrastructural support that I have received from National Law University and Judicial Academy, Assam.

In fact this work is the outcome of overwhelming support that I have received from the faculty members of the college especially from Dr. Topi Basar, Associate Professor of Law.

I find this opportunity to thank the library staff of NLUJA, for their help and cooperation in making available the relevant materials required for study.

This research work bears testimony to the active encouragement and guidance of a host of friends, family and well wishers.

I am greatly indebted to the various writers, jurists and all others from whose writings and work I have taken help to complete this dissertation.

Date: 9/07/18

Place: Guwahati, Assam

Sujata Sarma

UID- SF0217015

PREFACE

Food has been a matter of debate ever since human beings were born. Food is central to all the basic needs of an individual. Apart of all other rights that a human has, right to food is the most basic of all. Food can be defined as those materials or liquids that we consume in order to survive and maintain good health. Food must undeniably be nutritious and healthy in order to sustain human race. Right to food is a birth right of every individual and not only that even an unborn (foetus) also has right over food. Unprecedented scientific and technological inventions have made human's life very simple, comfortable and convenient. There has been incredible growth in technologies and the markets are flooded with eye catchy food products which are mostly manufactured using artificial additives acting as slow poison. In India people are diagnosed with deadly diseases every year mostly carcinogenic. The drift of food adulteration has gone rampant and the consequences are terrifying. The research paper focuses on the violation of Right to life under Article 21 and other articles under Directive Principles of State Policies of Constitution of India, due to the unscrupulous activities of the adulterers. Global perspective on food adulteration has also been discussed in one of the chapters specifically emphasizing the obligations that India has being a signatory to most of the International Conventions. The paper also throws light on various kinds of food additives and their harmful effects. Lastly it endeavours to point out few tremendous efforts by Indians to eradicate chemical farming and replace it with organic farming.

Sujata Sarma

UID- SF0217015

TABLE OF CASES

S.NO.	CASES
1	<i>Food Inspector v. Suwert Dhalakia (P) Limited</i>
2	<i>Salaitnan Shanji v. State</i>
3	<i>Andhra Pradesh Grain and Seeds Merchants' Association v. Union of India</i>
4	<i>Public Prosecutor v. K. V. R. Annamalai Chettiar</i>
5	<i>Manohar Lal v. State</i>
6	<i>F.I. Palghat Municipality v. P. Subramaniam</i>
7	<i>Govind Pillai v. P. Pillai</i>
8	<i>Public Prosecutor v. Nagabushan</i>
9	<i>Sheela Barse v. Secretary, Children's Aid Society</i>
10	<i>Jolly George Verghese v. Bank of Cochin</i>
11	<i>Vital Nutraceuticals Private Limited etc v. Union of India</i>
12	<i>Dharmendrabhai Dashrathbhai Patel v. Dy. Police Commissioner</i>
13	<i>State of Uttar Pradesh v. Kartar Singh</i>
14	<i>Tapan Kumar v. FDI</i>
15	<i>Vincent v. Union of India</i>
16	<i>Food Business v. Union of India</i>
17	<i>PUCL v. UOI</i>
18	<i>KishenPattnayak and ors.v. State of Orrisa</i>
19	<i>State of Tamil Nadu v. R. Krishnamurthy</i>
20	<i>Chameli Singh v. State of Uttar Pradesh</i>
21	<i>Fransis Coralie v. Union Territory of Delhi</i>
22	<i>Bandhua Mukti Morcha v. Union of India</i>
23	<i>Consumer Education and Research Center v. UOI</i>

24	<i>State of Kerala v. Kandath Distilleries</i>
25	<i>Mohd. Yamin v. State of U.P</i>
26	<i>A.P. Grain & steel: Merchant Assom v. Union of India</i>
27	<i>R.Nair v. City Corporation</i>
28	<i>PK.Tajani v .M.RDange</i>
29	<i>Keshavananda Bharati v. State of Kerala</i>
30	<i>Manohar Llal v. State</i>
31	<i>Swami Achyutanand Tirth & Ors. Vs. Union of India & Ors</i>
32	<i>Association of the Traders carrying the Food Business v. Union of India</i>

TABLE OF ABBREVIATIONS

1	ADI	Acceptable Daily Intake
2	ADHD	Attention deficit hyperactivity disorder
3	AIR	All India Reporter
4	ART	Article
5	BOM	Bombay
6	CESCR	Committee on Economic Social and Cultural Rights
7	CEDAW	Convention on Elimination of any form of Violence
8	CRC	Childs Rights Centre
9	EFSA	European Food Standards Authority
10	FSL	Forensic Science Laboratory
11	FSS	Food Safety and Standards Act
12	FSSAI	Food Safety And Standards Authority of India
13	FDA	Food and Drug Administration
14	FAO	Food and Agricultural Organisation
15	GHI	Global Hunger Index
16	ISSN	International Standard Serial Number
17	ICESCR	International Covenant on Economic Social and Cultural Rights
18	ICCPR	International Covenant on Cultural and Political Rights
19	IFPRI	International Food Policy Research Institute
20	IBA	Indian Beverage Association
21	ISBN	International Standard Book Number
22	MDG	Millennium Development Goals
23	NPM	Non Pesticidal Management'
24	NHRC	National Human Rights Commission
25	NP-NSPE	National Programme of Nutritional Support to Primary Education

26	PPM	Parts Per Million
27	PFA	Prevention of Food Adulteration
28	SC	Supreme Court
29	SCC	Supreme Court Cases
30	UDHR	Universal Declaration Human Rights
31	UN	United Nations
32	UK	United Kingdom
33	USA	United States of America
34	UT	Union Territory
35	v.	Versus
36	WHO	World Health Organisation

TABLE OF CONTENTS

	Page No.
Certificate	
Declaration	
Acknowledgement	i
Preface	ii
Table of Cases	iii-iv
Table of Abbreviations	v-vi
CHAPTER I	
1.1 Introduction	1
1.2 Statement of Problem	4
1.3 Aims	4
1.4 Objectives	4
1.5 Scope and Limitations	5
1.6 Detailed Literature Review	5
1.7 Hypothesis	9
1.8 Research methods applied	9
1.9 Research Design	10
CHAPTER II	
HISTORY OF FOOD ADULTERATION LAWS IN INDIA	
2.1 Concept of Food Adulteration in Ancient India	12
2.2 Concept of food adulteration during British Period	13
2.3 Food Adulteration Laws in Post Independence India	14
2.4 FSS Act 2006	16
2.4.1 <i>Salient Features of the Act</i>	18
CHAPTER III	
CRITICAL ANALYSIS OF LEGISLATIONS MONITORING FOOD SAFETY AND ADULTERATION	
3.1 Concept and Meaning of Food According to PFA Act 1954	19

3.2 Food Standards and Security Act 2006	23
3.3 Some Food Additives and their Side-Effects	24
3.3.1 <i>Artificial ripening of fruits in Assam</i>	28
3.4 Few facts on Food Standards and Security Act 2006	29

CHAPTER IV

CHALLENGING THE CONSTITUTIONAL IMPERATIVES

4.1 Growing Dimension of Right to Food by Judicial Interpretation	39
4.2 Case Studies on Food Adulteration in India	46
4.2.1 <i>Acute Poverty In Kalahandi District Of Odisha</i>	46
4.2.2 <i>Decades Long Endosulfan Tragedy in Kerala</i>	48
4.2.3 <i>1998 Delhi Oil Poisoning</i>	50
4.2.4 <i>Mid-Day Meal Tragedy in Bihar</i>	52

CHAPTER V

FOOD ADULTERATION IN INDIA AND ITS INTERNATIONAL OBLIGATIONS

5.1 International Instruments Securing Right to Adequate Food	54
5.1.1 <i>Important General Comments of the CESCR on the Right to Food</i>	56
5.1.2 <i>CEDAW AND CRC</i>	57
5.2 Overview of countries' constitutional recognition of the right to food	64

CHAPTER VI

CONCLUSION AND SUGGESTIONS

6.1 Conclusion	66
6.2 Suggestions	68

BIBLIOGRAPHY	x-xvii
---------------------	--------

CHAPTER I

1.1 INTRODUCTION

Food has been a central need for all of us from the moment of our existence, starting from Stone Age to the present era. It has occupied a principal position in the list of basic human needs. Out of all the basic necessities, food is to be secured first because it forms the indispensable pre-requisite to life which forms the base for fulfillment of other basic needs. Requirement of food starts from the formation of a foetus therefore an unborn also has the right to food and not only that, food also must be nutritious that helps the human body to grow. In India the poverty stricken population doesn't even get access to the basic three meals that a human body requires in a day. This is a sheer violation of their fundamental right to life under Article 21 and article 47. The right to food is central for the sustenance of human lives therefore it is given prominence at the global level. The 2030 Agenda also known as "Transforming our World: the 2030 Agenda for Sustainable Development" declare in its preamble that "eradicating poverty in all its forms and dimensions, including extreme poverty, is the greatest global challenge and an indispensable requirement for sustainable development. All countries and all stakeholders, acting in collaborative partnership, will implement this plan."¹ The main goal is to envisage a world free of poverty, hunger and disease.² We can see that there is a global recognition of poverty as a hindrance to development and world peace and the whole globe is trying to get rid of it.

Besides the issue of poverty, the world is witnessing the menace of food adulteration. Adding of chemicals and artificial colours in food and drinks has been a cause of worldwide illness. The first record of use of a food additive dates back to 5000 years in Egypt describing the brewing of beer from Barley by yeast. Egyptians also found that leavened bread could be made with yeast, thus putting the same additive for different purposes. The historical use of food additives however was minimal in comparison to modern day usage. Meals in the past were most often prepared from

¹ Sustainable Development Knowledge Platform, Transforming our world: the 2030 Agenda for Sustainable Development, United Nations, <https://sustainabledevelopment.un.org/post2015/transformingourworld>.

²Zero Hunger, http://www.rec.org/documents/news/SEEDLING_Call_Annex_G_.pdf.

locally produced raw ingredients and seasonal food items. Hence there was no much need to preserve it. Food additives play a vital role in the modern day food industry, and are generally used for maintaining food quality and its characteristics as well as promoting food safety. The last 100 years has seen radical changes in the food supply of societies around the world. The changing lifestyles across the globe have transformed food consumption patterns. This may be related to rapid urbanization and sociological changes such as spread of television and its impact, habit of eating out and growth of foreign travel. People now have more expectation and demand for a greater variety of foods. The technology and discovery of new effective food additives has led to their widespread use. These include baking soda in cake mixes, gelling agents in jams and emulsifier in margarine. Many modern products such as low calorie snack, ready to eat convenience foods etc would not be possible without food additives.³ Today to satisfy the hunger of ever increasing population of the world and to sustain themselves in the neck to neck competition of the globalised markets the processing of food has become technical and it is now administered by the food industries and in the process a lot of discrepancies occur. Unprecedented scientific and technological developments have made man's life very simple, comfortable and convenient. The globalization of world markets has brought about changes in technological innovations to maximize profits and compete with global traders. In the process, the manufacturers started adopting methods which would earn them more profit by adding colours to the products making it catchier to the eyes of the consumers, by substituting or adding cheaper substances into the product making it look voluminous.

Adulteration of food is commonly practiced by traders in India. It poses a major threat to human health. These days rarely any food item is spared from the malicious practice of food adulteration. Almost every food-item from milk to fruits, from vegetables to grains is added with adulterants.⁴ These adulterants that are intentionally added are invisible or they are made invisible by astutely camouflaging with the color or texture. They are generally harmful for the health and most of them lead to serious health problems like cancer. Adulterant reduces

³ Chapter one, Introduction, Shodhganga,
http://shodhganga.inflibnet.ac.in/bitstream/10603/25952/8/08_chapter%201.pdf.

⁴ Id.

the quality of the food and this weakens the health of the one who consumes them, thereby increasing the cost for healthcare. Regular intake of an adulterated food can lead to many health problems. From curable to incurable disorders and diseases can ruin one's lifestyle and life as well.⁵

The Codex Alimentarius Commission has defined "Food Additive" as any substance not normally consumed as a food by itself and not normally used as a typical ingredient of the food, whether or not it has nutritive value, the intentional addition of which to food for a technological purpose in the manufacture, processing, preparation, treatment, packing, packaging, transport or holding of such food results, or may be reasonably expected to result (directly or indirectly) in it or its by products becoming a component or otherwise affecting the characteristics of such foods (CAC, 1999).⁶ As poverty and malnutrition is a significant issue in India, it is implied that the basic rights of Indians are violated therefore it is necessary to focus on Right to food as a benchmark to achieve. Another reason for the persistent malnourishment in Indian population is due to lack of nutritious and healthy food. The issue of adulteration of food and drinks has been a blemish to the development of Indian economy. The practice of adulteration in India can be traced back to the advent of Green Revolution in India. It was the starting point when India witnessed chemical farming. Huge amount of chemicals and pesticides were sprayed into the agricultural fields resulting in adulteration of the produces that were to be consumed by the nation. The effects of these chemicals are not immediate therefore it had been a difficult task to know the reason of the frequent deaths and illness in India. The produces of chemical farming are very harmful for human body and are mostly carcinogenic.

In present time due to large scale population and demand of food products, the adulteration problem has taken a dangerous shape. Releasing the implications of the problem the government enacted and brought into force laws and rules to combat the menace."⁷ Adulteration has been growing rampantly these days resulting in life threatening diseases and sometimes leading to death too, these acts of unscrupulous traders and the negligence of duty bearers are violating the fundamental

⁵ Id.

⁶ Id.

⁷ Id.

rights and also the DPSPs of the Constitution of India. Although there have been laws enacted to control adulteration ensuring safety of the consumers, but it has failed to stop the adulterers from doing unscrupulous activities. This study strives to discuss Right to food as a fundamental right and how food adulteration violates the fundamental rights of the citizens and also directive principles of state policy. It also throws light on the international obligations of India on food adulteration.

1.2 Statement of Problem

Although there has been various laws enacted to control food safety and to eradicate food adulteration, still the issue of food adulteration is rampant. Many deaths have occurred due to intake of adulterated food. The most disturbing fact is that the worst victims of food adulteration in India have been the children. The Mid Day Meal scheme of the govt. which was meant to eradicate hunger and provide nutritious food to the deprived children has turned out to be a deadly activity in the schools, most cases of food adulteration that India has witnessed, has been related to the Mid Day Meal schemes in schools. What to say of food adulteration at other places. The unscrupulous traders in the greed of getting minimal profit put the lives of the consumers at stake violating the basic rights under the Constitution. This deadly practice has become very common in India and therefore getting very difficult to get rid of it. It is high time that to save the lives of people from the hands of the money minded food adulterators.

1.3 Aims

The aim of the research paper is to bring into focus the dangers of food adulteration and the violation of fundamental rights under Constitution. The paper also throws light on the international instruments upholding right to adequate food and to which India is a signatory and the obligations that India has in fulfilling the international principles.

1.4 Objectives

- I. To study the history of food adulteration
- II. To study the legislations monitoring food safety and adulteration in India

- III. To discuss right to food as a fundamental right.
- IV. To study food adulteration and international implications

1.5 Scope and Limitations

The scope of this paper is limited to the study on the rampant issue of food adulteration in India and how the scenario of Indian markets have gone through a shift where almost all goods contains synthetic additives and artificial colouring agents. These additives are acting as a slow poison in our bodies affecting the health and sometimes even causing death. The paper analyses how this change in the Indian markets are violating the basic fundamental rights of the citizens. It also focuses on India's international obligations. Further it also includes discussions on the legislations monitoring food safety and adulteration and how far it has been successful in implementing the provisions.

1.6 Detailed Literature Review

1. Lidija Knuth and Margret Vidar, Constitutional and Legal Protection of the Right to Food around the World, Food and agriculture organization of the United Nations, Rome, 2011

The Constitutional and legal protection of the Right to Food around the world is a study conducted under Food and Agricultural Organisation of United Nations. This study reviews legal protection at the national level through constitutional provisions, national legislation and the direct applicability of international law. It builds on research undertaken for papers dealing with recognition of the right to food at the national level and for the Guide on Legislating for the Right to Food, complemented by further research by the FAO Legal Office. It provides up-to-date and comprehensive information regarding legislative activities in different countries and the constitutional protection of the right to food. The methodology employed was that of reviewing the constitutions of the world with regard to the right to food and the direct applicability of international human rights law, and collecting examples of framework law from different sources available to FAO. This article has helped me lot in the study of international perspective on the Right

to Food. This article contains a list of countries that recognizes Right to Food in their respective constitutions both explicitly or implicitly. It also helped me to understand the role of constitutions on recognizing Right to Food. It also has a prepared list of countries that recognizes the Right to Food explicitly;

It also threw light on the fact that the right to food is implicit in a broader human rights perspective and it an inalienable right of humans.

While discussing about right to food as a basic human right it also has a chapter on indirect recognition too, this helped me to understand the Right to Food which is implicitly mentioned under Article 21 in our Constitution.

The study briefly reviews the right to food in international law and discusses whether there is a duty to take legislative action. Having examined constitutions protecting the right to food and the different ways in which they do so, it identifies those countries in which the right to food is directly applicable by virtue of international human rights treaties being incorporated into the domestic legal system. Finally, it summarizes country progress with regard to framework law and indicates the number of countries that have adopted, or are in the process of drafting, a framework law on the right to food or food security.

2. Neetu Sharma, Right to Food For Children and The Law, Centre for Child and the Law, NLSIU, 2013

This book is a compilation of Frequently Asked Questions on Right to Food for children and law with special reference to National Food Security Act 2013. It starts with the analysis of India's social structure and how the children are suffering all over the country despite having food safety laws. It also discusses on the dubious distinction that India has of having the largest no. of malnourished children in the world and how various schemes and welfare programmes of the central and state govt. have been designed and implemented from the point of view of improving this situation. The author is of the view that there has to be some legal entitlements to access and enjoy the right to food. The existing international legal framework as well as the

adoption of laws in food security by other countries provides the necessary inspiration for India to work accordingly. The fact that the magnitude of hunger and starvation remains very high has been taken note by the judiciary and courts in India has defined right to food and identified mechanisms and have tried to evolve the jurisprudence on right to food. The FAQs included in this publication attempts to clarify few of these issues, while taking stock of the entitlement available through various other means such as schemes programmes and judicial pronouncements. The publication is an attempt on presenting the provisions of the NFSA, with special emphasis on children's right to food, in a simplified manner and also places them viz. a viz. benefit already available from schemes and programmes and as accrued through judicial interventions. This book discusses PUCL V. UOI in an exhaustive manner which has further helped in analyzing the case.

3. Sudarshan Nimma, Right To Food Reforms and Approaches, The ICFAI University Press, ISBN: 81-314-1302-0

The book seeks to provide at once a retrospective as well as prospective view of the contemporary developments in the legal environment, with emphasis on general and specialized branches of knowledge and applications regarding Right to Food in India as well as other countries. This book consists of series of authoritative and thought- provoking articles written by experts and published in leading professional magazines and research journals the articles are organized in a sequential and logical way that makes reading continuous and help the reader acquire a holistic view of the subject. This helps in strengthening in understanding of the subject better and also enables the readers stretch their thoughts beyond the content of the book. The series is designed to meet the requirements of research scholars, academicians and students of law. This book elaborates on "Food Sovereignty" and that all governments have a legal obligation to respect, protect and fulfill the right to food government strategies should aim at reducing hunger and providing adequate food. This book also discusses the significance and emergence of the 'Right to Food' as an important economic and social human right in the light

to rising global hunger and resulting in deaths especially of infants and pregnant women in developing countries.

4. Swaroop V.R, Biochemical Aspects Of Colouring Agents Used In Foods, Mahatma Gandhi University, Kerala, June 2011

This article deals with the artificial colouring agents that are used in foods and their harmful effects. As my research paper deals with food additives this article has helped me a lot to complete one of my chapters.

The author states that the colours form a major class of food additives in India. Many location based studies on the pattern of use of food colours have been conducted which show product and specific variation in the use of colours. The indiscriminate use of permitted and non permitted colours was shown to induce wide range of reactions in humans. The usage of permitted colours has also evoked concern because they are being used in excess of the statutory limit of 100 ppm. The safety of repeated exposure to a permitted synthetic colourants may also result in severe toxicity. The effects of the colours are held to be mostly carcinogenic and very dangerous.

5. Samji David, Efficacy Of Food Adulteration Law With Particular Reference To Kerala & Madhya Pradesh, Shodhganga

This article gave me a vivid idea of the history of food adulteration in India. Earnest effort is being made to trace its development from the times of pre historical stage. Its modern development with particular reference to India, UK, and U.S.A., is also discussed in this article. It defines food as those materials which are fit for human consumption. Everyone knows that we must eat to live and what we eat to live should act as a body building material. Thus quality of food has great implosion on the body and life of the consumer. Since most food articles consists of complex biological materials, a precise assessment of its quality is a difficult task. Close to the heels of this, development in science and technology added new kinds of food articles which were unknown to the past. Therefore, it became very difficult for the common man to assess the quality and nature of food articles. All this prompted the modem States to

formulate artificial definitions with new standards for the term 'food' through Legislation. This article also discusses the origin of food adulteration practices in India. The evil of adulteration is not of recent origin and date back to the times of pre-history. However, the devices used to perpetrate the venture varied from time to time at the hands of unscrupulous traders. This article has helped me in tracing the history of Food Adulteration Laws in India since pre-independence period.

1.7 Hypothesis

1. India faces an immense problem of malnourishment and poverty despite being the second largest producer of food in the world and this contributes to the violation of Article 21 for which rampant food adulteration can be contributed as one of the main cause.

2. India is yet to achieve the benchmark of assuring adequate nutritious food to each and every individual established by the International Conventions due to widespread illiteracy in India and lack of proper surveillance by the duty bearers under FSS Act.

1.8 Research methods applied

The research method applied in this research paper is doctrinal and analytical. Doctrinal method has been applied by seeking reliance from published materials, books and journals. Internet sources are also widely referred to. The study has also analysed primary sources of data such as international agreements, municipal statutes and case laws. As such this will mainly be a library and internet based study. Under doctrinal research data collection is restricted to only the primary and secondary sources. All the relevant sources were broadly classified into two basic categories namely Primary and Secondary sources.

A. Primary Sources:

It includes the study and analysis of legal regime of food adulteration scenario in India and the legislations enacted for securing food standards, the relevant laws, rules, notifications, byelaws, orders etc. All these were studied from the critical and

analytical point of view. The proposed research was also focused on the judicial scope of the 'right to food' based on the various landmark judgments delivered by the Judiciary in India.

B. Secondary Sources:

The proposed research work includes the detailed analysis of the various secondary sources related to the concept of right to food in India. This included various texts from legal and non-legal section, relevant articles, research papers, reports related to various aspects of right to food and important learning resources, study of relevant cases, etc.

Analytical Method

Analytical method has been adopted by doing an in-depth study and evaluation of available information in an attempt to explain complex phenomenon like understanding the root cause of food adulteration and creating linkage between food adulteration and violation of Article 21 under Constitution of India. Through analytical method the history of food adulteration in India has been properly addressed in the research paper and also various ways are being mentioned to put an end to it.

1.9 Research Design

The Research paper has been divided into six major chapters and further divided into various sub topics and sub to sub topics. The first chapter is the Introduction to the topic which is sub divided into 7 sub topics, they are listed as- Statement of problem, aims, objectives, scope and limitations, detailed literature review, hypothesis and research methods applied.

The second chapter of the research paper discusses the history of food adulteration laws in India. It is further divided into two sub-topics. First sub topic is concept of food adulteration in ancient India and the second sub topic covers food adulteration laws in post independence scenario in India.

The third chapter deals with Critical Analysis of Legislations Monitoring Food Safety and Adulteration. It also discussed the concept and meaning of food according to PFA Act 1954. In the sub topics the research paper discusses the harmful effects of few food additives and their side-effects. In the later part of the paper Food Standards and Security Act, 2006 is discussed in detail with the powers and functions attributed to FSSAI.

The fourth chapter of this research paper is an endeavour to draw connecting lines between food adulteration and rights enumerated under Indian Constitution. It has attempted to discuss how food adulteration is violating the constitutional imperatives. It is further divided into sub topics covering discussions on growing dimension of right to food by judicial interpretation and case studies on food adulteration in India. The case studies of this chapter are related to the following topics:

1. Acute Poverty in Kalahandi District of Odisha,
2. Decades Long Endosulfan Tragedy in Kerala,
3. 1998 Delhi Oil Poisoning,
4. Mid-Day Meal Tragedy in Bihar.

Chapter five of the paper deals with food adulteration in India and its international obligations. It is further divided into international instruments securing right to adequate food, important general comments of the CESCR (Committee of Economic Social and Cultural rights) on the right to food, overview of countries' constitutional recognition of the right to food .

The sixth chapter of this dissertation gives conclusion of the research work and certain valuable suggestions to the research problem.

CHAPTER II

HISTORY OF FOOD ADULTERATION LAWS IN INDIA

Act of debasing articles of food with the ulterior motive of passing it off as genuine is adulteration. Substitution of an inferior article for a superior one to the detriment of the purchaser also is adulteration. When scarcity occurs, the unscrupulous traders take undue advantage. They supply adulterated articles, sometimes at a comparatively cheaper rate. There are even sadder news of adding poisonous materials to food and drinks causing death.

2.1 Concept of Food Adulteration in Ancient India

There are indications of the prevalence of this heinous crime even in ancient India. Laws were in vogue. Kautilya in his Arthashastra gives a vivid description of the consumer protection measures. He prescribes various penalties and thus indicates the need for control of adulteration. When society became more and more impersonalised, food adulteration assumed diverse proportions. In the complexity and multiplicity of transactions in the modern age, the traditional contractual and tortious remedies turned to prove themselves inadequate.⁸ Manu, the ancient law giver, also wrote about ethical trade practices. He prescribed a code of conduct to traders and specified punishments to those who committed certain crimes against buyers. For example, he referred to the problem of adulteration and said “one commodity mixed with another must not be sold (as pure), nor a bad one (as good) not less (than the property quantity or weight) nor anything that is at hand or that is concealed.”⁹

Written subsequent to Manu Smriti, Kautilya’s Arthashastra is considered to be a treatise and a prominent source, describing various theories of statecraft and the rights and duties of subjects in ancient society. It describes the role of the State in regulating trade and its duty to prevent crimes against consumers. There were severe

⁸ Emily Andrews, Penal Law on Food Adulteration, <http://dspace.cusat.ac.in/jspui/bitstream/123456789/10991/1/Penal%20Law%20on%20Food%20Adulteration.PDF> .

⁹ Dr. A. Rajendra Prasad, Historical Evolution of Consumer Protection and Law in India, http://www.jtexconsumerlaw.com/V11N3/JCCL_India.pdf .

punishments for smuggling and adulteration of goods. For example, public health was guarded by punishing adulteration of food products of all kinds, including grains, oils, alkalies, salts, scents and medicines.¹⁰

2.2 Concept of food adulteration during British Period

The Indian Penal Code, 1860 deals with food adulteration treating adulteration of food and drinks as offences. This provision considers mixing of noxious ingredients in food or drinks as punishable. But mere adulteration with harmless ingredients with an eye on more profit is not punishable under it. Mixing milk with water is an example. Mere adulteration with harmless ingredients for the purpose of getting more profit is not punishable under this section. A reading of the provision in the Indian Penal Code goes to show that *mens rea* is an essential element of the offence therein. An old Bombay decision explained its scope in **Salaitnan Shanji v. State**.¹¹ In this case the servant of the accused was found spreading used tea leaves on his terrace. He had a packet of white powder with him. The accused arrived on the scene. The Medical Inspector collected some of those used tea leaves and sent for analysis. It was found adulterated with foreign materials. The court held that there was no evidence to show that the mixture which was sent for analysis was intended to be sold as an article of food or drink.¹² The court in that decision held that in order to find a person guilty under Section 272, it should be proved that the article was intended to be sold as food. Thus it can be seen that under the Code, adulteration as such is not made punishable. Another provision which deals with adulteration of food is Section 273 of the Indian Penal Code. The ingredients of this provision are three in number. Selling or offering for sale as food or drink, such article must have become noxious or must be in a state unfit for food or drink and Sale or exposure must have been made with a knowledge or reasonable belief that the article was noxious as food or drink.¹³

The provision is comprehensive and includes an article of food which has gone bad by being kept too long. The food which never was at any time fit for consumption will also come under the purview of the provision. Thus, what is punishable under the

¹⁰ Id.

¹¹ *Salaitnan Shanji v. State*, A.I.R. 1943 Bom. 445.

¹² Swaroop V.R, *Biochemical Aspects Of Colouring Agents Used In Foods*, Shodhganga, Kerala, June 2011, http://shodhganga.inflibnet.ac.in/bitstream/10603/25952/13/13_chapter%206.pdf

¹³ *Supra* note 7

section is the sale, offer or exposure for sale, of noxious articles of food or drink. The word unfit is of larger conception but it does not mean unsuitable for food or drink on account of its inferior quality. For e.g. the admixture of large quantity of dirt, charcoal and black seed in wheat offered for sale does not make the wheat unfit for consumption within the meaning of this section. This section does not deal with food of inferior quality. Also this section says nothing about the knowledge of the purchaser, the offence consisting in the sale of an unwholesome article of food, and ignorance of its condition on the part of the purchaser.¹⁴

An examination of the above provisions in the Indian Penal Code reveals that if a person sells inferior article of food at a cheap rate, it does not constitute an offence. Moreover, in order to find that a person is guilty, it should be proved that the act of adulteration was with an intention to sell the same as food or drink.¹⁵ In order to remedy this lacuna Parliament passed an exclusive legislation dealing with food adulteration, called the Prevention of Food Adulteration Act 1954, hereinafter called in this paper as the PFA Act.

2.3 Food Adulteration Laws in Post Independence India

The Prevention of Food Adulteration Act 1954 becomes the first legislation controlling food adulteration in India which prohibits the manufacture, sale and distribution of adulterated food materials. Section 7 of the Act reads as follows "No person shall himself or by any person on his behalf manufacture for sale, or store, sell or distribute any adulterated food; any misbranded food; any article of food for the sale of which a licence is prescribed, except in accordance with the conditions of the licence; any article of food the sale of which is for the time being prohibited by the Food (Health) Authority in the interest of public health."¹⁶ It embraces within its purview all persons who adulterate various kinds of foods and drinks and render it extremely difficult for such people to escape punishment. The first instance when an article can be treated as adulterated is illustrated in sub-clause (a) of Section 2(i-a) of the PFA Act it reads as "if the article sold by a vendor is not of the nature, substance or quality demanded by the purchaser and is to his prejudice, or is not of the nature,

¹⁴ Id.

¹⁵ Id

¹⁶ PFA Act 1954, Section 7

substance or quality which it purports or is represented to be.” That clause has got two parts, the first denoting the ingredient of not only sale but also the prejudice caused to the purchaser and the second having no relevance to the prejudice of the purchaser.¹⁷

The main difference between the first and second part is that in the first part it is the purchaser who demands the article of food of certain nature, substance or quality. The seller does not expressly say anything about the nature, substance or quality. In the second part it is the seller who says what the nature or quality of the article is. 'Prejudice to the purchaser' is an additional fact to be proved in that context. In the second part it is enough that the seller declares an article to be of a certain nature, substance or quality. It can be applied even while the article is offered or exposed for sale or manufactured for sale without there being a purchaser.¹⁸

In the above discussions it can be seen that the word sale is an inevitable condition for adulteration to have been caused. The definition of sale in PFA Act is wider in ambit than the definition under Indian Sales of Goods Act 1930. A sale for analysis, an act of exposing for sale, instances of possession for sale, even an attempt to sell are all brought within the definition of 'sale' of the PFA Act. If the word 'sale' is to be construed in its ordinary dictionary meaning or in the sense it is used in statutes like the Sale of Goods Act, the purpose and object of the PFA Act itself will get defeated. This difficulty was pointed out by the Kerala High Court in **Food Inspector v. Suwert Dhalakia (P) Limited**¹⁹, It was argued before the court that in order to constitute sale, there must be an agreement between the parties for the purpose of transferring title to goods and that since the third respondent had no authority to sell, there was no sale of adulterated tea. The High Court did not agree with that contention. Under the PFA Act, manufacture, sale and distribution of adulterated food are prohibited in absolute terms. Mens rea is not an essential ingredient of an offence under this Act. An offence within the Act is committed even if the seller did not know the nature, substance or the quality of a particular food. Precisely speaking, knowledge is not a necessary ingredient.²⁰

¹⁷ *Supra* note 7

¹⁸ *Id.*

¹⁹ *Food Inspector v. Suwert Dhalakia (P) Limited* 1982 K.L.T. 364

²⁰ *Id.*

In **Andhra Pradesh Grain and Seeds Merchants' Association v. Union of India**,²¹ it was held by the Supreme Court that proof of a guilty mind is not necessary for an offence creating absolute liability in statutes like the one, the PFA Act. Even though lack of *mens rea* is not a defence under the PFA Act, it cannot be said that the element of *mens rea* is completely excluded from its purview. Section 19 makes an exception in the case of vendors who sell articles of food under a warranty. Here a vendor is not deemed to have committed an offence pertaining to the sale of an adulterated or misbranded article of food if he proves that he purchased the article from a duly licensed manufacturer or dealer. The principle underlying this provision is to attach liability to the actual trader who might be responsible for adulteration.²² In **Public Prosecutor v. K. V. R. Annamalai Chettiar**²³, the accused purchased butter after taking all reasonable precautions like getting letters of patent. Later the employee in his shop sold butter to the Sanitary Inspector when the accused was absent. On analysis, the article was found to be adulterated with 8.1% excess of water. The Madras High Court held the accused not guilty on the ground that the appellant had taken a warranty and whatever done by the servant was without his knowledge, consent or connivance.²⁴

2.4 FSS ACT 2006

In the year 2006 Food Safety and Standards Act, was passed repealing the PFA Act 1954. The Act will establish a single statutory regulatory authority for the food sector in the state, named the Commissionerate of Food Safety. The main function of the Authority is to lay down scientific standards for food products and to regulate their manufacture, storage, distribution, sale and import.²⁵ It seeks to harmonise Indian standards with the international standards like CODEX and facilitates international trade in food articles. The Act lays down general provisions for food additives and processing of articles as well.²⁶

²¹ *Andhra Pradesh Grain and Seeds Merchants' Association v. Union of India* (1970) 2 S.C.C. 71

²² *Id.*

²³ *Public Prosecutor V. K. v. R. Annamalai Chettiar*, A.I.R. 1953 Mad. 862.

²⁴ *Supra* note 7.

²⁵ Food Safety and Standards Act Comes into Force, News18, <https://www.news18.com/news/india/food-safety-and-standards-act-comes-into-force-390043.html>.

²⁶ Food Safety and Standards Act, 2006, Arthapedia, http://www.arthapedia.in/index.php?title=Food_Safety_and_Standards_Act,_2006

Food Safety and Standards Act received the assent of the President on 23rd August, 2006 and came into effect on 5th August, 2011. It is a comprehensive legislation for the food sector and subsumes the then existing acts and standards like Prevention of Food Adulteration Act(PFA) of 1954, Fruit Products Order of 1955, Meat Food Products Order of 1973, Vegetable Oil Products (Control) Order of 1947, Edible Oils Packaging (Regulation)Order of 1988, Solvent Extracted Oil, De- Oiled Meal and Edible Flour (Control) Order of 1967, Milk and Milk Products Order of 1992 and also any order issued under the Essential Commodities Act, 1955 relating to food.²⁷ Food Safety and Standards Authority of India (FSSAI) has been created under the Act. FSSAI regulates the food sector by laying down guidelines and standards to be followed by food businesses. It also specifies procedures for accreditation of laboratories and provides advice to central and state government in matters relating to food safety. Ministry of Health and Family Welfare is responsible for implementation of the Act. The Act deals with administrative mechanism at the state level. It also provides for setting up of Food Safety Appellate tribunal for adjudication and trails under food standard offence.²⁸ The act was established to bring uniformity and a single reference point for all matters relating food safety and standards. It helped move from a multi-departmental and multi-level control to a single line of command. This act is enforced by two statutory authorities – Food Safety and Standard Authority of India and State Food Safety Authority.²⁹

Under the license and registration regulation, the food business operators in the country are required to be compulsorily registered or licensed as per the regulations under Food Safety and Standards Act. So no person shall commence any food business unless a valid license is possessed by the food business operator. The conditions with regard to sanity, safety and hygienic requirements have to be met at all times. These regulations recognize and help ensure that the food business operators maintain sanitary and hygienic conditions required in each food category.³⁰ This Food Safety Act consolidates all the previously existing 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,

²⁷ Id.

²⁸ Id.

²⁹ What are the laws regulating the Food Industry in India, I Pleaders, <https://blog.ipleaders.in/laws-regulating-food-industry-india/>

³⁰ Id.

distribution, sale and import, to ensure availability of safe and wholesome food for human consumption. The Food Authority acts as a single window to provide guidance and issue clarifications/advisories for all matters related to food safety.³¹

2.4.1 Salient Features of the Act

1. Movement from multi-level and multi-department control to a single line of command
2. FSSAI as a single reference point for all matters relating to Food Safety and Standards, Regulations and enforcement
3. Integrated response to strategic issues like Novel foods, Health Foods, Nutraceuticals,
4. International trade etc.
5. Decentralisation of licensing for manufacture of food products
6. Achieve high degree of consumer confidence in quality & safety of food
7. Enforcement of the legislation by the State Governments/UTs through the State Commissioner for Food Safety, his officers and Panchayati Raj/Municipal bodies.
8. Emphasis on gradual shift from regulatory regime to self compliance through food safety management system.³²

³¹ Objective of Food Safety and Standards Act, January 2013, Food Safety Helpline <https://foodsafetyhelpline.com/2013/01/objective-of-food-safety-and-standards-act/>

³² Food Safety- A Priority, FSSAI Brochure, New Delhi, https://www.fssai.gov.in/dam/jcr:39a0ce9a-35fe-4446-ae47.../FSSAI_Brochure.pdf.

CHAPTER III

CRITICAL ANALYSIS OF LEGISLATIONS MONITORING FOOD SAFETY AND ADULTERATION

Prior to Food Security and Standard Authority Act 2006, the monitoring of food safety was done by PFA Act 1954 which was the first law in India controlling food adulteration post Independence. In this Chapter, I have discussed how the concept of 'food' has evolved with time, by discussing definition of food under Section 2 of PFA Act 1954 and how the artificial additives were brought into the arena of food. Later the FSS Act 2006 is also being critically discussed especially on the definition of food and what were the grounds that led to the enactment of FSS Act 2006 by making a comparison of PFA Act 1954 with FSS Act 2006.

3.1 Concept and Meaning of Food According to PFA Act 1954

In simple terms 'food' denotes those materials which are fit for human consumption. Everyone knows that we must eat to live and what we eat to live should act as a body building material. Thus quality of food has great implosion on the body and life of the consumer. Since most food articles consists of complex biological materials, a precise assessment of its quality is a difficult task.

Development in science and technology discovered new kinds of food articles which were alien to the society. These products were discovered to make the products look better and tastier but very less knew that those were not benefitting us in anyway except being a treat to the eyes. It became a difficult task for laymen to test the quality and nature of those products. Today the markets are flooded with consumer friendly goods which are tempting and are catchier to the eyes. All these products are made up of artificial colours and chemicals which obviously does not enhance the quality instead it diminishes the nutritious quality of the food product. As it became very common to the Indian goods market, it led to the inclusion of artificial products into the definition of food as we can see in Section 2(v) of PFA Act, 1954.

Definition of food under section 2(v) of Prevention of Food Adulteration Act 1954

Food means any article used as food or drink for human consumption other than drugs and water and includes:-

(a) any article which ordinarily enters into or is used in the composition or preparation of human food,

(b) any flavouring matter or condiments, and

(c) any other article which the Central Government may having regard to its use, nature, substance or quality, declare by notification in the Official Gazette, as food' for the purpose of this Act.³³

A read-through to the section shows that the ordinary subtext of the term 'food' is perfectly explained by the Parliament in the introductory part of the definition. But clause (a) of this section widens the horizon of what we call as food. Every article or component which ordinarily enters into or used in the preparation of human food is an article of food for the purpose of this part. This definition of food covers a variety of products and also authorizes the central govt. to declare any other article as food having regard to its use, nature, quality. This wide definition of food is the result of rapid industrialization, urbanisation and evolution of food making processes.³⁴ In this urban society, people no longer live within the easy reach of food resources and hence the traditional method of food processing vanished long ago and it is substituted by newer processes of packaging and preservation. As the world turned into a global village things were no longer within the geographical boundaries. The trade of goods and services took place and in this process the goods were exported and imported within nations, therefore to preserve the goods from decaying ingredients like anti-oxidants, anti-bacterial, anti-microbial and sulfating agents etc were added to the food products in order to preserve them from decaying. Such articles are brought under the purview of Section 2 (v) of PFA Act, 1954.³⁵

³³ P.F.A. Act 1954, Section 2 (v)

³⁴ Samji David, Efficacy Of Food Adulteration Law With Particular Reference To Kerala & Madhya Pradesh, Shodhganga, http://shodhganga.inflibnet.ac.in/bitstream/10603/50306/8/08_chapter%201.pdf

³⁵ Id.

Clause (b) also adds flavouring agents and condiments as food. This clause brings in the flavouring agents which are better known as food additives within the ambit of food. The food additives mainly used by the producers are artificial and are synthetic dyes which affect the functioning of the human body. This mixing of additives to food has been proved harmful for humans.³⁶ A food additive is any substance not commonly regarded or used as food, which is added to, or used in or on, food at any stage to affect its keeping quality, texture, consistency, taste, colour, alkalinity or acidity, or to serve any other technological function in relation to food, and includes processing aids in so far as they are added to or used in or on food.³⁷ Earlier, we found that water was not included in the definition of 'food'. But this general exemption did not prevent the Court from declaring ice candy as an article of food even though; it is only a frozen state of water in the case **F.I. Palghat Municipality v. P. Subramaniam**³⁸. Similarly, it was held in **Govind Pillai v. P. Pillai**³⁹ that a particular stock of milk or rice or kesaridal will not cease to be a 'food', merely because it is not intended for human consumption. It is enough that the said article is generally used for human consumption or in the preparation of human food."⁴⁰ No doubt, ours is a country having different culture and taste which is reflected in the food habits of the people. What is treated as food in one part of the country is not treated as so in another part of the country. Hence great care should be taken while interpreting the word "ordinarily" appearing in the section. A liberal interpretation will oust articles consumed by many but not all, from the purview of the Act."⁴¹ The case of coconut oil is the best example. It is not universally consumed by people as food; still it is an article of food held in **Public Prosecutor v. Nagabushan**⁴²

In **Leela Ram v State of Punjab**⁴³ Punjab and Haryana High Court held that the occasional use of asafoetida for other purposes would not make it out from the category of food. Asafoetida is an article of food. Similarly in **Manohar Lal v.**

³⁶ Id.

³⁷ Tuula E. Tuormaa, The Adverse Effects of Food Additives on Health: A Review of the Literature with Special Emphasis on Childhood Hyperactivity, The Journal Of Orthomolecular Medicine <http://www.orthomolecular.org/library/jom/1994/articles/1994-v09n04-p225.shtml>

³⁸ F.I. Pal ghat MuniCipality v. P. Subramaniam, 1987 Cr. LJ. 333 (334)

³⁹ Govind Pjllai v P. Pillai 1964 KL.T. 1023 (1026)

⁴⁰ *Supra* note 34.

⁴¹ Id.

⁴² Public Prosecutor v. Nagabushan A 1965 A.P. 118. also see: Bhagawandas v.State of Maharastra 1992 Cr.L.J. 2022 (Born).

⁴³ Leela Ram v. State of Punjab 1964 P&H 427.

State⁴⁴ it was held that turmeric powder will not cease to be an article of food merely because it is used for pooja or for external application as medicine to wound or injuries held in.⁴⁵ The intention of the Legislature is to describe any article, which is generally or commonly used for human consumption or in the preparation of human food as food article. On the other hand, it was held in **State of Tamil Nadu v. R. Krishnamurthy**⁴⁶ and in **A.P. Grain & steel: Merchant Assom v. Union of India**⁴⁷ that if an article is not generally or commonly used for human consumption or in the preparation of human food, then, notwithstanding that it may be capable of being used on rare occasions for human consumption, it may be a clear indication that such article is not a food for the purpose of the Act.⁴⁸

In **PK. Tajani v. M.R Dange**⁴⁹ Supreme Court held that supari is an article of food. The word 'food' is used in a general term and applies all that is eaten by men for nourishment. Similarly, in **Mohd. Yamin v. State of U.P**⁵⁰ it was held that Shakkar is an article of food when it was contended that it was not meant for consumption.⁵¹

Last part of the Section empowers the Central Government with a blank cheque to bring any article into the arena of food. Before filling the cheque Central Government has to pay regard to the use, nature, substance or quality of the article. Section 23 of the PFA Act empowers the Central Government to make Rules which among other things, prohibit the sale of any substance which may be injurious to health when used as food or restricting in any manner its use as an ingredient in the manufacturer of any article of food. But in **R.Nair v. City Corporation**⁵² it was held that the power conferred on the Central Government in this regard should not be delegated to some other person or body.⁵³

⁴⁴ Manohar Lal v. State 1970 (I) ILR P&H 589 ; Kerala v. R.Nair 1977 KL T 672; A.Jaiwant v. State of Maharashtra 1975 SC 2178

⁴⁵ *Supra* note 55.

⁴⁶ State of Tamil Nadu v. R. Krishnamurthy AIR, 1980 SC 538

⁴⁷ A.P. Grain & steel: Merchant Assom v. Union of India (1971) 1 SCR 166

⁴⁸ Samji David, Efficacy Of Food Adulteration Law With Particular Reference To Kerala & Madhya Pradesh, Shodhganga, http://shodhganga.inflibnet.ac.in/bitstream/10603/50306/8/08_chapter%201.pdf

⁴⁹ PK.Tajani v .M.RDange A 1974 SC 228(234)

⁵⁰ Mohd. Yamin v. State of U.P. 1973 SC 484

⁵¹ *Supra* note 48.

⁵² R.Nair v. City Corporation 1965 KLT 61 (F.B).

⁵³ *Supra* note 48.

3.2 Food Standards and Security Act 2006

The act was established to bring uniformity and a single reference point for all matters relating food safety and standards. It helped move from a multi-departmental and multi-level control to a single line of command. This act is enforced by two statutory authorities – Food Safety and Standard Authority of India (FSSAI) and State Food Safety Authority (SFSA). It should also be noted that this was possible because Adulteration of foodstuff and other goods was included in the concurrent list in the constitution of India.⁵⁴

The definition of food in FSS Act is a modified version of the previous definition food under PFA Act, 1954. Section 3 (j) reads as follows:

Food means any substance, whether processed, partially processed or unprocessed, which is intended for human consumption and includes primary food to the extent defined in clause (zk), genetically modified or engineered food or food containing such ingredients, infant food, packaged drinking water, alcoholic drink, chewing gum, and any substance, including water used into the food during its manufacture, preparation or treatment but does not include any animal feed, live animals unless they are prepared or processed for placing on the market for human consumption, plants, prior to harvesting, drugs and medicinal products, cosmetics, narcotic or psychotropic substances: Provided that the Central Government may declare, by notification in the Official Gazette, any other article as food for the purposes of this Act having regards to its use, nature, substance or quality.

In the above definition of food the inclusion of engineered food and genetically modified food implies the usage of artificial ways of producing food. The usage of additives in food is not curbed even after enactment of this legislation. By examining the definitions of food in both the Acts it can be stated that the additives have become a part of our food. The next section deals with food additives and how it is harming our health by acting as slow poison.

⁵⁴Sandeep M Nandakumar, Food Standards and the Impact of Food Safety and Standards Act, 2006, The Lex Warriar, <https://www.consumer-voice.org/food/prevention-of-food-adulteration-act-1954/>

3.3 Some Food Additives and their Side-Effects

Tartrazine (E102): A lemon-yellow dye that is found in candy, soft drinks, chips, popcorn and cereals.⁵⁵ Tartrazine has a few known side effects in humans. It may cause allergic reactions to some people, specifically those with asthma or aspirin intolerance. Its symptoms include hives and swelling of the lips, tongue, throat, and neck. In the United Kingdom, warnings about specific food dyes, which include tartrazine, were issued in 2008 because of their potential side effects. The synthetic food dye was found to cause changes in the behavior of children, such as loss of concentration and hyperactivity.⁵⁶ Indian Standard Specification for tartrazine was first issued in 1960. It was revised in 1974 to bring it in line with the FAO/WHO specifications and also taking into account the indigenous data generated. This standard is being revised taking into consideration the latest FAO/WHO specifications for food colours.⁵⁷ Tartrazine was most popular among people of Uttar Pradesh, India. The intake of these dyes exceeded the ADI (Acceptable Daily Intake) for children and adolescents.⁵⁸ A diversity of immunologic reactions has been recognized in tartrazine consumption, comprising general fatigue, nervousness, migraines, clinical depression, purple skin spots, and disruption in sleep.⁵⁹

Either consumption or contact with a material containing tartrazine can produce symptoms of sensitivity. In kids, asthma attack and rashes have been claimed, as well as possible links with chromosomal injury, thyroid cancer and hyperactivity.

Particular investigators have related tartrazine with infantile obsessive-compulsive disturbances and hyperactivity. In 2008, the EFSA (European Food Standards Authority) Scientific Board of Food Additives, evaluated tartrazine, against claims

⁵⁵ Becky Bill, Food Dyes: Harmless or Harmful? Health Line, January 2017, <https://www.healthline.com/nutrition/food-dyes>

⁵⁶ Michelle Simmons, Tartrazine — toxicity, side effects, diseases and environmental impacts, Chemical News, <http://www.chemicals.news/2017-12-21-tartrazine-toxicity-side-effects-diseases-and-environmental-impacts.html>

⁵⁷ IS 1694: Tartrazine Food Grade, Bureau Of Indian Standards, https://archive.org/stream/gov.in.is.1694.1994/is.1694.1994_djvu.txt

⁵⁸ Swaroop V.R, Biochemical Aspects Of Colouring Agents Used In Foods, Shodhganga, Kerala, June 2011, http://shodhganga.inflibnet.ac.in/bitstream/10603/25952/13/13_chapter%206.pdf

⁵⁹ Kamal A. Amin and Fawzia S. Al-Shehri, Toxicological and safety assessment of tartrazine as a synthetic food additive on health biomarkers: A review, African Journal of Biotechnology, Academic Journals, ISSN 1684-5315, February 2018, <https://www.academicjournals.org/journal/AJB/article-full-text-pdf/077C95C55887>

that it causes hyperactivity in children. The Brazilian Sanitary Surveillance Agency issued a consultation on the opportunity of distributing a ticket warning against rise of urticaria, asthma and allergic rhinitis in atopic patient consuming food and drugs containing tartrazine.⁶⁰

Sunset Yellow (E110) : The main application of the sunset yellow is in the food products like soft drinks, breadcrumbs, orange jelly and squash, citrus marmalade, lemon curd, Swiss roll, cheese sauce, hot chocolate, chips, red sauces, etc. They can be found in most of the products that are of the color red, yellow or orange. Along with other food colors, sunset yellow dye is also uses for inducing a brown color for products like chocolate and caramel.⁶¹ The harmful substance is found to affect brain health and induce hyperactivity in children as well. In fact, recent studies carried out by Professor Jim Stevenson of Southampton University in the U.K. have demonstrated a clear correlation between food dye exposure and hyperactivity in pediatric patients. The *British Food Standards* agency has prohibited the use of sunset yellow FCF on various food and cosmetic products since then.⁶² This additive has been known to provoke particularly nasty reactions in people, which may include swelling, rashes, stomach pain, and vomiting. Sunset yellow has been shown to cause allergic or intolerance reactions in certain people, particularly those with a pre-existing sensitivity to aspirin, but no mutagenic effect was reported (Health Canada, 2007). In the present study even at the PFA permissible limit, sunset yellow was found to be genotoxic. The use of higher concentration was found to increase the risk of toxicity. This is contrary to the earlier findings. It may also cause or worsen ADHD symptoms in children.⁶³ Sunset yellow is banned or restricted as a food additive in Norway, Finland and Sweden.⁶⁴

Brilliant Blue: Brilliant Blue has been used in foods in the US since 1929. It is a greenish blue dye that adds a blue shade in applications. This color adds a distinctive, bright blue hue to beverages, beverage powders, dairy products, baked goods, dessert

⁶⁰ Id.

⁶¹ Sunset Yellow (E110) – FD&C Yellow 6, Food Additives, <http://www.foodadditivesworld.com/articles/sunset-yellow.html>

⁶²Earl Gracia, Sunset Yellow FCF sources, health risks, Naturalpedia, November 2017, <https://www.naturalpedia.com/sunset-yellow-fcf-sources-health-risks.html>

⁶³ *Supra* note 36

⁶⁴The additives which could be banned, The Telegraph, 13th November, <https://www.telegraph.co.uk/news/health/news/3453522/The-additives-which-could-be-banned.html>,

powders, confections, condiments, icings, syrups, jams, jellies, marmalades, liqueurs, extracts, dairy fats and oil, meat, seafood, snacks, dry mixes and seasonings, fruit preparations, convenient food, and flavors. Brilliant Blue FCF is soluble in water and slightly soluble in ethanol.⁶⁵ Some authors consider that the consumption of lollipops with brilliant and patent blue colorants by children is dangerous due to their absorption through the lingual mucosa and with negative effects on children who are the greatest consumers of these products.⁶⁶ Case reports describe the use of Brilliant Blue in enteral feeding solutions associated with discoloration of skin, urine and serum and toxicity, including 12 deaths.⁶⁷ In 2003, when Brilliant Blue was used as a dye in feeding tubes, the FDA issued a public health advisory because of side effects like blue-tinged skin, urine, and feces, as well as hypotension and death.⁶⁸

As a blue color, Brilliant Blue FCF is often found in ice cream, canned processed peas, packet soups, bottled food colorings, icings, ice pops, blue raspberry flavored products, dairy products, sweets and drinks. It is also used in soaps, shampoos, mouthwash and other hygiene and cosmetics applications.

Azorubine, Carmoisine – It is a synthetic colorant with red color from the group of azo dyes. It is produced from coal tar and is used mostly in the confectionery industry for making jellies, sweet candies, and cheesecakes. Possible effects on human health are allergic reactions, rashes such as hives as well as skin swelling. People with asthma often react badly to it. HACSG – the Hyperactive Children’s Support Group, issued an alert that this dye can stimulate a child’s nervous system and can lead to hyperactivity, as well as poor concentration.⁶⁹

⁶⁵ Brilliant Blue FCF (FD&C Blue No. 1), International Association Of Colour Manufacturers, <https://www.iacmcolor.org/safety-of-color/safety-synthetic-certified-colors/blue-1/>

⁶⁶ Márcio Caroch, Maria Filomena Barreiro, Adding Molecules to Food, Pros and Cons: A Review on Synthetic and Natural Food Additives, Wiley Online Library, <https://onlinelibrary.wiley.com/doi/full/10.1111/1541-4337.12065>

⁶⁷ Evaluation of Certain Food Additives, Who Technical Report Series, <http://apps.who.int/iris/bitstream/handle/10665/259483/9789241210164-eng.pdf;jsessionid=B3277387DEC4E374BEFD548A96C7EB64?sequence=1>

⁶⁸ Mandy Oaklander, A New Fear About Food Dyes, Prevention, January 2013 <https://www.prevention.com/life/a20450128/blue-food-dyes-absorbed-into-bloodstream/>

⁶⁹ Food Additives That Are Extremely Dangerous, Trusted Health Products, <https://www.trustedhealthproducts.com/blog/natural-health-news/2-food-additives-that-are-extremely-dangerous>

In India, the use of certain artificial colours has been banned under the Food Safety and Standards Act of 2006, because long-term consumption could increase risk of cancer and tumours in the body. Food safety officers in Coimbatore conducted few random inspections in wake of complaints by the public regarding the use of artificial food colours by many eateries. Some have complained that the use of colour was so high that the colour residue remained on their hands, said designated food safety officer, Dr R Kathiravan. They use a lot of red, orange, yellow and green colours in their food to make it look a lot more appealing; despite us giving them clear instructions on it being banned. They were suggested to use natural colors like turmeric for yellow, saffron for orange and Andhra Chilli and beetroot extracts for red. However, eateries continue to use synthetic colours which contain chemicals like erythrosine, carmoisine, ponceau 4R, indigo carmine, brilliant blue FCF, fast green FCF, tartrazine and sunset yellow FCF. These colours are approved by the government, but studies have shown that chronic or daily consumption of these colours makes them carcinogenic. The residues of these colours take almost a month to leave our body.⁷⁰

Although, there has been limits set for using the additives but still they stand quite a good amount of chance in creating health problems. Artificial flavours and colours are added to the goods to make it look more appealing and cannot be relied upon to be supplements for good health as they contain artificial additives. The money minded manufactures are using the additives to make the products look more appealing and in that process the food becomes adulterated bringing the lives of the consumers at stake. The food becomes adulterated in the process of increasing the quantity and makes more profit out of it. For e.g. Vanaspati is used as an adulterant for ghee. Ergot is used as an adulterant for cereals. Chalk powder is used as an adulterant for flour. Chicory is used as an adulterant for coffee. Papaya seeds are used as an adulterant for pepper. Brick- powder is used as an adulterant for chilly-powder. Tamarind seed powder is used as adulterant for coffee. Wood powder is adulterated for turmeric and dhaniya powder.⁷¹ Green chillies, green peas and other vegetables: Here

⁷⁰Pratiksha Rajkumar, Food safety dept to crack down on hotels, eateries using artificial food colours, Times Of India, <https://timesofindia.indiatimes.com/city/coimbatore/Food-safety-dept-to-crack-down-on-hotels-eateries-using-artificial-food-colours/articleshow/48981435.cms>

⁷¹ V.Lakshmi, Food Adulteration, International Journal Of Science Inventions Today, ISSN 2319-5436, http://www.ijst.com/admin/ijst_files/FOOD%20ADULTERATION_1.2.4.pdf

adulterant is Malachite Green (To accentuate the bright, glowing green colour of the vegetable). Argemone seeds (used to add bulk and weight) that it is a coloured dye that has proven to be carcinogenic for humans if consumed over a long period of time.”

Turmeric, dals and pulses such as moong or channa are coloured with Metanil Yellow to enhance the yellow colour of a food substance. Its harmful effect is that it is highly carcinogenic and if consumed over a continuous period of time it can also cause stomach disorders.⁷²

Ice-cream: Here adulterant is piperonal also known as heliotropin. It is used in place of vanilla as a cheap substitute. It is listed in the National Library of Medicine HSB Database as “moderately skin irritant”. Next additive is Ethyl Acetate, it is used as a pineapple flavor. It is also used as a cleaner for leather and textiles also used in nail polish remover. Its vapours have been known to cause chronic lung liver and heart damage. Amyl Acetate is another flavoring agent also used as paint.⁷³

Black pepper: Here adulterant is Papaya seeds (used to add bulk). Its harmful effect is that Papaya seeds can cause serious liver problems and stomach disorders.⁷⁴

3.3.1 Artificial ripening of fruits in Assam

Artificial ripening of fruits and vegetables has become very common these days especially in Assam. The main ingredient used in ripening the vegetables and fruits is calcium carbide which contains arsenic and phosphorous. This ingredient is banned by FSS Regulations 2011 but it is used in heavy amounts till date. Carbide ripened fruits on consumption cause several harmful effects to human health. As discussed earlier, CaC₂ has cancer causing properties and contains traces of arsenic and phosphorous hydride. The early symptoms of arsenic or phosphorous poisoning include vomiting, diarrhoea with or without blood, burning sensation of chest and

⁷² Id.

⁷³ Paul Scicluna, Ice Cream Or Ice Chemicals- This Will Shock You! Global Health Renegade, <http://globalhealthrenegade.com/articles/2013/10/25/ice-cream-or-ice-chemicals-this-will-shock-you>.

⁷⁴ *Supra* note 49.

abdomen, thirst, weakness, difficulty in swallowing, irritation or burning in the eyes and skin, permanent eye damage, ulcers on the skin, sore throat, cough and shortness of breath. Higher exposure may cause a build-up of fluids in the lungs. Consumption of fruits ripened with Calcium Carbide causes stomach upset because the alkaline substance is an irritant that erodes the mucosal tissues in the stomach and disrupts intestinal functions.⁷⁵

3.4 Few facts on Food Standards and Security Act 2006

The act was established to bring uniformity and a single reference point for all matters relating food safety and standards. It helped move from a multi-departmental and multi-level control to a single line of command. This act is enforced by two statutory authorities – Food Safety and Standard Authority of India (FSSAI) and State Food Safety Authority (SFSA). It should also be noted that this was possible because ‘Adulteration of foodstuff and other goods’ was included in the concurrent list in the constitution of India.⁷⁶

The most important change that it has brought about is the definition of food, it includes water in its ambit which was absent in the PFA Act of 1954. As water is what every human being intakes in order to keep his/ her body fit and most importantly, it is one of the vital elements that our body needs and without which we can't survive at all, must be taken due care of. Nowadays, water has also turned out to be poisonous; markets in India sell contaminated bottled water which can harm the human body in various ways. Three out of ten units of so-called mineral water sold across India have been found to be contaminated. This was stated by Minister of Consumer Affairs. The Food Safety and Standard Authority of India (FSSAI) had undertaken an exercise to test 743 samples in 2016-17. Out of these samples, 224 samples of packaged water were found to be not conforming to safety standards set in India.⁷⁷

⁷⁵Artificially ripened fruits, Vikaspedia, <http://vikaspedia.in/health/health-campaigns/beware-of-adulteration/artificially-ripened-fruits>

⁷⁶Sandeep M Nandakumar, Food Standards and the Impact of Food Safety and Standards Act, 2006, The Lex Warriar, <https://www.consumer-voice.org/food/prevention-of-food-adulteration-act-1954/>

⁷⁷ Sugandha Mukherjee, ‘Buying mineral water? There's a 30% chance it will be contaminated’, Business Standards, March 2018, https://www.business-standard.com/article/current-affairs/three-out-of-ten-packaged-drinking-water-bottles-in-india-contaminated-118031300682_1.html

All these unscrupulous activities are brought under the surveillance of the FSS ACT 2006. This definition is a more exhaustive one, stratifying food into processed, partially processed or unprocessed and also including primary food and genetically modified food. It has also brought into its ambit packaged drinking water, alcohol and chewing gum. This exhaustive definition of food is the need of the hour as today's globalised world has flooded the markets with many new products and to bring all those under surveillance this step was necessary. The inclusion of food additives in the Act is also a commendable feat because food additives have become a part and parcel of our lives. Every other food that we intake has in additives in it. Therefore it was very much necessary to frame the definition of food additives. The FSS Act has included the definition of food additives in Section 3(k) which reads as follows- "food additive" means any substance not normally consumed as a food by itself or used as a typical ingredient of the food, whether or not it has nutritive value, the intentional addition of which to food for a technological purpose in the manufacture, processing, preparation, treatment, packing, packaging, transport or holding of such food results, or may be reasonably expected to result (directly or indirectly), in it or its by-products becoming a component of or otherwise affecting the characteristics of such food but does not include contaminants|| or substances added to food for maintaining or improving nutritional qualities.⁷⁸ Here it is stated that the food additives must not contain any kind of contaminant which could harm the human health.

Food Safety and Standards Act also seeks to harmonise Indian standards with the international standards like CODEX and facilitates international trade in food articles. The Act lays down general provisions for food additives and processing of articles as well. Under FSS Act an autonomous body has been formed which is responsible for protecting and promoting public health through supervision and regulation of food safety. It also issues licenses to the business operators known as FSSAI.⁷⁹

⁷⁸ FSS Act 2006, Section 3 (k)

⁷⁹ Ritika Narula, Food Standards and Safety Act, 2006, Arthpedia, http://www.arthpedia.in/index.php?title=Food_Safety_and_Standards_Act,_2006

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

Functions:

1. 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
2. Laying down mechanisms and guidelines for accreditation of certification bodies engaged in certification of food safety management system for food businesses
3. Laying down procedure and guidelines for accreditation of laboratories and notification of the accredited laboratories
4. 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
5. Collect and collate data regarding food consumption, incidence and prevalence of biological risk, contaminants in food, residues of various, contaminants in foods products, identification of emerging risks and introduction of rapid alert system
6. 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
7. Provide training programmes for persons who are involved or intend to get involved in food businesses
8. Contribute to the development of international technical standards for food, sanitary and phyto-sanitary standards
9. Promote general awareness about food safety and food standards.⁸⁰

⁸⁰ Food Safety- A Priority, FSSAI Brochure, New Delhi, https://www.fssai.gov.in/dam/jcr:39a0ce9a-35fe-4446-ae47.../FSSAI_Brochure.pdf

Unfortunately, there has been enforcement issues recently pointed out by the Comptroller and Auditor General of India. Comptroller and Auditor General of India (CAG) has pulled up food regulator FSSAI for issuing licences to food business operators without complete documents, and questioned it on the quality of testing with 65 out of 72 State labs not being NABL accredited. The Food Safety and Standards Authority of India (FSSAI) also failed to ensure that unsafe foods are not imported to the country, said the government auditor in its performance audit report on Implementation of Food Safety and Standards Act 2006.⁸¹ The CAG stated that its audit found “systemic inefficiencies, delays and deficiencies in the framing of various regulations and standards, amendments to regulations in violation of the Act and the specific direction of the Supreme Court. The CAG said it found that “licenses were issued on the basis of incomplete documents in more than 50 per cent of cases, test checked in Audit.” A test check by audit of 5 State licensing authorities and 3 central licensing authorities found that in 3,119 out of 5,915 test checked cases licensed had been issued to FBOs (food business operators) on the basis of incomplete documents, it added. Criticising the regulator over quality of testing, the CAG said: 65 out of the 72 State food laboratories to which FSSAI and State food safety authorities sent food samples for testing do not possess National Accreditation Board for Testing and Calibration Laboratories (NABL) accreditation.⁸² It further said that 15 out of 16 test checked food laboratories did not have qualified food analysts. Shortage of qualified manpower and functional food testing equipment in State food laboratories and referral laboratories resulted in deficient testing of food samples. On imports, the auditor said the FSSAI failed to ensure that the customs authorities follow up the ‘Non-Conformance Reports’ issued by the regulator, and take appropriate action to ensure that unsafe foods do not enter the country. Non-Conformance Report (NCR) means a certificate or report issued to the customs authorities and the food importer by the Authorized Officer or any other officer specifically authorized for this purpose by the Food Authority on account of non-conformance to/with the Act and the rules and regulations made there under of the consignment of the Food Importer. This is under Food Safety and Standards (food import) Regulation, 2016,⁸³ FSSAI and State

⁸¹ CAG raps FSSAI over licensing process, poor food testing labs, The Hindu, Business Line, <https://www.thehindubusinessline.com/companies/cag-raps-fssai-over-licensing-process-poor-food-testing-labs/article9996282.ece>

⁸² Id.

food safety authorities did not conduct surveys for enforcement and administration of the Act and of the FBOs under their jurisdiction as required under this law.⁸⁴

Therefore it can be stated that this legislation can do wonders if proper implementation and enforcement could be carried out. Together with that awareness amongst the consumers and the business operators is also needed. A lot of provisions controlling food security and adulteration have been put forward but due to internal discrepancies and poor implementation mechanism, the adulterers are not putting a stop on their unscrupulous activities. Thus, resulting in affecting human health even leading to death in some cases.

⁸³ Food Safety and Standards (Food Import) Regulations, 2016, http://www.old.fssai.gov.in/Portals/0/Pdf/Notice_Comments__WTO_TBT_Food_Import_Regulation.pdf.

⁸⁴ *Supra* note 74.

CHAPTER IV

CHALLENGING THE CONSTITUTIONAL IMPERATIVES

India being a country wherein the issue of poverty and material abandonment is rampant and hundreds of deaths occur due to malnourishment. The food that India intakes consists of harmful additives which are carcinogenic and life threatening. Despite India being the world's second largest producer of food, it is ironic that many people die of malnourishment and lack of adequate food. The food that reaches people is contaminated with harmful, synthetic food additives which makes the food poisonous and ultimately becomes life threatening. The rural population is the worst sufferers due to lack of awareness regarding food adulteration. On top of that Indian market is going through a bad phase, duplicate products of branded goods are sold to the urban as well as to the rural population, and mostly the rural consumers suffer who has no idea about the standardisation of products. The counterfeiting of products poses a very serious threat to the health of the consumers.

In 2015, FICCI CASCADE (Committee Against Smuggling and Counterfeiting Activities Destroying the Economy) released a study that says the government lost nearly Rs 6,000 Crore to the grey market of FMCG (Fast Moving Consumer Goods) personal goods. The report also mentioned that 31.6 per cent of FMCG personal goods space is several shades of grey. The number is 21.7 per cent for the packaged foods industry. That means roughly 1/5th of all the packaged food that the consumers are buying are counterfeited posing a serious threat to health and safety.⁸⁵

“India is one the biggest markets for drug counterfeiting”, says Zaheer Khan, chairman of EIPR (Enforcers of Intellectual Property Rights) — an anti-piracy wing that specialises in conducting raids to bust these rackets. Khan and his team conduct two to three raids every day, across the country. In one of these, they found lifesaving drugs being produced in a cement mixer. The level of hygiene was deplorable. Later they found the drug had salt at 100 times its recommended value.⁸⁶ Be it alcoholic or

⁸⁵Shephali Bhatt, Why ‘Make in India’ When you ‘Fake in India’, The Economic Times, <https://economictimes.indiatimes.com/magazines/brand-equity/why-make-in-india-when-you-fake-in-india/articleshow/52088848.cms>.

⁸⁶ Id.

non-alcoholic, the death toll due to fake products in both categories is alarming. About a decade ago, when returnable glass bottles used to be the primary package for the beverage industry, it was grappling with the manufacture and sale of spurious products. "It's relatively easy to fill and seal fake beverages in glass bottles," says Arvind Varma, secretary general of IBA (Indian Beverage Association).⁸⁷

From the above discussions it can very well be estimated that the judicially interpreted and implicitly mentioned "Right to Food" in Article 21, of our Constitution has been violated. The rampant deaths and deterioration in health of the consumers needs a proper investigation and legal recourse. It can be undeniably stated that it is time to include right to food as an explicit fundamental right in the Constitution. To secure right to food there has to be a paradigm shift from the domain of benevolence to that of a right of a citizen.⁸⁸ Viewed from this perspective, the prevalence of distress-conditions threatening starvation constitutes an injury requiring the imposition of a penalty on the State. The penalty would be claimed for the affected groups as a whole rather than on the basis of individual claims.⁸⁹

During the proceedings of the constituent assembly the discussion had taken place regarding the possibility of including right to food in the category of fundamental rights as well as with reference to Article 32 (Right to Constitutional Remedies). There were some members who were in favour of this, while some others felt that right to food, health, shelter is already included in the Directive Principle of State Policy and there was no need to include them separately in the section of fundamental rights.⁹⁰ Right to food is regarded as a 'penumbral right' i.e. a right that has been declared by the Supreme Court as integral to the fundamental right to life and liberty which stems out from Article 21. Although not specifically referenced in the Constitution, Right to food has been made implicit by Supreme Court from Art. 21 and several other provisions of the constitution read with the Directive Principles of State Policy. Indeed, the Supreme Court has explicitly stated in various cases that the right to life should be interpreted as a right to "live with human dignity", which

⁸⁷Id.

⁸⁸B.Jyoti Kiran, Enforcing Right to Food in India, Legal Services India, http://www.legalserviceindia.com/articles/en_food.htm

⁸⁹Id.

⁹⁰Neetu Sharma, Right To Food For Children And The Law, Centre For Child And The Law, National Law School of India University, November 2013

includes the right to food and other basic necessities. Certain directive principles such as Article 39(f) and Article 47 deals with the Right to food. Article 39(f) reads as children are given opportunities to develop in a health manner and in conditions of freedom and dignity and that childhood and youth are protected against moral and material abandonment.⁹¹ This article specifically protects the right to food for children in India as it states that the children are to be given opportunities to develop in a healthy manner. The word ‘healthy manner’ implies that the food that they intake must help them grow and should be nutritious and free from harmful additives. The Mid Day Meal scheme by the Government is one such initiative taken to ensure right to food for children in India.

Article 47 reads as ‘Duty of the State to raise the level of nutrition and the standard of living and to improve public health.’⁹² It is one of the primary duties of the state to improve public health and to restrict import, manufacture, distribution and sale of products that are injurious to health. In **Tapan Kumar v. FCI**⁹³, it was held that the Food Corporation of India being an agency of the State must conform to the letter and spirit of Article 47 to improve public health it should not allow sub-standard food grains to reach the public market. The State under Article 47 has to protect poverty stricken people who are consumer of sub-standard food from injurious effects.⁹⁴

In **Vincent Vs UOI**,⁹⁵ it was held that the Public Interest Petition for maintenance of approved standards for drugs in general and for the banning of import, manufacturing, sale and distribution of injurious drugs is maintainable. A healthy body is the very foundation of all human activities. That is why the adage “Sariramadyam Khalu Dharma sadhanam” meaning in a welfare State, it is the obligation of the State to ensure the creation and sustaining of conditions congenial to good health.⁹⁶ In **State of Kerala v. Kandath Distilleries**⁹⁷ it was held that article 47 is one of the DSPPs which is fundamental in the governance of the country and the state has the power to completely prohibit the manufacture, sale, possession, distribution and consumption

⁹¹ Constitution of India, 1950, Article 39(f)

⁹² Constitution of India, 1950, Article 47

⁹³ (1996) 6 SSC 101

⁹⁴ Hemant Kumar Varun, Right to Health, Legal India, February 2011, <https://www.legalindia.com/right-to-health/>

⁹⁵ Tapan Kumar v. FCI, AIR 1987 SC 990

⁹⁶ *Supra* note 95.

⁹⁷ State of Kerala v. Kandath Distilleries AIR 2013SC 1812

of liquor as a beverage because it is inherently dangerous to the human health. Not only are the state but also the Panchayats and the Municipalities also given the duty to improve public health.”

Panchayat, Municipality and Health- Not only the State, the Panchayat and the Municipalities are also liable to improve and protect public health. Article 243G says “the legislature of a state may endow the panchayats with necessary power and authority in relation to matters listed in the eleventh Schedule”.⁹⁸ The entries in this schedule having direct relevance to health are as follows:

11 –Drinking

16- Poverty alleviation programme.

23 -Health and sanitation including hospitals, primary health centers and dispensaries.

24 -Family welfare

25 -Women and Child development

26 -Social welfare including welfare of the handicapped and mentally retarded.

Article 243-W finds place in the 12th schedule of the constitution titled ‘The Municipalities’:

5 -Water supply for domestic industrial and commercial purpose.

6 -Public health, sanitation conservancy and solid waste management.

9 -Safeguarding the interest of weaker sections of society, including the handicapped and mentally retarded.

11- Urban Poverty alleviation.

16-Vital statistics including registration of births and deaths.

⁹⁸ The Constitution of India, 1950, Article 243G

17- Regulation of slaughter houses and tanneries.”⁹⁹

In **Bandhua Mukti Morcha v. UOI**¹⁰⁰ it was held that since DPSP are not enforceable by the court, implementation of the guarantee has remained illusory.¹⁰¹ However, in a series of cases dealing with the substantive content on the right to life, the court has found that the right live with human dignity includes right to good health.¹⁰² In **Consumer Education and Research Center v. UOI**¹⁰³, the Court explicitly held that the right to health was an integral factor of a meaningful right to life. The court held that the right to health and medical care is a fundamental right under Article 21. The Supreme Court, while examining the issue of the constitutional right to health care under arts 21, 41 and 47 of the Constitution of India in **State of Punjab v. Ram Lubhaya Bagga**¹⁰⁴ observed that the right of one person correlates to a duty upon another, individual, employer, government or authority. Hence, the right of a citizen to live under art 21 casts an obligation on the state to protect it. This obligation is further reinforced under art 47; it is for the state to secure health to its citizens as its primary duty. Since it is one of the most sacrosanct and valuable rights of a citizen, it is an equally sacrosanct and sacred obligation of the state. Every citizen of this welfare state looks towards the state to perform this obligation with top priority, including by way of allocation of sufficient funds. This in turn will not only secure the rights of its citizens to their satisfaction, but will benefit the state in achieving its social, political and economic goals.¹⁰⁵

The significance of the right to life in India has achieved an important footing due to the interpretation of Article 21 and bringing into its ambit the Right to food by the Judiciary in many cases. The judiciary not only has declared right to food as a fundamental right but also has laid emphasis on right to consume healthy food and put a restriction on addition of toxic materials in food. India being a signatory with many International Conventions which upholds Right to food, must also includes it

⁹⁹ Hemant Kumar Varun, Right to Health, Legal India, February 2011, <https://www.legalindia.com/right-to-health/>

¹⁰⁰ **Bandhua Mukti Morcha v. UOI**, AIR 1984 SC 812

¹⁰¹ *Supra* note 100

¹⁰² *Id.*

¹⁰³ **In Consumer Education and Research Center v. UOI** AIR 1995 SC 636

¹⁰⁴ **State of Punjab v Ram Lubhaya Bagga** 1998 4 SCC 177, AIR 1998 SC 1703.

¹⁰⁵ *Supra* note 100

explicitly in its constitution. Chapter 5 will further discuss about India's international obligation on Right to Food.

4.1 Growing Dimension of Right to Food by Judicial Interpretation

As per the discussion in the introductory part of this chapter it can very well be stated that the India's food culture has taken its worst phase, everything that is available in the market has a probability of being adulterated. Even the medicines which are meant to save people's lives are adulterated. This is a clear violation of the right to life, which is upheld as a Fundamental Right in our Constitution apart from that it is a basic human right that every individual owns it as an absolute birth right, violation of which must be met with strict consequences. As in India there is no specific right to invoke violation of right to food, therefore the responsibility to address this menace rests primarily on the judiciary. Through various case laws the judiciary has been able to bring the right to food as a part of Right to life under Article 21.

The justiciability of the right to food by the Judiciary has certain advantages. Firstly, the Constitution of India makes the judiciary the guardian of the rights of the people. Therefore, the judges are entrusted by the Constitution to define the rights of the people. The rights enumerated by the judiciary becomes binding before all authorities be it the administration or any other power. Similar power is not available with any other authority. Therefore, the enforcement through the judiciary is more appropriate. Secondly, advantage of enforcement of the right to food through the judiciary is that the judges apply the international standards of human rights to the national laws. Thus, through the decisions of the court a more appropriate relief can be given in case of violation of the right to food of the people. Thirdly, only the judgments of the court on the right to food can create a sense of obligation in the mindset of the administration.¹⁰⁶

Usually the Government looks upon the entitlements on the right to food as a kind gesture on their part, rather than redressal of the rights of the people. Fourthly, when a law is ambiguous on a point, the judiciary is the appropriate forum to clarify the

¹⁰⁶ Justiciability of Right To Food In India In Terms Of International Law, http://shodhganga.inflibnet.ac.in/bitstream/10603/29218/13/13_chapter%205.pdf

position. Fifthly, the political system is unstable. Therefore, the right to food cannot be enforced through the political system.¹⁰⁷

Jean Dreze argues that in India, most people are unable to participate effectively in the democratic process due to economic insecurity, lack of education, social discrimination and other forms of disempowerment. They are unable to use the political system to redress the violation of their rights. This actually perpetuates their deprivation and they are ignored by the political system. Thus, in India the responsibility of ensuring the justiciability of the right to food is primarily on the judiciary.¹⁰⁸

A magnificent step was taken by Supreme Court in expanding the scope of Article 21 when it observed that ‘right to life does not merely mean ‘animal existence’ but living with ‘human dignity’ which include the right to the basic necessities of life and also the right to carry on such functions and activities as constitute the bare minimum expression of the human self in **Fransis Coralie v. Union Territory of Delhi**.¹⁰⁹

Another broad promulgation of the right to life with dignity is found in **Bandhua Mukti Morcha v. Union of India**.¹¹⁰ The Court observed-“to live with human dignity, free from exploitation, it includes protection of health and strength of workers, men and women, and of the tender age of the children against abuse, opportunities and facilities for children to develop in a healthy manner and in conditions of freedom and dignity, educational facilities, just and humane conditions of work and maternity relief. These are the minimum conditions which must exist in order to enable a person to live with human dignity. No government can take any action to deprive a person of the enjoyment of these basic rights.¹¹¹

The Supreme Court in **Chameli Singh v. State of Uttar Pradesh**¹¹² held that the need for a decent and civilized life includes the right to food, water and decent

¹⁰⁷ Id

¹⁰⁸Sanjeeve Gowda.G.S, Right To Food In India: A Constitutional Perspective, International Journal Of Law And Legal Jurisprudence Studies :ISSN:2348-8212:Volume 3 Issue 2, <http://ijlljs.in/wp-content/uploads/2016/04/3.pdf>

¹⁰⁹ Fransis Coralie v. Union Territory of Delhi., AIR1981 SC 746.

¹¹⁰Bandhua Mukti Morcha v. Union of India, AIR 1984 SC 802.

¹¹¹ Id.

¹¹²Chameli Singh v. State of Uttar Pradesh , AIR 1996, SC1051.

environment. The court has observed in this connection: In any organized society, right to live as a human being is not ensured by meeting only the animal needs of man. It is secured only when he is assured of all facilities to develop himself and is freed from restrictions which inhibit his growth. All human rights are designed to achieve this object. In **KishenPattnayak and ors.v. State of Orrisa**¹¹³, It was alleged that the people of Kalahandi, Koraput and other districts of Orissa, there are many people dying there due to hunger. Justice P.N Bhagavathi observed that ¹¹⁴No one in this country can be allowed to suffer deprivation and exploitation particularly when social justice is the watchword of our Constitution.

In a landmark judgment the Supreme Court elevated the freedom from hunger to the status of fundamental right. In **Keshavananda Bharati v. State of Kerala**¹¹⁵ interpreting the Constitution in the light of the municipal law and the Charter of the United Nations the court held that the object of the Constitution is to promote social and economic justice. The task of protecting the people from starvation is on all the wings of the Government, the executive, judiciary and the legislature. It further held that protection from starvation is a fundamental right of a citizen. The court also laid down the role required to be played by the different organs of the Government in eliminating hunger. It thereby created new jurisprudence in the right to food in Indian legal system.¹¹⁶ It is pertinent to mention here that the international law supporting the right to food of the people was not fully established at that point of time. India was yet to ratify the Conventions promoting the right to food. Conventions were ratified after this dynamic approach of the Indian judiciary. During that period the international obligation for providing these basic rights were not very rigid. Under such circumstances it was the far sightedness and compassionate heart of the judiciary which felt for the hungry and starving population of India.

However the judgment failed to specify the Article of the Constitution which could be invoked in case of violation of fundamental right to freedom from hunger or

¹¹³ KishenPattnayak and ors.v. State of Orrisa, AIR 1989 AIR 677.

¹¹⁴ *Supra* note 107

¹¹⁵ Keshavananda Bharati v. State of Kerala 47 (1973) 4 SCC 225

¹¹⁶ Justiciability Of Right To Food In India In Terms Of International Law, http://shodhganga.inflibnet.ac.in/bitstream/10603/29218/13/13_chapter%205.pdf

starvation. Thus this judgment falls short in bringing about enforceability to safeguard violation.¹¹⁷ Later, in **PUCL v. UOI**¹¹⁸

The Supreme Court declared that Right to Food is guaranteed under right to life under Article 21.

The Supreme Court held that the right to food is a justiciable, reviewable, expandable, legally enforceable, constitutional and inviolable- right opened up new avenues both for political discourse and for concrete action. PUCL's case has brought about a marked footprint on the lives of millions of people in India. Never before has the world witnessed such a dynamic character of the judiciary. To ensure proper distribution of food grains, the first major interim order of the Supreme Court in this PIL was issued on 28th November 2001.¹¹⁹ This order focuses on eight food-related schemes:

1. The Public Distribution System (PDS);
2. Antyodaya Anna Yojana (AAY);
3. The National Programme of Nutritional Support to Primary Education, also known as "mid-day meal scheme";
4. The Integrated Child Development Services (ICDS);
5. Annapurna;
6. The National Old Age Pension Scheme (NOAPS);
7. The National Maternity Benefit Scheme (NMBS); and
8. The National Family Benefit Scheme (NFBS).¹²⁰

Essentially, the interim order of 28th November 2001 converted the benefits of these eight schemes into legal entitlements. This means, for instance, that if someone has an

¹¹⁷ Id.

¹¹⁸ PUCL v. UOI, Writ Petition(Civil) No.196 of 2001

¹¹⁹ *Supra* note 115

¹²⁰ Id.

Antyodaya card but she is not getting her full quote of 35 kg of grain per month at the official prices (Rs 3/kg for rice and Rs 2/kg for wheat), she can claim her due as a matter of right, by going to Court if necessary.¹²¹

In **Swami Achyutanand Tirth & Ors. Vs. Union of India & Ors.**¹²² the issue of milk adulteration was brought before the notice of the Supreme Court. The apex Court vide order dated 26.11.2013 observed that non implementation of the provisions of the Food Safety and Standards Act, 2006 and the rules framed there under violates the right to health and safety of the human beings guaranteed under Article 21 of the Constitution of India.¹²³

Bombay High Court has, in **Association of the Traders carrying the Food Business v. Union of India**¹²⁴, held that food safety has direct nexus to the right to life as enshrined under Article 21 of the Constitution¹²⁵

In **Vincent v. Union of India**¹²⁶ the Supreme Court emphasized that a healthy body is the very foundation of all human activities. Art.47, a directive Principle of State Policy in this regard lays stress note on improvement of public health and prohibition of drugs injurious to health as one of primary duties of the state.¹²⁷ The Bombay High Court in **Association of the Traders carrying the Food Business** case has held that in light of legal principles laid down by the Supreme Court, it is not only a statutory requirement for the food authorities to have a regime of making available safe food products to the consumer but it is a constitutional requirement emanating from the provisions of Article 21 read with Article 39 and 47 of the Constitution of India.¹²⁸

¹²¹ Id.

¹²² Swami Achyutanand Tirth & Ors. V.. Union of India & Ors Writ Petition Civil No. 159 of 2012

¹²³ Dr. Rashmi Ranjan Mishra, Ms. Miatreyee Chakrabarty, Right to Safe Food: Constitutional Perspectives, Law Mantra Think Beyond Others, I.S.S.N 2321-6417, <http://journal.lawmantra.co.in/wp-content/uploads/2016/02/8.pdf>

¹²⁴ Food Business v. Union of India Writ Petition No.477 of 2012

¹²⁵ *Supra* note 122

¹²⁶ Vincent v. Union of India 1987 AIR 990 : 1987 SCR (2) 468

¹²⁷ *Supra* note 122

¹²⁸ Id.

In **State of Uttar Pradesh v. Kartar Singh**¹²⁹ the constitutional validity of Prevention of Food Adulteration Act 1954 (now repealed) was challenged. The Apex Court held that that the respondent cannot assert any fundamental right under Article 19(1) to carry on business in adulterated foodstuffs.¹³⁰ In another case of **Andhra Pradesh Grain and Seed Merchants Association v. Union of India**,¹³¹ the Supreme Court held that the restriction imposed on the conduct of business by traders in foodstuffs by the provisions of the Prevention of Food Adulteration Act cannot be deemed unreasonable, as the Act was enacted to deal with the great social evil and for ensuring public welfare especially in the offences against public health. Thus the apex court gave clear message that one cannot sell adulterated foodstuffs and total prohibition of it is constitutionally valid. It was also held that “our Constitution establishes a welfare state and for economic gain of a few lives, well being of the mass cannot be put in danger.”¹³² In **Titanic Restaurant through Dharmendrabhai Dashrathbhai Patel v. Dy. Police Commissioner**¹³³ the High Court of Gujrat held that right under Article 19(1)(g) is not an absolute one and the State in enforcement of its duties to improve the health is absolutely justified in prohibiting and banning supply of hookahs at eating houses/restaurants. In this case Petitioner’s contented that by imposition of such an absolute ban and prohibition on hookahs, they will be deprived of their right to trade and thus they will lose their livelihood cannot be countenanced. Rejecting the contention the court held that Interest of the public outweighs the inconvenience caused to persons like the petitioners.”¹³⁴

In **Vital Nutraceuticals Private Limited etc v. Union of India**¹³⁵ and FSSAI various food advisories issued by FSSAI under the Food Safety and Standard Act was challenged on the ground of being ultravires of the Act and violative of Articles 14, 19(1)(g) and 300A of the Constitution of India in as much as the Petitioners who are

¹²⁹ State of Uttar Pradesh v. Kartar Singh, AIR 1964 SC 1135

¹³⁰ *Supra* note 122

¹³¹ Andhra Pradesh Grain and Seed Merchants Association v. Union of India, AIR 1971 SC 2346

¹³² *Supra* note 122

¹³³ Dharmendrabhai Dashrathbhai Patel v. Dy. Police Commissioner, Special Civil Application No. 8973 of 2011

¹³⁴ Dr. Rashmi Ranjan Mishra, Ms. Miatreyee Chakrabarty, Right to Safe Food: Constitutional Perspectives, Law Mantra Think Beyond Others, I.S.S.N 2321-6417,

<http://journal.lawmantra.co.in/wp-content/uploads/2016/02/8.pdf>

¹³⁵ Vital Nutraceuticals Private Limited etc v. Union of India Writ Petition No. 2746 of 2013

food manufactures are unwarrantably required to undergo the procedure of product approval as a condition for renewal of the license or to conduct the Food Businesses, which is wholly unwarranted in view of the fact that the Petitioners are already holding a valid licence to undertake manufacturing of food products.

Justice Girish Kulkarni differed and said the right to safe and uncontaminated food was held to be a fundamental right under the constitution. It is well settled that the right to livelihood encompasses the right to live with dignity that is to have a healthy which is possible only if safe and wholesome food is available for human consumption. It cannot be overlooked that the issue of food safety and right to have wholesome food is a matter of national as well as international concern.”¹³⁶ He added that "there is nothing improper on the part of the Food Authority to bring about a regime to have a concept of product approval for existing license holders or in relation to any food business. Court further held that consumption of any substandard food would definitely affect the health of a person and in this context the mandate of Article 21, Article 39 clause (e) and (f) read with Article 47 of the Constitution cannot be overlooked as constitutional provisions recognize the human right to have safe and wholesome food apart from the provisions of the FSS Act.”¹³⁷ “The Bombay High Court referred this case in **Association of the Traders carrying the Food Business v. Union of India**¹³⁸, Article 19 1(g) does not give any citizen right to harm the well being of other citizens and public health. Thus reasonable restrictions can be imposed on right to carry trade, business or occupation for implementing Article 21 and Part IV of the Constitution.”¹³⁹ “In **Kishen Pattnayak and ors.v. State of Orrisa**¹⁴⁰, It was alleged that the people of Kalahandi, Koraput and other districts of Orissa, there are many people dying there due to hunger. Justice P.N Bhagavathi observed that- No one in this country can be allowed to suffer deprivation and exploitation particularly when social justice is the watchword of our Constitution’¹⁴¹

¹³⁶ *Supra* note 122

¹³⁷ *Id.*

¹³⁸ *Food Business v. Union of India*, Writ Petition No.477 of 2012

¹³⁹ *Supra* note 133

¹⁴⁰ *Kishen Pattnayak and ors.v. State of Orrisa* AIR 1989 SC 677

¹⁴¹ *Supra* note 107

4.2 Case Studies on Food Adulteration in India

4.2.1 Acute Poverty In Kalahandi District Of Odisha

Over several decades Kalahandi district in the State of Odisha is facing the problem of acute shortage of food and basic amenities for a standard living. The population in Kalahandi has been persistently deprived of basic rights and entitlements. The labourers of Kalahandi are paid below the minimum wage structure resulting in poor standard of living violating fundamental rights under the Constitution. There also have been times during droughts that the people in Kalahandi “picked the poisonous roots and leaves, the only thing that will grow there and boil them for three whole days before they can eat them.”¹⁴² “Two out of every three children born die in infancy. There is fever, cholera, dysentery and an ever-increasing number of respiratory diseases. Nothing could be worse, no people more wretched. But in the once princely district of Kalahandi in Orissa, there is something much worse: women have now begun to abandon and sell their children because they can no longer afford to feed them. Panasi Punji, 35, of Amlapalli village in Khariar block abandoned her husband's little sister Vanita because her own children were hungry. In Boden block, Rama Gahir picked up her three-day-old child and walked 25 km to Khariar to leave the tiny new-born baby at a Christian mission. On the way she sold it for Rs 80 and two saris.¹⁴³ There also has been a case in Khariar where a starving woman abandoned her child. Kapil Narain Tiwary a former MLA said “here children are sold cheaper than channas”¹⁴⁴ Kalahandi district has about 1,000 registered TB patients at present and it’s a known fact that malnutrition and hunger lead to TB by weakening the immune system of the human body. The region comprising undivided Kalahandi-Koraput-Bolangir districts, called the KBK region, is known to the world as the most backward regions of the country and home to poverty, malnutrition and hunger. Over 80 per cent of people living below the poverty line, over 60 per cent of its population including women and children are believed to be suffering from malnourishment. Despite several government schemes to provide with nutritional supplements to the

¹⁴² Farzand Ahmed, Orissa: Drought, famine force women in Kalahandi to abandon and sell their children, December 2013, <https://www.indiatoday.in/magazine/special-report/story/19850731-orissa-drought-famine-force-women-in-kalahandi-to-abandon-and-sell-their-children-770267-2013-12-27>

¹⁴³ Id.

¹⁴⁴ Id.

pregnant and lactating mothers and new-born babies, to children under ICDS programmes and mid-day meal scheme, rural Kalahandi has the infant mortality rate of 57 in a thousand, under five mortality rate of 78, neonatal death rate of 33 and maternal mortality rate of 245.”¹⁴⁵ In September 2017, in the district of Kalahandi, over 150 students of four primary schools fell ill allegedly after consuming mid-day meal. The affected students were admitted to government hospital at Biswanathpur after they complained of vomiting, loose motion, nausea and stomach pain.¹⁴⁶ In Malkangiri district, more than 50 students of a school - run by the Odisha government - fell sick on Friday after consuming breakfast which had phenyl, a media report said. They were taken to a nearby hospital and their condition is said to be stable.¹⁴⁷

The 5th Joint Review Mission on Mid-Day Meal Scheme(MDMS) in Odisha, observed that, Mid-Day Meal Scheme is not being monitored effectively due to lack of proper organizational structure at the Directorate, District, Sub district and the school levels. The Review Mission also observed that online Management Information System(MIS) is not available in Odisha for capturing real time data on Mid day meal scheme. The location of toilets in many schools is also a matter of grave concern. In many places, the toilets are located next to the drinking water facility. In several places make shift kitchens had been made next to the toilet. Such close proximity to the toilet increases the risk of contamination. It was also noticed that there were no proper places for the students to have a meal in many schools. The students had the meals in veranda or in open space in the school and throw the leftover haphazardly. It is suggested that as per the guidelines of MDMS, the funds may be utilised for construction of dining halls in schools.¹⁴⁸ Malnutrition is a complex phenomenon. It is both the cause and effect of poverty and ill health: and follows a cyclical, inter-generational pattern. It is inextricably linked

¹⁴⁵ Basudev Mahapatra, Did Dana Majhi's wife die of hunger, malnourishment? Narada News, <http://naradanews.com/2016/08/plight-of-dana-majhi-blame-failure-of-govt-schemes-and-programmes/>

¹⁴⁶ Odisha: Over 150 students fall ill after consuming mid-day meal, ASIA NEWS INTERNATIONAL, Sep 15, 2017 <http://www.freepressjournal.in/india/odisha-over-150-students-fall-ill-after-consuming-mid-day-meal/1137911>

¹⁴⁷ WION Web Team, Over 200 primary school students in Odisha fall ill after food-poisoning, WION, <http://www.wionews.com/india-news/over-200-primary-school-students-in-odisha-fall-ill-of-food-poisoning-in-two-days-20256>

¹⁴⁸ Report of 5th Joint Review Mission Odisha, Mid Day Meal Scheme, Government Of India Ministry Of Human Resource Development, Department Of School Education & Literacy, http://mdm.nic.in/Files/Review/Fifth_Review/Odisha/JRM_Report_Odisha_MDM.pdf

with illiteracy, lack of safe drinking water, sanitation, ignorance, lack of awareness and ill health. It creates its own cycle within the large cycle of poverty.¹⁴⁹

4.2.2 Decades Long Endosulfan Tragedy in Kerala

Kasaragod District of Kerala is famous for its cashew plantations. The Plantation Corporation of Kerala, a State Govt. enterprise has cultivated cashew plantation in a large area of the district, to prevent the cashew plantation from pests the corporation started aerial spraying of endosulfan, a pesticide over 12000 acres of land which covered 9 villages in the Kasaragod area. The people living inside the plantations and downwind and downstream of the experiment were exposed to this hazardous chemical for 25 years. Studies conducted after the ban of the pesticide show significantly higher concentration of endosulfan products in environmental media like water, soil and lake sediments and human blood, even in a village 25 km away from the sprayed area.¹⁵⁰ The aerial spraying of endosulfan over the cashew plantations in Kasaragod district in Kerala, India was started in 1978. This was done 3 times a year over an area covering 15 Gram Panchayats (Local Government at the village level) in Kasaragod. There were many warning signals about its impact from the beginning, including the mass deaths of bees, fishes, frogs, birds, foxes and also congenital deformities in domestic animals like cows.¹⁵¹

Since 1979 there had been local outcry from farmers and media concerning the health effects of the pesticide spraying. In 1994, independent health observations by a local doctor, Dr. Mohan Kumar revealed that there was a rising incidence of cases of mental illness and congenital anomalies in Kasaragod. He initially considered the possibility of heavy metal or radioactive toxicity of the water in the area (small streams and ponds) since some of the health disorders were more in the people staying near these water sources. He had a letter on this issue published in a journal for doctors published by Indian Medical Association, asking the experts to conduct a study in the area. He took action by writing to the media and other doctors. Later in 1998, Leelakumari Amma, a staff of the Krishi Bhavan (Agriculture Department's

¹⁴⁹ Id.

¹⁵⁰ V T Padmanabhan, Continuing Disaster Of Endosulfan In Kasargod And Kannur Districts Of Kerala, <https://endosulfan.wordpress.com/2011/02/01/disaster-of-endosulfan-in-kasargod-and-kannur/>

¹⁵¹ Dr. Adithya P, India's Endosulfan Disaster, <http://www.indiaenvironmentportal.org.in/files/IndiaEndosulfan.pdf>

office at the village level) At Periya Panchayat witnessed the deterioration of health of her two children and herself - loss of voice and hormonal problems after she came to live in a village inside the spraying area. She then lodged a complaint in the local court along with two other farmers to stop the aerial spraying in the interests of the people's health and the environment. Several national and international groups conducted health and toxicological studies between 1998 and 2002; and arrived at the conclusion that the abnormal health problems at Kasaragod were due to the spraying of endosulfan.¹⁵² The commonly noted unusual diseases were neurobehavioral disorders, congenital malformations in girls and abnormalities of reproductive tract in males. Another report showed increased rate of cancers and gynecological abnormalities as well. Later the Kerala State health department also conducted medical camps in various regions and subsequently they also conducted a study.¹⁵³

Mohan Kumar, a doctor who has practised medicine in the area since 1982, has been perplexed for the past 10 years. "When seven-year-old Sharanya was born, her parents Rukmini and Chandran were relieved the baby was normal. In the eighth month of pregnancy, the doctor had warned them that fluid had entered the baby's brain. Rukmini's joy of having a normal baby was short-lived. Sharanya developed cerebral meningitis on the 28th day. Her head began to swell. She was diagnosed suffering from hydrocephalus—a condition caused by abnormal accumulation of cerebrospinal fluid. Sharanya can talk, rather mumble, and can sit only with support."¹⁵⁴ Disorders of the central nervous system are very common among the children of the area; cerebral palsy, retardation of mental and/or physical growth, epilepsy and congenital anomalies like stag horn limbs. There are too many cases of cancer of the liver and blood; infertility; miscarriages and hormonal irregularities among women; skin disorders; and asthma, to name a few. Psychiatric problems and suicidal tendencies have also been rising.¹⁵⁵ Over 20 years of aerial spraying on cashew plantations in Kerala and other states has left many with mental and physical disorders. Studies by Centre for Science and Environment has established linkages between aerial spraying of the pesticide and the growing health disorders in Kasaragod district. Over the

¹⁵² Id.

¹⁵³ Id.

¹⁵⁴ Savvy Soumya Mishra, Sapan Joshi, Tracking Decades Long Endosulfan Tragedy In Kerala, Down To Earth, January 2017, <http://www.downtoearth.org.in/coverage/tracking-decades-long-endosulfan-tragedy-in-kerala-56788>.

¹⁵⁵ Id.

years, other studies confirmed these findings, and the health hazards associated with endosulfan are now widely known and accepted.¹⁵⁶ The pesticide is a known carcinogen, neurotoxin and genotoxin (damages DNA); the Insecticides Act of 1968 recommends restricted use of endosulfan. The Stockholm Convention, a global treaty to protect human health and environment from such chemical compounds, has declared endosulfan a persistent organic pollutant and 73 countries have banned its use.¹⁵⁷

The NHRC ordered to pay at least Rs.3 lakh to all those who became living victims of the killer pesticide.¹⁵⁸ These health hazard caused by the deadly pesticide 'Endosulfan' is a clear violation of Article 21, and it is a duty of the Government to stop such violation of basic human right and take care of its citizens nutritional aspect under Article 47. The plight of the victims of Kasaragod area cannot be purged but definitely they could be provided with a helping hand by way of compensation which would help them to avail medical help. If the victims of endosulfan are not being compensated in terms of the government of Kerala order dated May 26, 2012, it will amount to violation of their human rights stated by NHRC.¹⁵⁹

4.2.3 1998 Delhi Oil Poisoning

Argemone Mexicana L., a native plant of the West Indies, has been naturalized in India. It grows widely and is popularly known as 'satyanashi'. Its seeds are black in colour and similar to the dark-coloured mustard seeds in shape and size. Consumption of mustard oil contaminated with argemone seed oil is known to cause epidemic dropsy. Argemone Poisoning was first reported from Calcutta in 1877. Since then, several outbreaks have occurred in different states of India as well as in Mauritius, Fiji Islands and South Africa. All the other outbreaks were related to the Intake of mustard oil contaminated with argemone oil.¹⁶⁰

¹⁵⁶ Id.

¹⁵⁷ Id.

¹⁵⁸ NHRC intervenes as relief eludes endosulfan victims, *The Hindu*, January 2016, http://nhrc.nic.in/documents/nhrc_in_news/2016_01_24.pdf

¹⁵⁹ Id.

¹⁶⁰ Mukul Das, Subhash K. Khanna, Endemic Dropsy, *The National Medical Journal Of India*, Industrial Toxicology Research Centre, Uttar Pradesh, <http://archive.nmji.in/archives/Volume-11/issue-5/editorials-2.pdf>

The outbreak of epidemic dropsy in the Indian capital, New Delhi, during the rainy season of 1998 was of one of the most severe forms and had repercussions in both health and political circles. Some 2552 cases were reported and 65 deaths and more than 3000 cases of illness occurred between 5 August and 12 October, causing untold misery and economic loss to the affected families. The actual figures are likely to be much higher due to non-reporting of milder cases to the hospitals.¹⁶¹

Mustard oil adulterated with argemone oil contains two toxins called *Sanguinarine* and *DihydroSanguinarine* which induces vomiting, loose motions, bloated stomach, swelling of hands/feet, cardiac and respiratory complications. Once the heart is affected, there is little hope for recovery, experts point out.¹⁶² Pregnant Women afflicted with epidemic dropsy either abort or give birth to stillborn foetuses.¹⁶³ Sale of mustard in loose quantity was banned by a court order, to prevent more health hazards. Epidemic dropsy is a clinical state resulting from use of edible oils adulterated with *Argemone mexicana* oil. Epidemic dropsy results from ingestion of edible oil adulterated with *Argemone mexicana* (Mexican Poppy) oil.¹⁶⁴

The condition was first reported by Lyon in 1877 from Calcutta and has since occurred in other countries including the Fiji Islands, Mauritius, Madagascar, South Africa and Burma (Myanmar). In India, it has been reported from time to time from the States of West Bengal, Bihar, Orissa, Madhya Pradesh, Uttar Pradesh, Gujarat, Maharashtra and Delhi, generally sparing South Indian States where the predominant cooking fat is coconut oil.¹⁶⁵ The perusal of report of Central Food Laboratory, Calcutta, indicates that the sample was found adulterated with 'Argemone oil' which is injurious to health,' additional sessions judge Brijesh Kumar Garg said, while convicting Rakesh Kumar Arora.¹⁶⁶ In September 1998, the ban on packed mustard oil was removed after a Cabinet decision with a condition that the date of packing

¹⁶¹ B D Sharma, Sanjay Malhotra, Epidemic Dropsy In India, Post Graduate Medical Journal, Vol. 75, issue 889, <https://pmj.bmj.com/content/75/889/657>.

¹⁶² Sale of loose mustard oil banned, 2 dealers held, The Tribune, August 1998, <http://www.tribuneindia.com/1998/98aug27/head2.htm>.

¹⁶³ Mukul Das, Subhash K. Khanna, Endemic Dropsy, The National Medical Journal Of India, Industrial Toxicology Research Centre, Uttar Pradesh, <http://archive.nmji.in/archives/Volume-11/issue-5/editorials-2.pdf>.

¹⁶⁴ 1998 Delhi Oil Poisoning, REVOVLVY, <https://www.revolvy.com/main/index.php?s=1998+Delhi+oil+poisoning>.

¹⁶⁵ Supra note 82.

¹⁶⁶ Id.

should be prominently displayed.¹⁶⁷ In 1998, the Prevention of Food Adulteration Department booked one trader for adulteration of mustard oil.¹⁶⁸ After lot of struggle and long legal battle, the trader was found guilty and in 2008, was sentenced to two years imprisonment and a fine of Rs.5000 was imposed. The appalling fact is that the traders who were responsible for such tragic deaths in the Capital are only punished with imprisonment for 2 years and a fine of Rs 5000. This minimal punishment encourages the potential wrong doers in the country to take up such activities to earn profit keeping people's life at stake. Violation of such basic rights such as Right to Life should meet with stricter consequences otherwise there will be no stop in such happenings.

4.2.4 Mid-Day Meal Tragedy in Bihar

The issue of Mid- Day Meal Scheme has been in limelight due to its ill effects in the society. There has been occurrence of various cases leading to death and illness amongst the school children in India. The most tragic case was the Bihar Mid Day Meal tragedy, costing 23 lives of young children in the Chhapra district of Bihar. The idea of supplementary nutritional support to the school children in the form of a social welfare concept roots back to 1925 when the Madras Corporation launched it for the under privileged children. It was providing cooked food during that time and was introduced in a larger scale in 1960. Post independent Gujarat is the first state in India to start school lunch programme in 1984. However, it was only in 1995 that the National Programme of Nutritional Support to Primary Education (NP-NSPE) was launched at the national level. Subsequently the Mid Day Meal programme became the part of the Minimum Needs Programme in the fifth five year plan. Later on, the programme was revised and was called as Mid Day Meal Scheme in 2004. The main objective of the programme was to give boost to universalization of primary education and to impact the nutritional intake of students in primary classes.¹⁶⁹

¹⁶⁷ 1998 Delhi Oil Poisoning, Revolvly,

<https://www.revolvly.com/main/index.php?s=1998+Delhi+oil+poisoning>

¹⁶⁸ Trader gets 2 years' RI for selling adulterated mustard oil, The Times Of India, 2008, <https://timesofindia.indiatimes.com/city/delhi/Trader-gets-2-years-RI-for-selling-adulterated-mustard-oil/articleshow/3761334.cms>.

¹⁶⁹ Janmejaya Samal, Mid Day Meal Menace in Bihar: The Public Health Concerns of the Tragedy, Cloud Publications, Volume 2, Issue 1, International Journal Of Advanced Nutritional And

The cause of the food contamination is pesticide. Here the major concern is the pesticide-laced Mid Day Meal which could have been prevented with proper precautionary measures. What is lacking here is proper food surveillance measure. “The minute the children were brought in, we smelled this foul odour of organophosphorus,” said Dr. Vinod Mishra.¹⁷⁰ The Forensic Science Laboratory's (FSL) report in the Bihar's mid-day meal tragedy stated that high quantity of organophosphorus pesticide was found in the food items that the children consumed. The Forensic Science Laboratory report found Monocrotophos, an organophosphorous compound in the samples of oil from the container, food remains on the platter and mixture of rice with vegetables on utensils. It is used as a pesticide for agricultural purposes; it is very toxic to human beings and other animals.¹⁷¹

This is a sheer case of poor surveillance of the duty bearers and also illiteracy amongst the citizens. The fact that the cooking oil was kept in a bottle of pesticide implies the illiteracy and lack of awareness amongst the people. It is to be stated that the district administration must conduct awareness campaigns regarding food adulteration and its harmful effects. These campaigns should target the people from the base level like the cooks whose awareness matters the most and after that the school administration to whom the food products are supplied for the mid day meal schemes. Basic hygiene should be taught to the school children as well as the people who are engaged in preparing the meals. In India personal hygiene is an ignored issue, people in the villages have a very little information about cleaning and personal hygiene. As we are all aware of the saying that education starts at home, it is very much important to educate the people about importance of hygiene. The school children should be taught to use soap and water before consuming a meal and to properly wash their utensils.

Health Science 2014, <https://www.ceh.org.in/wp-content/uploads/2017/02/3-Mid-Day-meal-menace-Bihar.pdf>.

¹⁷⁰ Annie Banerji, Mayank Bhardwaj, Police focus on cooking oil container in Bihar mass poisoning case, Thompson Reuters, <https://in.reuters.com/article/india-bihar-children-food-poisoning/police-focus-on-cooking-oil-container-in-bihar-mass-poisoning-case-idINDEE96I09B20130720>.

¹⁷¹ Id

CHAPTER V

FOOD ADULTERATION IN INDIA AND ITS INTERNATIONAL OBLIGATIONS

It is paradoxical, but hardly surprising, that the right to food has been endorsed more often and with greater unanimity and urgency than most other human rights, while, at the same time being violated more comprehensively and systematically than probably any other right.¹⁷²

To illustrate the broad range of problems related to the human right to adequate food, the causes of malnutrition takes a place of priority as, simply providing eatables to the needy won't actually help to curb the issue of malnutrition especially because the problem of adulteration is rampant nowadays and it is a necessity to keep a check on food being provided to the people. The problem of food adulteration is not only affecting the poor but the wealthy section of population has also becomes its prey. People can suffer from hunger in many different ways. Most obvious are the shortage of protein, energy, often referred to as undernutrition, and the shortage of micronutrients, vitamins and minerals, often referred to as malnutrition.¹⁷³ The UNICEF, has built a framework in which it catches the different cause of hunger, one of such was insufficient health services or unhealthy environment.

The right to food is protected under various international human rights and humanitarian law and the correlative state obligations are equally well-established under international law.

5.1 International Instruments Securing Right to Adequate Food

The human right to adequate food is recognized and reaffirmed in a number of binding and non-binding international instruments. Among the most relevant of these are:

¹⁷² Bart F.W Wernaart, *The Enforceability of the Human Right to Adequate Food*, Wageningen Academic Publisher.

¹⁷³ Sudarshan Nimma, *Right to Food reforms and approaches*, ISBN: 81-314-1302-0, The ICFAI University Press, 2007.

- a. Universal Declaration of Human Rights (UDHR), 1947
- b. International Convention on Economic, Social And Cultural Rights, (ICESR), 1966
- c. Convention on the Elimination of All Kinds Of Discrimination Against Women, (CEDAW), 1979
- d. Convention on the Rights of Child, (CRC), 1989

Article 25 of UDHR recognizes the right to an adequate standard of living, including food.

Article 11 of ICESR recognizes the right to an adequate standard of living, including adequate food, and the fundamental right to be free from hunger as a separate right.

The committee on Economic Social and Cultural Rights has the mandate to monitor the status of realization of right to food as well as other economic, social and cultural rights. The Committee on Economic, Social and Cultural Rights (CESCR) is a body of independent experts that monitors implementation of ICESR by its States parties. The committee was established under ECOSOC Resolution 1985/17 of 28 May 1985 to carry out the monitoring functions assigned to the United Nations Economic and Social Council (ECOSOC) in part IV of the covenant. All the States party to ICESCR is obliged to submit regular reports to the Committee on how the rights are being implemented. States must report initially within two years of accepting the Covenant and thereafter every five years. The Committee examines each report and addresses its concerns and makes recommendations to the State party in the form of concluding observations. The committee also publishes its interpretation of the provisions of the Covenant, known as General Comments.

5.1.1 Important General Comments of the CESCR on the Right to Food

General comments 12(GC 12) and 15 (GC15) are very important comments made by the Committee that have contributed towards not only providing an operational definition of the right to food but have also helped in defining the scope of it.

General Comment 12 passed during the 20th session of the committee in 1999 directly refers to Article 11 of the ICESCR. According to GC 12 “the right to adequate food is realized when every man, woman and child, alone or in community with others, has physical and economic access at all times to adequate food means for its procurement’.

State Obligations under the Right to Adequate Food

a. Respect

Para.15 of the Comment reaffirms that the obligation to respect existing access to adequate food requires States parties not to take any measures that result in preventing such access. The obligation to respect requires the state, and hence all its organs and agents, to abstain from doing anything that violates the integrity of the individual or infringes on his or her freedom to use the material resources available, which best satisfy the personal basic needs.

b. Protect

The obligation to protect requires measures by the state to ensure that enterprises or individuals do not deprive the access to adequate food. The full realisation of the right to food obliges state parties to protect every human being against restrictions from third parties. State parties have to guarantee with all appropriate means the protection of the affected population.

c. Fulfill

The obligation to fulfill requires the state to take the measures necessary to ensure for each person opportunities to obtain satisfaction of those needs, according to the right

to food, which cannot be secured by personal efforts. Much more than the obligation to respect and protect, this obligation is dependent on the availability of resources. The obligation to fulfill (facilitate) means the state must proactively engage in activities intended to strengthen people's access to and utilisation of resources and means to ensure their livelihood, including food security.¹⁷⁴

General Comment 15 of the Committee pertains to the right to water. According to GC 15 “The human right to water entitles everyone to sufficient, safe, acceptable, physically accessible and affordable water for personal and domestic uses. This is specified further by noting the importance of ensuring sustainable access to water resources for agriculture to realize the right to adequate food”. The Comment further affirms that States should ensure that their actions as members of international organizations take due account of the right to water. It also says that the access to water and water facilities and services must be ensured on a non-discriminatory basis, especially for disadvantaged and marginalized groups and access to the minimum essential amount of water must be ensured at all times for everybody.”¹⁷⁵

5.1.2 CEDAW AND CRC

CEDAW recognizes the right of pregnant and lactating women to special protection with regard to adequate nutrition under article 12 and the right of rural women to equal access to land, water, credit and other services, social security and adequate living conditions under Article 14. Including India around 186 countries have ratified his convention.

Article 25 of CRC recognizes the right of children to the highest attainable standard of health and article 27 the right to an adequate standard of living which, in both articles, includes food and nutrition.

The Rome Declaration was made after the World Food Summit of 1996. This declaration reaffirms the right of everyone to have access to safe and nutritious food

¹⁷⁴ Sven Söllner, The “Breakthrough” of the Right to Food: The Meaning of General Comment No. 12 and the Voluntary Guidelines for the Interpretation of the Human Right to Food, http://www.mpil.de/files/pdf1/mpunyb_15_soellner_11.pdf

¹⁷⁵ Neetu Sharma, Right to Food for Children and the Law, Centre for Child and the Law, National Law School of India University, November 2013

consistent with the right to adequate food and the fundamental right of everyone to be free from hunger.

World Food Summit Plan of Action further reaffirms that each State should contribute to the full enjoyment of all human rights in order to achieve the objective of food security for all. India also participated in the World Food Summit of 1996 and committed itself to the plan of Action adopted at the end of it. Vienna Declaration and Programme of Action were made in 1993.¹⁷⁶

The Millennium Development Goals (MDG's) are eight goals to be achieved by 2015 that respond to the world's main developmental challenges. Three of the eight Millennium Developmental Goals are related to the Human Right to Food. These are:

Goal 1: Reduce Poverty

Goal 4: Reduce Child Mortality

Goal 5: Improve Maternal Health¹⁷⁷

Trade in food is difficult to imagine without standards. Food standards give confidence to consumers in the safety, quality and authenticity of what they eat. Together, the FAO and the WTO provide governments with the means to establish a framework to facilitate trade on the basis of internationally agreed food standards. Through the joint FAO/WHO Codex Alimentarius

Commission, governments establish science-based food standards. The work of Codex provides governments with a valuable resource to achieve public health objectives such as food safety and nutrition, while providing a basis for trade to take place.¹⁷⁸ Due to the growing concern of the consumers about the quality of the food that they are consuming and the food related health problems, Codex Alimentarius Commission was created with the objective of developing and publishing food standards in a "food code" that would protect public health and ensure fair practices in the food trade. In accordance with Codex General Principles, the publication of the

¹⁷⁶ Id.

¹⁷⁷ Id.

¹⁷⁸ Trade and food Standards, FAO, <http://www.fao.org/3/a-i7407e.pdf>.

food code is intended to guide and promote the elaboration and establishment of definitions and requirements for foods so they can be harmonized and thereby facilitate international trade. This is why Codex standards began to play a key role under the WTO Agreements.¹⁷⁹

The Codex Alimentarius Commission was established by FAO and the WHO in 1963 as part of the Joint FAO/WHO International Food Standards Programme. It is the single most important international reference point for food standards. Codex Alimentarius is a compilation of harmonized international food standards, guidelines and codes of practice. Collectively, these Codex texts aim to protect consumer health and promote fair practices in the food trade, and are developed with the joint input of independent experts and the participation of 188 members representing over 99 percent of the world's population. Codex commodity standards define the physical and chemical characteristics of nearly 200 traded products – from apples and wheat to frozen fish and bottled water.¹⁸⁰ Codex standards, guidelines and codes of practice, applied together, ensure food is safe. In the case of a milk product, for example, the task begins with the animal and how it is reared – the feed and medicines it is given – then continues with defining how the processes to collect transport and store the milk must be designed and monitored to ensure its safety. When the milk is processed, hygienic processes and sufficient checks need to be in place to ensure that harmful bacteria and other contaminants are controlled, minimized and kept within safe levels, while nutritional characteristics and the taste, look, smell and texture of the product remain intact.¹⁸¹ If the milk is to be transported and perhaps transformed into another product, then it must be tracked and labelled at each phase. If the product is for export, it will have to meet international standards and regulations, in addition to the needs of consumers.¹⁸²

In September 2008 the first cases of illnesses in infants were reported in China after drinking a particular brand of powdered infant milk formula. By 26 September 54,000 children had sought medical treatment and 12,900 were hospitalised. By December there had been 6 deaths and a total of 2,94,000 cases. The reason for this food safety

¹⁷⁹ Id.

¹⁸⁰ Id.

¹⁸¹ Id.

¹⁸² Id.

crisis had been identified as contamination of infant formula with melamine in extremely high levels, due to adulteration of the product. An FAO/WHO Ad hoc expert meeting in Canada in December 2008 established a tolerable daily intake for melamine which formed the basis for the international Codex standard adopted in 2010. Eventually trade was restored and consumer confidence re-established.¹⁸³

The CODEX Alimentarius Commission proposed a draft on Regional Code of Hygienic Practice for Street- Vended Foods on its 20th session in Delhi, India 26th-30th September 2016. Under Section 2 of the code it defines its scope as the general hygienic practices required to be followed to make the street foods safe. It will be useful for all the three major stakeholders (Vendors/ cooks/ other food handlers, consumers and the relevant authorities) who need to be involved to make street foods hygienic. This Code has been prepared for use by the Asian Countries to improve the overall safety and hygiene of street vended foods and beverage.¹⁸⁴ Under Section 4 a need for proper management is being laid down and a few guidelines are stated for the authorities to follow. They are:

- a. Be aware of food safety regulations.
- b. Monitor the hygienic status of street foods being sold.
- c. Monitor the environmental condition, water safety, garbage disposal, etc.
- d. Generate awareness, motivate and train food vendors and also customers regularly.
- e. Involve suitable and experienced experts and voluntary agencies in managing awareness generation, motivation and training of vendors and customers.¹⁸⁵

Also Section 9 talks about education and training of the vendors.

¹⁸³ Id.

¹⁸⁴ Proposed Draft Regional Code of Hygienic Practice For Street-Vended Foods, Codex Alimentarius Commission, Agenda 9, 26th-30th September, 2016, http://www.fao.org/fao-who-codexalimentarius/sh-proxy/en/?lnk=1&url=https%253A%252F%252Fworkspace.fao.org%252Fsites%252Fcodex%252FMeetings%252FCX-727-20%252FWorking%252FDocument%252Fas20_10e.pdf.

¹⁸⁵ Id.

“Every street food vendor, helper, cook or food handler shall undergo basic food hygiene training.” Viewed from a general perspective, most food borne hazards may be prevented by thorough cooking, hot handling, rapid cooling, and cold storage, avoidance of cross-contamination or combination of these. Training is to be conducted by the relevant authority or other institutions recognized or approved by the relevant authorities. Street Food Vendors should also be made aware of their responsibility to consumers.

The training material can be pictorial with less of texts. The key messages should be reinforced in short and crisp messages and also delivered in local language. The training material may be water proof so that they can refer to it/ keep it/hang it on their food vending cart/stall too.¹⁸⁶

Despite of all the rules being laid down by the international organizations it can still be concluded that the proper implementation has not been done in India. As it still can be seen that a common belief echoed that food adulteration is generally an economically motivated crime whereby the safety of food is placed at risk in a bid to improve the profit margin. There is also concern that the advancement of science creates opportunities for unethical food manufacturers to adulterate food products with non-permitted substances, and concern that some traditional food risk assessment tools are not applicable to predict and prevent food adulteration and food fraud incidents.¹⁸⁷

International trade in food commodities has escalated tremendously over the last decade, requiring harmonization of food quality and safety standards that are science-based and uniformly acceptable. Ensuring food safety along the food supply chain is a continuous challenge and needs improved collaboration and coordination across sectors and national borders. The respondents indicated that food safety standards are kept up-to-date and harmonized with international standards. The

¹⁸⁶ Id.

¹⁸⁷ Food Safety And Quality Situation In The Countries Of The Region, CODEX Alimentarius Commission, Agenda Item 3a, 26TH-30TH September 2016, http://www.fao.org/fao-who-codexalimentarius/sh-proxy/en/?lnk=1&url=https%253A%252F%252Fworkspace.fao.org%252Fsites%252Fcodex%252FMeetings%252FCX-727-20%252FWorking%252FDocument%252Fas20_03e.pdf.

need for harmonized laboratory analysis of food products as well as traceability and recall systems for food needs to be urgently addressed.¹⁸⁸

All the international instruments dealing with human rights take into account the fact that there is need for a decent standard of living. A decent standard of living is often decided upon three factors i.e. food, clothing and shelter. Though there are several added basic necessities now but we cannot deny the fact that food is the thing which keeps a human being alive and helps them to grow and without which the whole human species will perish. As all the above discussed international instruments deliberated upon the right to adequate food as a basic human right, it is implied that the term adequate food means healthy and nutritious food and also free from any kind of adulteration. Despite of all these international efforts for protecting right to food the duty bearers are caught in the web of social justice and other rights that raised their heads in competition with right to food diluting the very effect of the move.

Despite the promise made by Member states to halve hunger in accordance with the Millennium Development Goals, the shocking news is that globally, hunger is continuing to increase. The Food and Agriculture Organisation of the United Nations (FAO), in the State of Food Insecurity in the World 2004, reports that hunger has increased in 2004 to 852 million of people gravely undernourished children, women and men, up by 10 million since 2003.¹⁸⁹ Indian ranks in 100th amongst the 119 countries in Global Hunger Index in 2017 according to a report released by Washington-based International Food Policy Research Institute (IFPRI). It got slipped by three positions as compared to 97th rank in 2016 GHI.

GHI is multidimensional measure that describes state of hunger situation on regional, national and global level. It is published annually by International Food Policy Research Institute (IFPRI) since 2006. It ranks countries on a 0 to 100-point scale calculated by taking into account four indicator parameters. Zero means the best score i.e. No hunger and 100th is the worst. Four parameters applied while determining GHI index are:

¹⁸⁸ Id. at 4

¹⁸⁹ Sudarshan Nimma, Right To Food Reforms And Approaches, ICFAI University, ISBN: 81-314-1302-0.

- a. Under nourished population
- b. Child wasting
- c. Child stunting
- d. Infant Mortality rate

Here, child wasting means low weight in relation to child's height reflecting acute undernutrition and child stunting means deficiency in height in relation to age reflecting chronic undernutrition. More than 20% Indian children under the age of five are having lower weight in relation to their height and about 33% are too short in relation to their age. Despite India being world's second largest food producer, it has second highest under-nourished population in the world.¹⁹⁰

Food security in India has not been fulfilling due to corruption, lack of proper implementation of policy among society. Food adulteration is major blockage in the way of implementation of right to food and food security act. If food is adulterated then it has no value to consumer's health and well being. It should be wholesome and free from all extra and deleterious matter. The fact that right to food is only a penumbral right and not an explicit right in our constitution, the safeguard of such right has been kept aloof and as a result the violators do not face any serious consequences for the unscrupulous activities carried out.

It is important to note that the international obligations of the Government are particularly relevant for the promotion of the justifiability of the right to food in India, because the Supreme Court stated that all national courts must apply them when they decide on human rights violations. According to the Supreme Court in **Jolly George Verghese v. Bank of Cochin**¹⁹¹, national courts must interpret domestic laws in accordance with the international obligations of the Government, and it was also held in **Sheela Barse v. Secretary, Children's Aid Society**¹⁹², that they must base their decisions directly on international human rights law when it provides a better

¹⁹⁰ Global Hunger Index 2017, October 2017, <https://currentaffairs.gktoday.in/global-hunger-index-2017-india-ranks-100th-119-nations-10201748906.html>.

¹⁹¹ Jolly George Verghese v Bank of Cochin, (AIR 1980 SC 913).

¹⁹² Sheela Barse v. Secretary, Children's Aid Society AIR 1987SC 870.

protection for the victims.¹⁹³ This means that in India, national courts have to ensure that the Government respects its international obligations to respect, protect and fulfill the right to food, without any discrimination. When they are faced with a complaint from victims of violations of the right to food, national courts must interpret domestic laws in accordance with these obligations, and they should apply these obligations directly when they have to decide if the right to food is violated, and which remedies/relief are the most appropriate one for the victims.¹⁹⁴ Although the right to food is not directly justiciable, its inclusion in the Directive Principles of State Policy is important because it serves to guide the interpretation of Fundamental Rights, including the right to life protected by Article 21.¹⁹⁵

5.2 Overview of countries' constitutional recognition of the right to food

1. A total of 23 constitutions recognize the right to food explicitly as a human right. Of these, nine countries recognize the right as a separate and stand-alone right: Bolivia (art. 16), Brazil (art. 6), Ecuador (art. 13), Guyana (art. 40), Haiti (art. 22), Kenya (art. 43) and South Africa (art. 27.1). The Interim Constitution of Nepal recognizes an individual right to food sovereignty 47 (art. 18.3) and Nicaragua (art. 63) provides for the right of every person to be free from hunger.
2. Ten constitutions recognize the right to food of a specific segment of the population:

Brazil (art. 227), Colombia (art. 44), Cuba (art. 9), Guatemala (art. 51), Honduras (art. 123), Mexico (art. 4), Panama (art. 52), Paraguay (art. 54), and South Africa (art.28.1.c) have provisions regarding the right to food of children; Costa Rica (art. 82) protects the right to food of indigenous children; while South Africa (art. 35.2.e) also specifies the right to food of prisoners and detainees.

¹⁹³Gomati Desai Onskar, The Right to Adequate Food : International and Indian Scenatio, V.M Salgaocar College Of Law, <http://www.vmslaw.edu.in/the-right-to-adequate-food-international-and-indian-scenatio/>.

¹⁹⁴ Id.

¹⁹⁵ Id.

3. An additional five countries recognize the right to food explicitly as part of a human right to an adequate standard of living, quality of life, or development: Belarus (art. 21.), the Congo (art. 34.1), Malawi (art. 30.2), Moldova (art. 47.1) and Ukraine (art. 48)¹⁹⁶

¹⁹⁶ Constitutional and Legal Protection of the Right to Food around the World, FAO, <http://www.fao.org/docrep/016/ap554e/ap554e.pdf>

CHAPTER VI

CONCLUSION AND SUGGESTIONS

6.1 Conclusion

The importance of food should be asked to those individuals who are literally deprived of it for days. Who keep their hunger at stake, who for days sleeps just by drinking water. Well it is quite common in India, people here suffers from abject poverty. India has the world's largest slum situated at Mumbai known as Dharavi. The population of urban poor is increasing day by day and lot of rural population has migrated to the city for employment. These bunches of population be it rural or urban poor are the worst sufferers and are living below the poverty line deprived of their basic human right to food. Such deprived section of the society has all the right under the constitution as the other citizens have, but these people have a lot of obstacles in front to them and it outnumbers their ability to ask for such basic rights from the State. The issue related to right to food has gone global as access to adequate food is a fundamental right of human. It protects the right of all human begins to live in self-respect, free from food uncertainty, starvation and malnutrition. The right to food is a human right derived from the Universal Declaration on Human Rights (UDHR) and International Convent on Economic, Social and Cultural Rights (ICESCR). The right to food is central for the sustenance of human lives therefore it is given prominence at the global level. The 2030 Agenda also known as "Transforming our World: the 2030 Agenda for Sustainable Development" declare in its preamble that "eradicating poverty in all its forms and dimensions, including extreme poverty, is the greatest global challenge and an indispensable requirement for sustainable development. All countries and all stakeholders, acting in collaborative partnership, will implement this plan."¹⁹⁷ The main goal is to envisage a world free of poverty, hunger and disease. We can see that there is a global recognition of poverty as a hindrance to development and world peace and the whole globe is trying to get rid of it. India being a country wherein the issue of poverty and material abandonment is rampant and hundreds of

¹⁹⁷ Sustainable Development Knowledge Platform, Transforming our world: the 2030 Agenda for Sustainable Development, United Nations, <https://sustainabledevelopment.un.org/post2015/transformingourworld>

deaths occur due to malnourishment. The food that India intakes consists of harmful additives which are carcinogenic and life threatening. Despite India being the world's second largest producer of food, it is ironic that many people die of malnourishment and lack of adequate food. The food that reaches people is contaminated with harmful, synthetic food additives which makes the food poisonous and ultimately becomes life threatening. The rural population is the worst sufferers due to lack of awareness regarding food adulteration. On top of that the Indian market is going through a bad phase, duplicate products of branded goods are sold to the urban as well as to the rural population, mostly the rural consumers suffer who has no idea about the standardisation of products. The counterfeiting of products poses a very serious threat to the health of the consumers. From the above discussions it can very well be estimated that the judicially interpreted and implicitly mentioned "Right to Food" in Article 21, of our Constitution has been violated. The rampant deaths and deterioration in health of the consumers needs a proper investigation and legal recourse. It can be undeniably stated that it is time to include right to food as an explicit fundamental right in the Constitution. To secure right to food there has to be a paradigm shift from the domain of benevolence to that of a right of a citizen.¹⁹⁸ "Viewed from this perspective, the prevalence of distress-conditions threatening starvation constitutes an injury requiring the imposition of a penalty on the State. The penalty would be claimed for the affected groups as a whole rather than on the basis of individual claims."¹⁹⁹

Right to food has been made implicit by Supreme Court from Art. 21 and several other provisions of the constitution read with the Directive Principles of State Policy. Indeed, the Supreme Court has explicitly stated in various cases that the right to life should be interpreted as a right to "live with human dignity", which includes the right to food and other basic necessities. Certain directive principles such as Article 39(f) and Article 47 deals with the Right to food. The significance of the right to life in India has achieved an important footing due to the interpretation of Article 21 and bringing into its ambit the Right to food by the Judiciary in many cases. The judiciary not only has declared right to food as a fundamental right but also has laid emphasis

¹⁹⁸ B.Jyoti Kiran, Enforcing Right to Food in India, Legal Services India, http://www.legalserviceindia.com/articles/en_food.htm

¹⁹⁹ Id.

on right to consume healthy food and put a restriction on addition of toxic materials in food. As the issue of food adulteration is becoming rampant and there is no stop in it, it is high time that Right to food should be included as an explicit and specific right under part III of the Constitution of India so that the people affected from the unscrupulous activities of the adulterers are dealt with stricter consequences. India being a signatory of various International Conventions which upholds right to adequate food, must also include it explicitly in its constitution.

6.2 Suggestions

As we know public health and all around development of individual is envisaged by our Constitution. Ensuring food safety is essential for achieving it. As the practice of food adulteration has taken its ugliest form, it is necessary to curb it from its roots. The roots are in the agricultural fields wherefrom the raw material arrives to the market. The vegetables and fruits that we consume nowadays are literally covered with poisonous pesticides and all kinds of harmful chemicals. These pesticides and chemicals are sprayed in the agricultural fields in huge quantities to save the production from pests and not only that these chemicals are also used to artificially ripen the productions. Artificial ripening of fruits and vegetables has become very common these days. The main ingredient used in ripening the vegetables and fruits is calcium carbide which contains arsenic and phosphorous. This ingredient is banned by FSS Regulations 2011 but it is used in heavy amounts till date.²⁰⁰

The spraying of harmful chemicals in the agricultural field should be stopped immediately because there has been invention of few techniques through which the pests could be destroyed without using chemicals and pesticides. Dr. G.V Ramanjaneleyulu of Andhra Pradesh has pioneered the concept of 'Non Pesticidal Management' (NPM) in agriculture. Pudukula, a village in Khammam dist of Andhra Pradesh became completely pesticide free without affecting the yields. He also established the first completely organic village Yenabavi in Warangal dist and also worked with Govt. of AP in designing and establishing Community Managed Sustainable Agriculture in 1500 villages covering 200 thousand ha across 18 districts

²⁰⁰Artificially ripened fruits, adulteration/artificially-ripened-fruits

Vikaspedia,<http://vikaspedia.in/health-campaigns/beware-of-adulteration/artificially-ripened-fruits>

during 2004 to 2007-08 and the program is today implemented in over 35 lakh acres.²⁰¹ This is a commendable feat that India has achieved through scientist like Dr. G.V Ramanjaneleyulu, the idea of Non Pesticidal Management should be adopted by whole India. It will be very helpful if such kind of organic farming is taught to the rest of India's farmers via training methods and are provided with the adequate amount of incentives by the Government during initial years.

Another example of organic cultivation is the State of Sikkim; Sikkim has been able to set an example for the rest of the nation regarding organic agriculture. Sikkim has formally become India's first fully organic state after it successfully implemented organic farming practices on around 75,000 hectares of land. A formal declaration in this regard was made by Prime Minister Narendra Modi after inaugurating the Sikkim Organic Festival 2016 in Gangtok, Sikkim.²⁰²

It has been declared that organic cultivation does not involve the use of chemical pesticides and fertilizers and thus helps to maintain a harmonious balance among the various complex ecosystems. Also it has improved the quality of the soil which further improves the standards of the crops produced there. Within 1.24 million tonnes of organic production in the country around 80000 million is supplied by Sikkim alone.²⁰³

Coming to the implementation part for eradicating the sale of adulterated products, a paradigm shift can be brought by the consumers in India; this can be made possible by conducting awareness campaigns regarding the harmful effects of chemical farming and the dire need to accept the organic ways of farming. One thing that is constant in development of the economy is the fact that, economy produces or supplies what the customers demand in a state and it is heavily dependent on the consumers on what they demand because it will be reflection of the whole Indian markets. if the people of India starts demanding for pesticide less food than there is 100% possibility of turning the chemical food market into an organic one with 0% pesticides or chemicals in it.

²⁰¹ Centre for Sustainable Agriculture, CSA, <http://csa-india.org/who-we-are/staff/ramoo/>

²⁰² Sikkim becomes India's first fully organic state, January, 2016
<https://currentaffairs.gktoday.in/sikkim-indias-fully-organic-state-01201629814.html>

²⁰³ Manogya Loiwal, Sikkim becomes the first fully organic state of India, India Today, January 2017, <https://www.indiatoday.in/india/story/sikkim-becomes-the-first-fully-organic-state-of-india-304412-2016-01-18>

Sikkim's commendable feat on banning pesticides totally is what the rest of the India should follow.

Fourthly it is time for India to make 'Right to food' as a specific and explicit right in the Constitution to safeguard the citizens of India from the adulterers and saving the people from deadly diseases. The worst sufferers are the people living in Punjab. Huge usage of chemical fertilizers in the region has deteriorated the health of the people residing there. There is a train in Punjab which is commonly known as "cancer train" which head to Acharya Tulsi Regional Cancer Hospital and Research Centre in Prince Bijay Singh Memorial Hospital, in Bikaner for cancer treatments. The patients on this train are mostly small farmers from the southern districts of Punjab- Mansa, Sangrur, Bhatinda, Faridkot, Moga, Muktsar, Ferozepur and Sangrur, which together make up the Malwa region. It is in this Malwa region that scores of farmers and their families are coming to grips with cancer and numerous health problems due to the lush fields hiding a scary tale. Malwa, which is also Punjab's cotton belt, requires the use of a startling amount of pesticides. Reportedly, farmers in this region use fifteen different pesticide sprays and the unregulated and excessive use of chemical fertilizers and pesticides have resulted in farmers and their families living in a cesspool of toxicity.²⁰⁴ There is no denying the fact that the occurrence of deadly diseases in India is due to the excessive usage of dreadful pesticides and chemicals but since recent times people have started standing against such cruel practices. Hopefully the day will come soon when the whole of India will unite against food adulteration. Such a situation can only happen if Right to food is given prominence and recognition as a fundamental right in the Constitution.

²⁰⁴ Poloumi Das, The shocking tale of India's Cancer Train, Business Insider, <https://www.businessinsider.in/the-shocking-tale-of-indias-cancer-train/articleshow/52690219.cms>

BIBLIOGRAPHY

Books:

1. Sudarshan Nimma, Right To Food Reforms And Approaches, ISBN: 81-314-1302-0, The ICFAI University Press, 2007
2. Neetu Sharma, Right To Food For Children And The Law, Centre For Child And The Law, National Law School of India University, November 2013
3. Bart F.W Wernaart, The Enforceability of the Human Right to Adequate Food, Wageningen Academic Publisher

International Conventions

1. Universal Declaration of Human Rights (UDHR)
2. International Covenant on Cultural and Political Rights (ICCPR)
3. International Convention of Economic Social and Cultural Rights (ICESCR)
4. Convention on Elimination of all kinds of Discrimination Against Women(CEDAW)
5. Centre for Child Rights (CRC)
6. General Comment 12 (GC12)
7. General Comment 15 (GC15)

Journals

1. Lidija Knuth, Margret Vidar, "The Right To Food, Constitution And Legal Protection Of Right To Food Around The World", FAO of UN, Rome 2011, <http://www.fao.org/docrep/016/ap554e/ap554e.pdf>
2. Emily Andrews, Penal Law on Food Adulteration, <http://dspace.cusat.ac.in/jspui/bitstream/123456789/10991/1/Penal%20Law%20on%20Food%20Adulteration.PDF>

3. Dr. A. Rajendra Prasad, Historical Evolution of Consumer Protection and Law in India, http://www.jtexconsumerlaw.com/V11N3/JCCL_India.pdf
4. Swaroop V.R, Biochemical Aspects Of Colouring Agents Used In Foods, Shodhganga, Kerala, June 2011, http://shodhganga.inflibnet.ac.in/bitstream/10603/25952/13/13_chapter%206.pdf
5. Food Safety- A Priority, FSSAI Brochure, New Delhi, https://www.fssai.gov.in/dam/jcr:39a0ce9a-35fe-4446-ae47.../FSSAI_Brochure.pdf
6. Samji David, Efficacy Of Food Adulteration Law With Particular Reference To Kerala & Madhya Pradesh, Shodhganga, http://shodhganga.inflibnet.ac.in/bitstream/10603/50306/8/08_chapter%201.pdf
7. Tuula E. Tuormaa, The Adverse Effects of Food Additives on Health: A Review of the Literature with Special Emphasis on Childhood Hyperactivity, The Journal Of Orthomolecular Medicine <http://www.orthomolecular.org/library/jom/1994/articles/1994-v09n04-p225.shtml>
8. Kamal A. Amin and Fawzia S. Al-Shehri, Toxicological and safety assessment of tartrazine as a synthetic food additive on health biomarkers: A review, African Journal of Biotechnology, Academic Journals, ISSN 1684-5315, February 2018, <https://www.academicjournals.org/journal/AJB/article-full-text-pdf/077C95C55887>
9. Earl Gracia, Sunset Yellow FCF sources, health risks, Naturalpedia, November 2017, <https://www.naturalpedia.com/sunset-yellow-fcf-sources-health-risks.html>
10. Márcio Carochó, Maria Filomena Barreiro, Adding Molecules to Food, Pros and Cons: A Review on Synthetic and Natural Food Additives, Wiley Online Library, <https://onlinelibrary.wiley.com/doi/full/10.1111/1541-4337.12065>
11. V.Lakshmi, Food Adulteration, International Journal Of Science Inventions Today, ISSN2319-5436, http://www.ijst.com/admin/ijst_files/FOOD%20ADULTERATION_1.2.4.pdf
12. Sandeep M Nandakumar, Food Standards and the Impact of Food Safety and Standards Act, 2006, The Lex Warriar, <https://www.consumer-voice.org/food/prevention-of-food-adulteration-act-1954/>
13. Food Safety- A Priority, FSSAI Brochure, New Delhi, https://www.fssai.gov.in/dam/jcr:39a0ce9a-35fe-4446-ae47.../FSSAI_Brochure.pdf

- 14.** Food Safety and Standards (Food Import) Regulations, 2016,http://www.old.fssai.gov.in/Portals/0/Pdf/Notice_Comments__WTO_TBT_Food_Import_Regulation.pdf
- 15.** B.Jyoti Kiran, Enforcing Right to Food in India, Legal Services India, http://www.legalserviceindia.com/articles/en_food.htm
- 16.** Hemant Kumar Varun, Right to Health, Legal India, February 2011, <https://www.legalindia.com/right-to-health/>
- 17.** Justiciability of Right to Food In India in Terms of International Law, Shodhganga, http://shodhganga.inflibnet.ac.in/bitstream/10603/29218/13/13_chapter%205.pdf
- 18.** Perspectives, Law Mantra Think Beyond Others, I.S.S.N 2321-6417, <http://journal.lawmantra.co.in/wp-content/uploads/2016/02/8.pdf>
- 19.** Dr. Rashmi Ranjan Mishra, Ms. Miatreyee Chakrabarty, Right to Safe Food: Constitutional Perspectives, Law Mantra Think Beyond Others, I.S.S.N 2321-6417, <http://journal.lawmantra.co.in/wp-content/uploads/2016/02/8.pdf>
- 20.** Report of 5th Joint Review Mission Odisha, Mid Day Meal Scheme, Government Of India Ministry Of Human Resource Development, Department Of School Education & Literacy,http://mdm.nic.in/Files/Review/Fifth_Review/Odisha/JRM_Report_Odisha_MDM.pdf
- 21.** Savvy Soumya Mishra, Sapan Joshi, Tracking Decades Long Endosulfan Tragedy In Kerala, Down To Earth, January 2017, <http://www.downtoearth.org.in/coverage/tracking-decades-long-endosulfan-tragedy-in-kerala-56788>
- 22.** Mukul Das, Subhash K. Khanna, Endemic Dropsy, The National Medical Journal Of India, Industrial Toxicology Research Centre, Uttar Pradesh, <http://archive.nmji.in/archives/Volume-11/issue-5/editorials-2.pdf>
- 23.** B D Sharma, Sanjay Malhotra, Epidemic Dropsy In India, Post Graduate Medical Journal, Vol. 75, issue 889, <https://pmj.bmj.com/content/75/889/657>
- 24.** Janmejaya Samal, Mid Day Meal Menace in Bihar: The Public Health Concerns of the Tragedy, Cloud Publications, Volume 2, Issue 1, International Journal Of Advanced Nutritional And Health Science 2014, <https://www.ceh.org.in/wp-content/uploads/2017/02/3-Mid-Day-meal-menace-Bihar.pdf>

- 25.** Proposed Draft Regional Code Of Hygienic Practice For Street-Vended Foods, Codex Alimentarius Commission, Agenda 9, 26th-30th September, 2016,
http://www.fao.org/fao-who-codexalimentarius/sh-proxy/en/?lnk=1&url=https%253A%252F%252Fworkspace.fao.org%252Fsites%252Fcodex%252FMeetings%252FCX-727-20%252FWorking%2BDocument%252Fas20_10e.pdf
- 26.** Food Safety And Quality Situation In The Countries Of The Region, Codex Alimentarius Commission, Agenda Item 3a, 26TH-30TH September 2016,
http://www.fao.org/fao-who-codexalimentarius/sh-proxy/en/?lnk=1&url=https%253A%252F%252Fworkspace.fao.org%252Fsites%252Fcodex%252FMeetings%252FCX-727-20%252FWorking%2BDocument%252Fas20_03e.pdf
- 27.** Sustainable Development Knowledge Platform, Transforming our world: the 2030 Agenda for Sustainable Development, United Nations,
<https://sustainabledevelopment.un.org/post2015/transformingourworld>

Web Sources

1. Poloumi Das, The shocking tale of India's Cancer Train, Business Insider, <https://www.businessinsider.in/the-shocking-tale-of-indias-cancer-train/articleshow/52690219.cms>
2. V.T Padmanabhan, Continuing Disaster Of Endosulfan In Kasargod And Kannur Districts Of Kerala, <https://endosulfan.wordpress.com/2011/02/01/disaster-of-endosulfan-in-kasargod-and-kannur/>
3. Gomati Desai Onskar, The Right to Adequate Food : International and Indian Scenatio, V.M Salgaocar College Of Law, <http://www.vmslaw.edu.in/the-right-to-adequate-food-international-and-indian-scenatio/>
4. Artificially ripened fruits, Vikaspedia, <http://vikaspedia.in/health/health-campaigns/beware-of-adulteration/artificially-ripened-fruits>
5. Centre for Sustainable Agriculture, CSA, <http://csa-india.org/who-we-are/staff/ramoo/>
6. Global Hunger Index 2017, October 2017, <https://currentaffairs.gktoday.in/global-hunger-index-2017-india-ranks-100th-119-nations-10201748906.html>,
7. Sustainable Development Knowledge Platform, Transforming our world: the 2030 Agenda for Sustainable Development, United Nations, <https://sustainabledevelopment.un.org/post2015/transformingourworld>
8. Zero Hunger, http://www.rec.org/documents/news/SEEDLING_Call_Annex_G_.pdf
9. Food Safety and Standards Act Comes into Force, News18, <https://www.news18.com/news/india/food-safety-and-standards-act-comes-into-force-390043.html>
10. Food Safety and Standards Act, 2006, Arthapedia, http://www.arthapedia.in/index.php?title=Food_Safety_and_Standards_Act,_2006

11. What are the laws regulating the Food Industry in India, I Pleadings,
<https://blog.ipleaders.in/laws-regulating-food-industry-india/>
12. Objective of Food Safety and Standards Act, January 2013, Food Safety Helpline.Com <https://foodsafetyhelpline.com/2013/01/objective-of-food-safety-and-standards-act/>
13. Chapter one, Shodhganga,
http://shodhganga.inflibnet.ac.in/bitstream/10603/25952/8/08_chapter%201.pdf
14. IS 1694: Tartrazine Food Grade, Bureau Of Indian Standards,
https://archive.org/stream/gov.in.is.1694.1994/is.1694.1994_djvu.txt
15. Becky Bill, Food Dyes: Harmless or Harmful? Health Line, January 2017,
<https://www.healthline.com/nutrition/food-dyes>
16. NHRC intervenes as relief eludes endosulfan victims, The Hindu, January 2016,
http://nhrc.nic.in/documents/nhrc_in_news/2016_01_24.pdf
17. Sunset Yellow (E110) – FD&C Yellow 6, Food Additives,
<http://www.foodadditivesworld.com/articles/sunset-yellow.html>
18. Evaluation of Certain Food Additives, WHO Technical Report Series,
<http://apps.who.int/iris/bitstream/handle/10665/259483/9789241210164-eng.pdf;jsessionid=B3277387DEC4E374BEFD548A96C7EB64?sequence=1>
19. The additives which could be banned, The Telegraph, 13th November,
<https://www.telegraph.co.uk/news/health/news/3453522/The-additives-which-could-be-banned.html>,
20. Brilliant Blue FCF (FD&C Blue No. 1), International Association Of Colour Manufacturers,
<https://www.iacmcolor.org/safety-of-color/safety-synthetic-certified-colors/blue-1/>
21. Food Additives That Are Extremely Dangerous, Trusted Health Products,
<https://www.trustedhealthproducts.com/blog/natural-health-news/2-food-additives-that-are-extremely-dangerous>
22. Pratiksha Rajkumar, Food safety dept to crack down on hotels, eateries using artificial food colours, Times Of India,
<https://timesofindia.indiatimes.com/city/coimbatore/Food-safety-dept-to-crack-down-on-hotels-eateries-using-artificial-food-colours/articleshow/48981435.cms>

23. Mandy Oaklander, A New Fear About Food Dyes, Prevention, January 2013
<https://www.prevention.com/life/a20450128/blue-food-dyes-absorbed-into-bloodstream/>
24. Artificially ripened fruits, Vikaspedia, <http://vikaspedia.in/health/health-campaigns/beware-of-adulteration/artificially-ripened-fruits>
25. Sugandha Mukherjee, 'Buying mineral water? There's a 30% chance it will be contaminated', Business Standards, March 2018, https://www.business-standard.com/article/current-affairs/three-out-of-ten-packaged-drinking-water-bottles-in-india-contaminated-118031300682_1.html
26. Annie Banerji, Mayank Bhardwaj, " Police focus on cooking oil container in Bihar mass poisoning case", Thompson Reuters, <https://in.reuters.com/article/india-bihar-children-food-poisoning/police-focus-on-cooking-oil-container-in-bihar-mass-poisoning-case-idINDEE96I09B20130720>
27. Sale of loose mustard oil banned, 2 dealers held, The Tribune, August 1998, <http://www.tribuneindia.com/1998/98aug27/head2.htm>
28. Trader gets 2 years' RI for selling adulterated mustard oil, The Times Of India, 2008, <https://timesofindia.indiatimes.com/city/delhi/Trader-gets-2-years-RI-for-selling-adulterated-mustard-oil/articleshow/3761334.cms>
29. Michelle Simmons, Tartrazine — toxicity, side effects, diseases and environmental impacts, Chemical News, <http://www.chemicals.news/2017-12-21-tartrazine-toxicity-side-effects-diseases-and-environmental-impacts.html>
30. Debarati Mukherjee, Food Adulteration a rising problem in India, <http://www.dw.com/en/food-adulteration-a-rising-problem-in-india/a-5958444>
31. Paul Scicluna, Ice Cream Or Ice Chemicals- This Will Shock You! Global Health Renegade, <http://globalhealthrenegade.com/articles/2013/10/25/ice-cream-or-ice-chemicals-this-will-shock-you>
32. CAG raps FSSAI over licensing process, poor food testing labs, The Hindu, Business Line, <https://www.thehindubusinessline.com/companies/cag-raps-fssai-over-licensing-process-poor-food-testing-labs/article9996282.ece>

- 33.** Shephali Bhatt, Why ‘Make in India’ When you ‘Fake in India’, The Economic Times, <https://economictimes.indiatimes.com/magazines/brand-equity/why-make-in-india-when-you-fake-in-india/articleshow/52088848.cms>
- 34.** Farzand Ahmed, Orissa: Drought, famine force women in Kalahandi to abandon and sell their children, December 2013, <https://www.indiatoday.in/magazine/special-report/story/19850731-orissa-drought-famine-force-women-in-kalahandi-to-abandon-and-sell-their-children-770267-2013-12-27>
- 35.** Basudev Mahapatra, Did Dana Majhi's wife die of hunger, malnourishment? Narada News, <http://naradanews.com/2016/08/plight-of-dana-majhi-blame-failure-of-govt-schemes-and-programmes/>
- 36.** Odisha: Over 150 students fall ill after consuming mid-day meal, Asia News International, Sep 15, 2017 <http://www.freepressjournal.in/india/odisha-over-150-students-fall-ill-after-consuming-mid-day-meal/1137911>
- 37.** WION Web Team, Over 200 primary school students in Odisha fall ill after food-poisoning, WION, <http://www.wionews.com/india-news/over-200-primary-school-students-in-odisha-fall-ill-of-food-poisoning-in-two-days-20256>
- 38.** Dr. Adithya P, India’s Endosulfan Disaster, <http://www.indiaenvironmentportal.org.in/files/IndiaEndosulfan.pdf>
- 39.** Sven Söllner, The Breakthrough of the Right to Food: The Meaning of General Comment No. 12 and the Voluntary Guidelines for the Interpretation of the Human Right to Food, http://www.mpil.de/files/pdf1/mpunyb_15_soellner_11.pdf