# INTERNATIONAL FOOD LAW: HISTORICAL DEVELOPMENT AND NEED OF COMPREHENSIVE LAW

***Sadiya S. Silvee & Ximei Wu****

**ABSTRACT**

*Zero hunger is one of the Sustainable Development goals that the global leaders need to accomplish by 2030. However, the World Economic Forum (WEF) in its Global Risk Report 2020 stated, "food insecurity" will remain as a "societal risk" for the next 10 years and the number of hungry people worldwide can exceed 840 million by 2030. Despite 100 years since the emergence of the concept "food security" and the development of numbers of international guidelines and enactments, "food insecurity" is still a persisting global issue. In this context, this paper examines 100 years of the concept "food security" from which the contemporary international food law has developed. In carrying out this qualitative research, the paper argues the contemporary international food instruments mostly lacks legal significance and addresses food trade, food safety and development. Hence, the contemporary international food law has failed to acknowledge "food security" issues and provide a systematic conceptualization and normative endeavour along with ethical, humanitarian, environmental, and social dimensions. A comprehensive international food law is essential to build a global food system to resolve the global food security issues, and food governance.*

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**KEYWORDS:** *food governance, global food system, food security, food rights, food safety, food standard*

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## I. INTRODUCTION

International Food Law is an evolving branch of international law whose existence has become definite overtime since the notion food insecurity, food security and food safety emerged and were acknowledged in the international arena. Many international food guidelines and agreements emerged but without the intention of forming a comprehensive international food law. However, food insecurity remains a persistent global issue. The World Economic Forum (hereinafter "WEF") in its *Global Risk Report 2020* has acknowledged "food insecurity" as a "societal risk" for the next ten years. According to reports, since 2014, the number of hungry people worldwide has been gradually rising. If this trend continues, the number will exceed 840 million by 2030, having risen from 690 million.[1] Which means, instead of achieving Sustainable Development by 2030, zero hunger and good health, we are at the risk of facing severe "food insecurity."

To analyse international food law specific notions like food insecurity, food security, food safety, food aid and assistance, right to food, food governance and food sovereignty needs to be focused upon. Mostly, because the international food law is circulating and evolving around these interconnected notions. For instance, it is recommended that "food insecurity" is seen as the antithesis of the notion "food security." Similarly "food safety" is an integral part of "food security." However, food safety is usually treated as a trade issue.[2] The Committee on World Food Security (hereinafter "CFS") in 2009 illustrating the concept of "food security" stated, "[F]ood security exists when all people, at all times, have physical, social and economic access to sufficient, *safe and nutritious food* to meet their dietary needs and food preferences for an active and healthy life." Similar to the illustration of "food security" by the CFS, many international organisations, such as the Food and Agriculture Organization (hereinafter "FAO"), and the Codex Alimentarius (hereinafter "CODEX"), mandated to work in the field of food security and safety, have come forward with guidelines, policy declarations and codes of conduct to set standards of conduct. Although these international instruments together contribute to the formation of international food law, they are neither strictly binding in nature nor completely lacking legal significance. Hence, to analyse

[1] FOOD & AGRIC. ORG. OF THE UNITED NATIONS [hereinafter FAO] ET AL., THE STATE OF FOOD SECURITY AND NUTRITION IN THE WORLD 2020: TRANSFORMING FOOD SYSTEMS FOR AFFORDABLE HEALTHY DIETS 8 (2020), http://www.fao.org/3/ca9692en/ca9692en.pdf.

[2] *See generally* Alan O. Sykes, *Domestic Regulation, Sovereignty, and Scientific Evidence Requirements: A Pessimistic View*, 3(2) CHI. J. INT'L L. 353 (2002).

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international food law, scrutinization had to begin from the notion "food security" along with the international instruments led by the notion.

Considering the contemporary international instruments focusing on food, promoted by the international organisations, this research study aims to explore how the international food law emerged; second, its development over time and the contribution of the international organisations in its development; thirdly, can the present international instruments be collectively called international food law; and lastly, whether there is a need of a comprehensive international food law. This qualitative research study contributes largely in the academic arena and also for further research by offering concrete steps to build a comprehensive international food law and framework. In conducting this qualitative research which is designed naturalistically, the study utilized both primary data, such as enactments, policies, research reports, and so forth, and secondary data, such as journal articles, books and so forth. However, this study encountered some limitations while performing descriptive and comparative critical data analysis. One of the major limitations was access to critical academic resources and the fact that academic research in this field is still evolving.

The paper is divided into five major parts including introduction and conclusion. The discussion begins with a brief history of the international food law portraying how gradually this branch of international law is developing and evolving. In the later sections of the paper, several major international instruments are analysed to understand the main focus of the instruments. Furthermore, analysing the need for international food law, the paper attempts to recommend a basic structure for international food law. Finally, the findings of the study are discussed and summarised in the conclusion.

## II. HISTORY OF THE INTERNATIONAL FOOD LAW

To provide a brief history of the international food law, the study has to begin with analysing the development and evolution in perceptions of food security which shaped the contemporary international food law over 100 years within 5 periods, from 1920 to 2020.

### *A. Post First World War and League of Nations (1920-1945): Emergence of Food Insecurity in the International Arena*

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The notion of food insecurity is not an emerging one; it has a long history.[3] Addressing food insecurity, Dinah Shelton noted in "*The Duty to Assist Famine Victims*," "[T]he phenomena of hunger and famine have been recorded throughout history,"[4] which caused increase in malnutrition. Analysing the early centuries it is observed that beside the phenomena of hunger, famine, and malnutrition, food crimes such as adulteration, falsification of weight specification, and so forth, also hold a long history.[5] Hence, a significant number of food safety laws were implemented in early centuries at different times[6], such as the Assize of Bread regulation in 1646, the Treatise on Adulterations of Food and Culinary Poisons in 1820, the Victorian Public Food Act in 1854, the UK Adulteration of Food and Drink Act 1860, the Pure Food and Drug Act in 1906, the Federal Meat Inspection Act in 1906, the Bengal Food Adulteration Act 1919, and so forth. So, the notion of food insecurity, gradually developed with the phenomenon of chronic food insecurities, malnutrition and food safety.[7]

After the First World War the extent to which the food insecurity phenomenon affected millions of people became perceptible, but neglecting the urge towards a global food system, the League of Nations perceived the imperative of a global health system to eradicate malnutrition and created the Health Organization of the League of Nations in 1922. Nevertheless, the issue of food insecurity remained a camouflaged global issue, as it was considered mostly at country or regional levels. But soon the issue of food insecurity became perceptible when the world experienced a global economic crisis in 1929 which had an impact on the then free trade policy and international trade.[8] The global economic crisis made the connection between trade and food insecurity discernible when the food-importing countries raised their tariff barriers in the name of protecting domestic industries, leading to a 60% drop in wheat imports, which eventually collapsed trade[9] and increased the price of food; resulting in affecting access to food, affordability of food, and availability of food. This

[3] *See* Pierre Spitz, *The Right to Food in Historical Perspective*, 10(4) FOOD POL'Y 306, 306-16 (1985).
[4] Dinah Shelton, *The Duty to Assist Famine Victims*, 70 IOWA L. REV. 1309, 1309 (1985).
[5] Hans-Ulrich Grimm, *Information-Domination in the European Food Industry: Focus on Germany*, *in* INTERNATIONAL FOOD LAW AND POLICY 3, 7-9 (Gabriel Steier & Kiran K. Patel eds., 2016).
[6] Peter Barton Hutt & Peter Barton Hutt II, *A History of Government Regulation of Adulteration and Misbranding of Food*, 39 FOOD DRUG COSM. L.J. 2, 2 (1984). *See generally* GUSTAVUS ADOLPHUS WEBER, THE FOOD, DRUG AND INSECTICIDE ADMINISTRATION: ITS HISTORY, ACTIVITIES, AND ORGANIZATION (1928).
[7] Baris Karapinar, *Introduction: Food Crises and the WTO*, *in* FOOD CRISES AND THE WTO: WORLD TRADE FORUM 1, 1-2 (Baris Karapinar& Christian Häberli eds., 2010).
[8] Hou Ruoshi, *History Shows Trade Protectionism Is Short-lived*, CHINA PLUS (Aug. 22, 2018, 3:48 PM), http://chinaplus.cri.cn/opinion/opedblog/23/20180822/173553.html.
[9] *FAO 70th Anniversary*, FAO, http://www.fao.org/70/1945-55/en/ (last visited July 6, 2021).

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phenomenon resulted in a legal framework by implementation of food enactments. Consequently, countries like the United States (hereinafter "US"), India and South Africa adopted enactments such as the Agricultural Adjustment Act 1933, the Federal Food, Drug, and Cosmetics Act of 1938, The Bombay Prevention of Food Adulteration Act 1925, the Food, Drugs and Disinfectants Act in 1929, and the Public Health Act in 1919.[10] These food enactments where implemented aimed to regulate the production, supply, distribution, food safety and food trade.

In early 1935, the Health Committee of the Health Organization submitted a report titled *Nutrition and Public Health*, the first account of the extent of hunger and malnutrition in the world. The report introduced the concept of world food insecurity into the international political arena.[11] According to the report, "there was an acute food shortage in the poor countries."[12] However, the report could not make that impact until the relationship of food with health, economics and politics, was proposed by Stanley Bruce in the Assembly of the League of Nations.[13] This multidisciplinary aspect of food insecurity roused considerable enthusiasm in the international political arena, as the governments were engaged in resolving political difficulties related to the agricultural sector and economic sector without considering and accepting the benefits of cooperation. Stanley Bruce's multidisciplinary aspect of food insecurity had induced the understanding that to resolve the food insecurity we need to build food security which can be achieved through cooperation because it will give economic and political benefits. So, the governments gave a chance to cooperation for food security, mostly for economic and political benefits. However, neither the notion of food security, nor the notion of food insecurity, was defined by the Health Committee of the Health Organization, although about 200 definitions in published writings were available in literature.[14]

Consequent to Stanley Bruce's multidisciplinary aspect, the "International Standard of Food Requirements" was agreed, the beginning of coordinated nutrition law, which gave an indication of the amount of food needed throughout the world. A "mixed committee," as a leading authority on nutrition, agriculture and economics was also created to

[10] *See generally* Berndvan der Meulen, *Development of Food Legislation Around the World*, *in* ENSURING GLOBAL FOOD SAFETY: EXPLORING GLOBAL HARMONIZATION 5, 5-69 (Christine E. Boisrobert et al. eds., 2010).
[11] JOHN BOYD ORR & DAVID LUBBOCK, THE WHITE MAN'S DILEMMA 12 (1953). *See also* LORD BOYD ORR, AS I RECALL: THE 1880'S TO THE 1960'S 118-20 (1966).
[12] D. JOHN SHAW, WORLD FOOD SECURITY: A HISTORY SINCE 1945, at 6 (2007).
[13] *Id.* at 7.
[14] Simon Maxwell & Marisol Smith, *Household Food Security: A Conceptual Review*, *in* HOUSEHOLD FOOD SECURITY: CONCEPTS, INDICATORS, MEASUREMENTS: A TECHNICAL REVIEW 1, 18-50 (Simon Maxwell & Timothy R. Frankenberger eds., 1992).

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examine and make recommendations on every aspect of the food problem, including production, transport and trade.[15] The committee's first report, "the Relation of Health, Agriculture and Economic Policy" in 1937, presented the recent trends in food habits throughout the world, with particular reference to consumption, prices, the relation of income and education to nutrition, and the problem of agricultural adaptation to nutritional requirements, along with the numerous recommendations for future progress. It will not be imprecise to assert that during the period of 1920-1945, gradually, food insecurity was considered as a global issue and progressively its the nexus with trade, public health and economy was comprehended.

Hence, in 1938, twenty-two nations, including the US and Russia, met in conference to arrange how the world food policy could be carried out to prevent malnutrition and maintain good health.[16] However, the outbreak of the Second World War put a hold on this optimistic development. Nevertheless, United Nations Conference on Food and Agriculture in 1943 with the participation of forty-four governments created hopes as the Conference decided on the establishment of a permanent organization in the field of food and agriculture.

### *B. Post Second World War and United Nations (1945-1970): Shift Towards Food Security*

In the post Second World War period, a paradigm shift can be noticed. Emphasis was given more to the notion of food security than food insecurity along with building of a food aid and food assistance system. FAO was established as a specialized agency of the United Nations (hereinafter "UN") under *General Assembly (G/A) Resolution 50 (I)*[17] in 1945 aiming to ensure freedom from hunger.[18] Later the World Health Organization (hereinafter "WHO") was created in 1948 "to improved public health conditions, epidemic control, quarantine measures, and drug standardization."[19] Afterwards the World Food Programme was also created in 1961 "to achieve Zero Hunger by facilitating the transfer of knowledge, skills, resources and technical know-how, as well as through policy,

[15] SHAW, *supra* note 12, at 7.
[16] *See* George-André Simon, *Food Security: Definition, Four Dimensions*, HISTORY 12 (Mar., 2012) (unpublished manuscript), http://www.fao.org/fileadmin/templates/ERP/uni/F4D.pdf.
[17] G.A. Res. 50(I) (Dec. 14, 1946).
[18] Conference of FAO, *Constitution of the Food and Agriculture Organization of the United Nations*, pmbl. (1945), http://www.fao.org/3/x5584e/x5584e0i.htm.
[19] *World Health Organization: UN Public Health Agency*, BRITANNICA, https://www.britannica.com/topic/World-Health-Organization (last visited July 6, 2021).

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advocacy and regional collective action, to strengthen national capacities."[20]

After conducting many researches and performing on-the-spot investigations, such as Uses of Agricultural Surpluses to Finance Economic Development in Under-Developed Countries: A Pilot Study in India Commodity,[21] Study of an Emergency Food Reserve (Resolution 16/51, Report of Working Party on an Emergency Famine Reserve (CCP 52/55), and so forth, similar to the "Relation of Health, Agriculture and Economic Policy" prepared by the mixed committee in 1937, the FAO has stated "poverty lay at the root cause of hunger and malnutrition."[22] This means economic instability is the core cause of hunger and malnutrition. This gave the notion of food security an economic nature, and disseminated a camouflaged message that is—"people are suffering from hunger and malnutrition, because they are unable to afford adequate food. And economic development and market stability is the solution to address it." The notion received a new dimension, from food as biological necessity to food as a commodity and essence for economic growth. Hence, later emphasis was given to producing surplus food for cross-border trade.

In 1954, with the view that surplus commodities can be utilized for the promotion of economic development, special welfare distribution and emergency relief, the FAO came up with the "*FAO Principles of Surplus Disposal and Guiding Lines* (hereinafter "*FAO Principles*")." Predominantly, *FAO Principles* was the first guideline that impliedly encouraged international food trade by emboldening its members for "the constructive use of surplus agricultural commodities and at the same time safeguarding the interest of commercial exporters and local producers."[23] Hence, *FAO Principles* stressed the need of full intergovernmental consultations to ensure the use of surpluses in aid of economic development and with proper safeguards to prevent disturbance of markets or the normal pattern of trade. Although *FAO Principles* encouraged international food trade, under the General Agreement on Tariffs and Trade (hereinafter "GATT 1947"), the members were also given the right to impose import and export restrictions on food stuffs on various grounds under Article XI.

Furthermore, to deal with the impact of food assistance programmes on commercial trade and on agricultural production, and to govern the operations under these Principles, the FAO Committee established the

[20] *See Who We Are*, WFP, https://www.wfp.org/who-we-are (last visited July 6, 2021).
[21] FAO, USES OF AGRICULTURAL SURPLUSES TO FINANCE ECONOMIC DEVELOPMENT IN UNDER-DEVELOPED COUNTRIES: A PILOT STUDY IN INDIA (1955).
[22] *FAO 70th Anniversary*, *supra* note 9.
[23] FAO, REPORTING PROCEDURES AND CONSULTATIVE OBLIGATIONS UNDER THE FAO PRINCIPLES OF SURPLUS DISPOSAL iii (2001), http://www.fao.org/3/y1727e/y1727e.pdf.

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*Consultative Subcommittee on Surplus Disposal* (hereinafter "CSSD") at the same time.[24] The diversification of the food trade was not only apprehended by the international organisations and manufacturers: governments of different nations had grasped how a strong national food industry can significantly contribute to food security but also to economic growth. Hence, the governments of the conventional food exporter countries along with the other countries have put in efforts to strengthen national food industries, in terms of production and export, by working on their food law.

By 1967, a number of resolutions of the UN, its specialized agencies, and other intergovernmental bodies urged the negotiation of commodity agreements and five successful international commodity agreements had been concluded for wheat, sugar, coffee, tin and olive oil, such as the International Wheat Agreement (1962) and the International Grains Agreement (1967)[25] Analysing these international commodity agreements, three features of these agreements have been observed—Multilateral contract agreements, International buffer stock and Export restriction agreements. The main feature of multilateral contract agreements was that "it contained an obligation on importers or exporters to buy and sell certain guaranteed quantities at stipulated maximum or minimum prices whenever the free-market price reached or exceeded those limits."[26] On the other hand, international buffer stock agreements "aimed to stabilize prices by an obligation to buy whenever the world price fell below a certain minimum level and to sell when the price rose above a certain maximum."[27] And export restriction agreements aimed to secure some degree of stability of prices by restricting exports at a certain degree.[28] So these international agreements focused on trade and market stability more than peoples' right to adequate food, right to have safe food, right to food, and food standards. Gradually international food trade increased, which seemed to be standing in good stead to ensure food affordability and availability. However, its volte-face was unforeseen. With the gradual increase in international food trade, many other persisting issues relevant to food trade gained concern, such as food crime.

[24] At the 410th meeting (October 1995), members agreed to change the acronym of the Subcommittee from "CSD" to "CSSD" to avoid conflict with a sister organization in the United Nations family.
[25] *See generally* Alton D. Law, *International Commodity Agreements: Policies and Problems*, 4 J. ECON. ISSUES 87 (1970); Christopher L. Gilbert, *International Commodity Agreements: An Obituary Notice*, 24(1) WORLD DEV. 1 (1996).
[26] SHAW, *supra* note 12, at 68.
[27] *Id.*
[28] *Id.* at 69.

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Food crime, affecting food safety, was not a new category of crime that emerged in the period. In the early centuries adulteration, falsification of weight specification, additions of poisonous substances like lead and aluminum were considered as violations of food safety, fraud against citizens, and risk to public health,[29] resulting in punishment.[30] Addressing this old concern to protect the health of the consumer and, at the same time, to ensure fair practices in food trade, the FAO jointly with the WHO established the "*Codex Alimentarius Commission* (hereinafter "CAC")" in 1963 under the *Resolution No. 12/61* with the vision "to create food safety and quality standards to protect everyone everywhere."[31] Since CAC has started working, it has elaborated a "number of guidelines for developing a food safety system,"[32] which required implementation in the law to get the binding effect.

Alongside these strategical and procedural initiatives, human rights aspects of food security were also materialised. The Universal Declaration of Human Rights (hereinafter "UDHR") acknowledged the right to have a standard of life which included food. But the declaration hindered itself from acknowledging the right to food like it acknowledged the right to education and right to life. Later in 1966, the correlation between eradication of hunger and economic development was promoted by the International Covenant on Economic, Social and Cultural Rights (hereinafter "ICESCR"), which at present is considered as the international document that acknowledged the "right to food." However, ICESCR addresses the right to adequate food and the right to be free from hunger in terms of methods of production, conservation and distribution, but does not involve the right to food.

In the period of 1945-1970, the global community shifted from the notion food insecurity to food security. This shift towards food security particularly shifted the approach towards economy and trade; making a direct nexus between food and economic development through international trade of food. Furthermore, other notions like right to food, food safety, food standard, and food aid and food assistance evolved in this period. But notions like right to food, food standard, and food safety did not gain much momentum, whereas food aid and food assistance grasped

[29] BEE WILSON, SWINDLED: THE DARK HISTORY OF FOOD FRAUD, FROM CANDY TO COUNTERFEIT COFFEE8 (2008).
[30] Grimm, *supra* note 5.
[31] FAO & WORLD HEALTH ORG. [hereinafter WHO], CODEX STRATEGIC PLAN 2020-2025, at 7 (2019), http://www.fao.org/3/ca5645en/CA5645EN.pdf.
[32] FAO & WHO, CODEX ALIMENTARIUS (SUPPLEMENT TO VOLUME 1B): GENERAL REQUIREMENTS (FOOD HYGIENE) 24-28 (1997), www.fao.org/input/download/standards/23/CXP_001e.pdf. *See also Standards*, CODEX ALIMENTARIUS, http://www.fao.org/fao-who-codexalimentarius/codex-texts/list-standards/en/ (last visited July 6, 2021).

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attention in the period. Hence, a resolution was passed by the UN General Assembly in this regard,[33] under which the FAO was requested to conduct an in-depth study of the then popular concept of a "world food reserve"[34] to determine the feasibility of establishing a world food reserve within the framework of the UN, and the feasibility of such a reserve acting as an institution which could contribute to relieve emergency situations and to counteract excessive price fluctuations.

So, in this period there was an attempt to materialise a legal framework. And the challenges of the period were to build cooperation, harmonization in food standards and policy, maintain food safety and quality standards, and facilitate international food trade to ensure market stability, food availability, accessibility and affordability, and food aid and assistance services.

### *C. World Food Crisis (1970-1990): Change in Approach—and Opportunity*

At the beginning of the1970s the world witnessed the worst food crisis caused by natural disaster and climate change which created an impact on food production and food availability. This situation transformed many countries to food importer and many to food exporter. So the 1970s world food crisis was a shift in paradigm which affected the developing countries more but had an impact on the developed countries as well by creating new trading opportunities. The 1970s world food crisis created much more concern in the international political arena by "demonstrating how unpredictable and fragile the world food security situation was, and how quickly it could change."[35] Consequently, the UN World Food Conference of 1974 was organised, which created the Committee on World Food Security and appointed the World Food Council.

The main purpose of the conference was to endorse the main elements of the proposed world food strategy,[36] and understand how the strategy as a whole and its various parts should be implemented, and how additional resources required for its implementation should be mobilized. The conference concluded with adoption of the *United Nations General Assembly Resolution 3348 (XXIX),* which stated, "[e]very man, woman and child have the inalienable right to be free from hunger and malnutrition in

[33] G.A. Res. 827(IX) (Dec. 11, 1954).
[34] SHAW, *supra* note 12, at 37.
[35] World Food Conference, *Assessment of the World Food Situation, Present and Future*, U.N. Doc. E/CONF.65/PREP/12 (Aug. 21, 1974). *See also* World Food Conference, *The World Food Problem: Proposals for National and International Action*, at 4, U.N. Doc. E/CONF.65/PREP/L.10 (Sept. 30, 1974).
[36] *See* Colin Tudge, *Capitlaism, Poverty and Hunger*, 13 (1) FOOD POL'Y 262, 262 (1976).

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order to develop fully and maintain their physical and mental faculties."[37] Moreover, the conference concluded promising to increase food production, especially in the developing countries, improve consumption and distribution of food, and build a system of food security.

Analysing the outcome of the UN World Food Conference, it is observed that the approach towards food security again shifted and this time it created a nexus between economy, trade, eradication of hunger and poverty. By creating a correlation between each other it disseminated a camouflage message that is, "hunger is a global issue caused because of economic instability, and economic development is the solution which can be brought by increasing food production and international food trade." Hence, the "Universal Declaration on the Eradication of Hunger and Malnutrition" clearly states, "[F]ood problems must be tackled during the preparation and implementation of national plans and programmes for economic and social development, with emphasis on their humanitarian aspects."[38] Since the conference concluded a number of resolutions and reports have been adopted that addressed economic cooperation and economic development, coupled with hunger and poverty.

Increasing economic cooperation increased food trade which transformed the pattern of food production and consumption worldwide[39] and raised serious concerns regarding food safety and food price. Many researchers, including international organisations, have seen food safety separate from food security. The concerns regarding food safety at that time included food hazards such as chemical contaminants, quality of food, misleading information on food labels and so forth. Hence, a range of guidelines addressing different aspects of food safety has been enacted by the FAO and other international organisations, such as the General Standard for the Labelling of Pre-packaged Foods (1985),[40] Guidelines on Nutrition Labelling (1985),[41] and so forth.[42] Later in 1987, when 1986 Chernobyl

[37] World Food Conference, *Report of the World Food Conference, Rome 5-16 November 1974*, at 2, U.N. Doc. E/CONF.65/20 (1975).

[38] *Universal Declaration on the Eradication of Hunger and Malnutrition*, OHCHR, https://www.ohchr.org/en/professionalinterest/pages/eradicationofhungerandmalnutrition.aspx (last visited July 6, 2021).

[39] Ching-Fu Lin, *Global Food Safety: Exploring Key Elements for an International Regulatory Strategy*, 51(3) VA. J. INT'L L. 637, 641 (2011).

[40] FAO & WHO, CODEX ALIMENTARIUS (REVISED 2001), FOOD LABELLING—COMPLETE TEXTS (REVISED 1999) 3-15 (1999), http://www.farmacia.ufrj.br/consumo/legislacao/n_cx_fl_basic(3).pdf.

[41] FAO & WHO, GUIDELINES ON NUTRITION LABELLING (CAC/GL2-1985) (1985), http://www.fao.org/faowhocodexalimentarius/shproxy/en/?lnk=1&url=https%253A%252F%252Fworkspace.fao.org%252Fsites%252Fcodex%252FStandards%252FCXG%2B2-1985%252FCXG_002e.pdf.

[42] For more information regarding the food safety guidelines, see *Guidelines*, CODEX ALIMENTARIUS, http://www.fao.org/fao-who-codexalimentarius/codex-texts/guidelines/en/ (last visited July 6, 2021).

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Disaster caused serious disruptions to food production and trade of food products, the FAO introduced "Safety of food in international trade,"[43]by which the FAO recommended a number of approaches to the governments on legislation governing food quality and safety compliance to assure food traded not be accidentally contaminated. These guidelines and recommendations required multiple actions from a variety of stakeholders, especially government and international organisations to be incorporated into law. But after the UN World Food Conference, no further optimistic development was noticed. Moreover, alongside the food safety issues which gained momentum in this period, the increase in food trade has increased trade barriers resulting in an increase in food price. The whole phenomenon affected the global food market, establishing that "food security exists and will get more prominent with increase in international food trade, but hunger co-exists because of poverty." So, one of the challenges for the period was trade barriers and tariffs which resulted in increasing food prices, making food unaffordable and inaccessible.

### *D. The Golden Period of the International Food Law: 1990-2000*

Many researchers describe the 1990s period as the golden period for the notion of food security. Firstly because, by the end of the 20th century many countries like the US,[44] the European Union (hereinafter "EU")[45] and China[46] came up with their own food law and implemented standards on food quality for public safety. Whether these national laws complement the international guidelines and recommendations remains a matter of concern. However, the lack of harmonization in the food standards and tariff barriers at national borders was quite evident. Secondly, till 1995 all the international instruments that addressed food issues were either recommendations, guidelines or certain political commitments based on customary principles; however, the establishment of the World Trade Organization (hereinafter "WTO") led to two legally binding international instruments—*the Application of Sanitary and Phytosanitary Measures* (hereinafter "SPS Agreement") and *the Agreement on Technical Barriers to*

[43] *Food Systems: Our Approach*, FAO, http://www.fao.org/food-systems/our-approach/en/ (last visited July 6, 2021).
[44] Michelle Jarvie, *Part 2: History of Food Safety in the U.S.*, FSN (Oct. 13, 2014), https://www.foodsafetynews.com/2014/10/part-2-history-of-food-safety-in-the-u-s/. *See also Our History*, USDA, https://www.fsis.usda.gov/about-fsis/history (last visited July 6, 2021).
[45] *General Food Law*, FOOD STANDARDS AGENCY, https://www.food.gov.uk/business-guidance/general-food-law (last visited July 6, 2021).
[46] *See generally* Yunbo Luo & Guangfeng Wu, *Food Safety Laws and Regulations*, *in* FOOD SAFETY IN CHINA: SCIENCE, TECHNOLOGY, MANAGEMENT AND REGULATION 347 (Joseph J. Jen & Junshi Chen eds., 2017).

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*Trade* (hereinafter "TBT Agreement") which impliedly added legal significance to FAO and Codex recommendations and guidelines. Consequently, a new branch of international law emerged, referred as International Food Law. Thirdly, by establishment of WTO main persisting food security issues, such as availability of food, food safety, and market stability, were addressed.[47]

Addressing the persisting issue of food safety within trade, under the SPS Agreement, the WTO member countries agreed to implement measures to protect human, animal (sanitary measures) and plant health (phytosanitary measures) based on scientific principles, sufficient scientific evidence and assessment of risk.[48] Furthermore, the WTO members ensured that their sanitary and phytosanitary measures would not be arbitrarily or unjustifiably discriminatory in nature.[49] Under this agreement, the WTO members can take measures according to "their appropriate level of protection" but the measures should not create an obstruction to food trade. Similarly, under the TBT Agreement, WTO members agreed to implement the measures regarding technical requirements and standards (applied to all commodities), such as labelling for fair practice in trade.[50] Besides addressing the persisting challenges and issues, this period has made an attempt to build a multilateral food trade governance system with accountability. Hence, besides introducing legally binding measures and cooperation, a dispute settlement system was also introduced. Some of the noteworthy disputes of the period were: *Australia — Measures Affecting Importation of Salmon (Australia — Salmon)*,[51] *European Union (formerly EC) — Measures Concerning Meat and Meat Products (EC — Hormones)*,[52] *European Union (formerly EC) — Measures Concerning Meat and Meat Products (Hormones)*,[53] *Japan — Measures Affecting Agricultural Products (Japan — Agricultural Products)*[54] and so forth,

[47] The creation of the World Trade Organization [hereinafter WTO], see MITSUO MATSUSHITA ET AL., THE WORLD TRADE ORGANIZATION: LAW, PRACTICE, AND POLICY 9-11 (3d ed. 2015).
[48] WTO, THE WTO AGREEMENTS SERIES: SANITARY AND PHYTOSANITARY MEASURES 3 (2010), https://www.wto.org/english/res_e/booksp_e/agrmntseries4_sps_e.pdf.
[49] *Id.* at 28.
[50] WTO, THE WTO AGREEMENTS SERIES: TECHNICAL BARRIERS TO TRADE 58 (2014), https://www.wto.org/english/res_e/publications_e/tbttotrade_e.pdf.
[51] *DS18: Australia — Measures Affecting Importation of Salmon*, WTO, https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds18_e.htm (last visited July 6, 2021).
[52] *DS26: European Communities — Measures Concerning Meat and Meat Products (Hormones)*, WTO,https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds26_e.htm (last visited July 6, 2021).
[53] *DS48: European Communities — Measures Concerning Meat and Meat Products (Hormones)*, WTO, https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds48_e.htm (last visited July 6, 2021).
[54] *DS76: Japan — Measures Affecting Agricultural Products*, WTO, https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds76_e.htm (last visited July 6, 2021).

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which answered and helped in comprehending obligations, interpretation and implementations of the SPS Agreement.

In the *Australia — Salmon* case,[55] the Appellate Body explored the question regarding the relation between 2.2 and Article 5.1 and stated, "in the event an SPS measure is not based on a risk assessment, as required in Article 5.1, this measure can be presumed, more generally, not to be based on scientific principles or not to be maintained without sufficient scientific evidence within the meaning of Article 2.2."[56] On that basis, the Appellate Body concluded that a violation of Article 5.1 also implied an inconsistency with Article 2.2.[57]

A similar view is observed in *EC — Hormones*,[58] where the Appellate Body stated "Articles 2.2 and 5.1 should constantly be read together;" "Article 5.1 may be viewed as a specific application of the basic obligations contained in Article 2.2 of the *SPS Agreement*," and "Article 2.2 informs Article 5.1: the elements that define the basic obligation set out in Article 2.2 impart meaning to Article 5.1."[59]

Furthermore, in *Japan — Agricultural Products*,[60] shedding light on the elements of the requirement under Article 5.6 not to adopt measures which are more restrictive than required to achieve the Member's appropriate level of protection, the Appellate Body stated:

> According to the footnote to Article 5.6, a measure is considered more trade-restrictive than required if there is another SPS measure which: (1) is reasonably available taking into account technical and economic feasibility; (2) achieves the Member's appropriate level of protection; and (3) is significantly less restrictive to trade than the SPS measure contested.[61]

The period received thirty consultation requests which showed how the gradual increase in international trade has increased disputes. The disputes

[55] *DS18: Australia — Measures Affecting Importation of Salmon*, *supra* note 51.
[56] Panel Report, *European Communities — Measures Affecting the Approval and Marketing of Biotech Products*, at 955 n.1852, WTO Doc. WT/DS291/R, WT/DS292/R, WT/DS293/R (adopted Nov. 21, 2006).
[57] *Id.* ¶ 7.3396; Appellate Body Report, *Australia — Measures Affecting Importation of Salmon*, ¶ 138, WTO Doc. WT/DS18/AB/R (adopted Nov. 6, 1998).
[58] *DS26: European Communities — Measures Concerning Meat and Meat Products (Hormones)*, *supra* note 52.
[59] Appellate Body Report, *European Communities — Measures Concerning Meat and Meat Products (Hormones)*, ¶ 180, WTO Doc. WT/DS26/AB/R, WT/DS48/AB/R (adopted Feb. 13, 1998).
[60] *DS76: Japan — Measures Affecting Agricultural Products*, WTO, https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds76_e.htm (last visited July 6, 2021).
[61] Appellate Body Report, *Japan — Measures Affecting Agricultural Products*, ¶ 95, WTO Doc. WT/DS76/AB/R (adopted Mar. 19, 1999).

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that emerged in the period have involved the nexus between global public health and trade of safe food, raising concern regarding food borne diseases[62] or non-communicable diseases transmitted through food[63] and genetically modified food. [64] Although food borne diseases or non-communicable diseases transmitted through food has a long history, [65] but genetically modified food grasp attention gradually after 1980. It is noteworthy to mention that, the emergence of Genetically Modified Organisms (hereinafter "GMOs") in agricultural and food production introduced several new and contentious issues before the WTO dispute settlement under the SPS Agreement and the TBT Agreement. Here it is noteworthy to mention the *European Communities—Measures Affecting the Approval and Marketing of Biotech Products*,[66] where the US preferred the neutral terminology of "biotech products" whereas the EC spoke of genetically modified (hereinafter "GM") crops and GM foods. This dispute has demonstrated one of the contentious issues that the SPS and TBT Agreement failed to addressed competently. Hence, gradually food safety of genetically modified crops and foods became one of the challenges for the period. Furthermore, how the "exceptions" included in these agreements are used politically and diplomatically in different circumstances to create economic pressure was also evident from these disputes. Moreover, these disputes demonstrated that political and cultural fragmentation collides with deep market integration and trade liberalization when it comes to food safety.[67]

The SPS Agreement has correlated public health, regulatory agencies, and the food industry. On the other hand, the TBT Agreement addressed the technical aspect of the food in trade. The TBT Agreement has indulged and contributed to the formatting and modification of labelling on the food with scientific and technical information which is relevant while assessing risks

[62] *See generally* Robert Tauxe, *Outbreak: Foodborne Illness and the Struggle for Food Safety*, 25(12) EMERGING INFECTIOUS DISEASES 2342 (2019).
[63] Obijiofor Aginam, *International Law and Communicable Diseases*, 80(12) BULL. WORLD HEALTH ORG. 946, 946 (2002) ("[T]he European cholera epidemics of 1830 and 1847 catalysed the evolution of the earliest multilateral governance of communicable diseases. Thus, the link between international law and communicable diseases is rooted in the mid-nineteenth century, more precisely in 1851, when France convened the first International Sanitary Conference.")
[64] *See generally* Kym Anderson & Chantal Pohl Nielsen, *GMOs, the SPS Agreement and the WTO*, *in* THE ECONOMICS OF QUARANTINE AND THE SPS AGREEMENT305 (Kym Anderson et al. eds., 2012).
[65] Tauxe, *supra* note 62.
[66] *DS291: European Communities — Measures Affecting the Approval and Marketing of Biotech Products*, WTO, https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds291_e.htm (last visited July 6, 2021).
[67] *See generally* Ching-Fu Lin, *Scientification of Politics or Politicization of Science: Reassessing the Limits of International Food Safety Lawmaking*, 15(1) COLUM. SCI. & TECH. L. REV. 1 (2013).

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to health or the environment prior to instituting protective standards.[68]The TBT Agreement mainly seeks to minimize the extent to which technical regulations can create "unnecessary obstacles" to international food trade by promoting harmonization in technical regulations.[69]

Furthermore two major conferences took place in this period—the International Conference on Nutrition in 1992 and the World Food Summit in 1996. The International Conference on Nutrition conferences took place with the view that "there is enough food for all people and the resources to eliminate hunger and to reduce all forms of malnutrition." [70] Despite addressing the problem that "approximately 780 million people in developing countries suffer from chronic food deficiency and more than 2000 million people suffer from micronutrient deficiencies,"[71] they ignored the fact that this was caused because of food insecurity. The International Conference on Nutrition conferences clearly denied the food insecurity and food security issues and asserted economic problems, such as poverty, as the rationale.

The conference concluded by adopting the "World Declaration and Plan of Action for Nutrition," which focused on eliminating famine, starvation and nutritional deficiency. However, nearly two decades after the 1974 World Food Conference, in the World Food Summit the notion of food security was defined as: "Food security exists when all people, at all times, have physical and economic access to sufficient safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life."[72] However, poverty was considered as the major cause of food insecurity. The conference concluded with the Rome Declaration on World Food Security[73] and the World Food Summit Plan of Action,[74] which urged for cooperation among different stakeholders. One of the major developments in the period was affirmation of three associated rights of right to food—"the right of everyone to have access to safe and nutritious food, consistent with the right to adequate food and the fundamental right of everyone to be free from hunger." So it can be asserted that the period gave the foundation of food as fundamental human rights by affirming the

[68] *See* Jacqueline Peel et al., *GMO Trade Wars: The Submissions in the EC — GMO Dispute in the WTO*, 6(1) MELB. J. INT'L L. 141, 144-66 (2005).
[69] WTO, *supra* note 50, at 30.
[70] "International Conference on Nutrition" was proposed at the 15th session of the Subcommittee on Nutrition of the UN Administrative Committee on Coordination (ACC/SCN) in 1989.
[71] "Food and Agriculture Organization" Conference in November 1989 and by the World Health Assembly in May 1990.
[72] FAO, AN INTRODUCTION TO THE BASIC CONCEPTS OF FOOD SECURITY 1 (2008), http://www.fao.org/3/al936e/al936e.pdf.
[73] *Rome Declaration and Plan of Action*, FAO, http://www.fao.org/3/w3613e/w3613e00.htm (last visited July 6, 2021).
[74] *Id.*

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right to food. Hence, the period concluded with an evolving notion of "right to food," but focused mostly on building food trade governance and food safety by impliedly denying the food insecurity and claiming that food security exists. The period has clearly demonstrated the perplexing understanding of food security and the establishment of a legal framework based on economic and trade perspective so that the world's trade regime is geared towards building food security.

### *E. Persisting Challenges and Right to Food: 2000 to Present*

Since the dispute under the SPS and TBT agreements gained momentum, the WTO dispute settlement has resolved many disputes, such as *Certain mandatory country of origin labeling (COOL) requirements*,[75] *Certain Country of Origin Labelling Requirements*,[76] *Certain Country of Origin Labelling Requirements*,[77] and *Import Bans, and Testing and Certification Requirements for Radionuclides*.[78] With the increase in international food trade and implementation of protective measures based on SPS and TBT Agreement persisting issues such as non-communicable diseases (hereinafter "NCDs"), nutrition labelling, GM, and so forth got new dimensions. Since the WTO was established it has received 104 cases regarding the SPS and TBT Agreements, of which 55 involve the TBT Agreement,[79] 49 involve the SPS Agreement,[80] and 22 involve both the Agreements.

Analysing the past and present disputes before the WTO dispute settlement body it is observed that the disputes circulated have mostly regarded the appropriate level of protection measures and food safety issues, such as food borne diseases, transmission of non-communicable diseases through food, nutrients labelling, food packaging, and so forth. However, one of the major concerns was and is regarding genetically modified crops and food as there are no international standards for genetically modified crops and food when modern agriculture is dependent on genetic modification to increase food production. However, the Codex Committee on Food Labelling is currently considering the adoption of an

[75] *DS384: United States — Certain Country of Origin Labelling (COOL) Requirements*, WTO, https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds384_e.htm (last visited July 6, 2021).
[76] *DS386: United States — Certain Country of Origin Labelling Requirements*, WTO, https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds386_e.htm (last visited July 6, 2021).
[77] *Id.*
[78] *DS495: Korea — Import Bans, and Testing and Certification Requirements for Radionuclides*, WTO, https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds495_e.htm (last visited July 6, 2021).
[79] *Disputes by Agreement*, WTO, https://www.wto.org/english/tratop_e/dispu_e/dispu_agreements_index_e.htm (last visited July 6, 2021).
[80] *Id.*

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international standard on GMO labelling. So it can be asserted that the year 2000 began with unresolved persisting food issues and challenges. However, the appointment of the UN Special Rapporteur on the right to food under Resolution 2000/10 added new hopes to resolve food security issues. The UN Special Rapporteur was mandated to promote, protect and identify emerging issues related to the right to food.

Although there are a number of international instruments that provided the legal basis for the right to food, such as article 25 of the UDHR, article11ofthe ICESCR, and article 6 of the International Covenant on Civil and Political Rights (ICCPR), the right was however neither defined nor explored under these international instruments. The UN Special Rapporteur defined the right to food in its first report[81] by stating:

> The right to food is the right to have regular, permanent and unobstructed access, either directly or by means of financial purchases, to quantitatively and qualitatively adequate and sufficient food corresponding to the cultural traditions of the people to which the consumer belongs, and which ensures a physical and mental, individual and collective, fulfilling and dignified life free from anxiety.

This definition of right to food clearly has the corollary that the right to food is food security.[82] Furthermore, the report stated that the concept of the right to food is made up of different components, such as the right to adequate food, the notions of adequacy and sustainability, dietary needs, cultural or consumer acceptability, and economic accessibility.[83]

Addressing similar components of the right to food in 2009, the CFS endorsed a new perspective towards food security. It advocated that access to food alone cannot improve food security, and state that improving food security and safety requires addressing some host of issues. For food security, four constituents are needed to be assured—food availability, access, utilization, and market stability.[84] However, the CFS refrained from stating that right to food is food security, but it advocated for an economic approach towards food security based on international trade to ensure the availability of food.

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[81] Jean Ziegler (Special Rapporteur of the Commission on Human Rights on the Right to Food), *Preliminary Rep. on the Right to Food*, ¶ 22, U.N. Doc. A/56/210 (July 23, 2001).
[82] *Id.* ¶ 24.
[83] *Id.* ¶¶ 26, 85.
[84] *See generally* COMM. ON WORLD FOOD SEC., *Committee on World Food Security* (2012), https://sustainabledevelopment.un.org/content/documents/15195Session%2012_Committee%20on%20World%20Food%20Security%20(CFS%20Brief)_May_2015.pdf; KYM ANDERSON, AGRICULTURAL TRADE, POLICY REFORMS, AND GLOBAL FOOD SECURITY 4 (2016).

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The rapid growth of international food trade triggered all aspects of food security advocated by the CFS. Besides this, it also demonstrated that the market reality was different towards the developing countries. Many developing countries with the hope that international food trade will enhance their economy and resolve food insecurity are still struggling to produce surplus food, to maintain the appropriate level of food standards, to find an appropriate market for business and to maintain low waste of food in the food production stage. Many developing countries like Bangladesh, India, Africa and so forth, are still struggling to maintain their national food security system which urges technological and economic support beside cooperation. Analysing the contemporary issues and law it can be asserted that the contemporary international food law falls short in addressing food production, food technology and food supply chain issues which are entangled with food security. So the narrow understanding of food security is quite visible.

Furthermore, despite much international trade cooperation between developed and developing countries, food price still remains an unresolved issue. Tariff barriers at the national border are identified as the major cause of food price that ultimately affects food security.[85] To understand how tariff affects price and access to food, recent changes by the Trump Administration in the US can be a good example. In June 2018, the Trump administration introduced billions of dollars in new tariffs on Chinese imports; as a result, the price of Chinese goods was increased. On the other hand, in August, China announced a 25% tariff on $16 billion worth of US goods including vehicles and crude oil in retaliation against the US tariffs on $16 billion worth of Chinese goods.[86] Matt Gold, a former deputy assistant US Trade Representative for North America under former President Barack Obama, commenting on the situation stated, "you're going to see higher prices passed on to consumers [. . .] almost immediately."[87] He added:

> [A] U.S. importer pays the taxes to the customs duties or customs tariffs to the U.S. Treasury . . . . Of course, that's going to [affect] the sale price [and] whatever price at which the exporter sells to

[85] Jagdish Bhagwati, *Protectionism*, ECONLIB, https://www.econlib.org/library/Enc/Protectionism.html (last visited July 6, 2021).
[86] Fred Imbert, *China Slaps 25% Tariffs on $16 Billion Worth of US Goods*, CNBC (Aug. 8, 2018, 8:26 AM), https://www.cnbc.com/2018/08/08/china-announces-25percent-tariffs-on-16-billion-worth-of-us-goods-including.html.
[87] Trent Gillies, *Pricier Soda and Food: How Tariffs Are Set to Hit Your Wallet*, CNBC (July 29, 2018, 9:00 AM), https://www.cnbc.com/2018/07/27/how-trumps-tariffs-are-set-to-drive-food-and-drink-prices-higher.html.

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> the importer is going to lower, because the importer has to pay duties in addition to paying the purchase price.

This indicates that if the price of foods is increased the consumers have to pay more. Subsequently, food might be available but not be affordable; so food might not be accessed due to higher price.

Here it is noteworthy to mention, even after so many years after emergence of the notion of food security, it is contemplated from an economic perspective, i.e. trade and development, and a public health perspective, i.e. food safety, hunger and malnutrition. And the contemporary understanding of food security circulates within the parameter of hunger, malnutrition and poverty. It is apprehended that hunger and malnutrition is the global health problem which is caused because of market instability which is causing the high price of food. Hence, in Millennium goals and Sustainable Development goals zero hunger, good health and poverty reduction have made their place.

Although the *United Nations Development Programme* (hereinafter "UNDP") claims, "[t]he number of undernourished people has dropped by almost half in the past two decades because of rapid economic growth and increased agricultural productivity,"[88] here a distinction should be drawn between two concepts: hunger or undernourishment, and malnutrition.[89] The UN Special Rapporteur report defined hunger or undernourishment as insufficient supply or, at worst, a complete lack of calories. Malnutrition, on the other hand, is defined by the lack of or shortage in food which otherwise provides sufficient calories, of micronutrients—chiefly vitamins (organic molecules) and minerals (inorganic molecules).[90] Analysing this definition of hunger or undernourishment and malnutrition with food security demonstrates a complicated scenario. That is, if "food security exists when all people, at all times, have physical, social and economic access to sufficient, *safe and nutritious food* to meet their dietary needs and food preference," then food security subsists when there is zero, or even minimum, hunger or undernourishment and malnutrition exists. Similarly, zero, or even minimum, hunger or undernourishment subsists when there is a sufficient supply of calories which is received from food. So in other words, if there is a sufficient supply of food there will be zero, or even minimum, hunger or undernourishment. Analogously, zero, or even minimum, malnutrition exists when the supplied food contains sufficient calories and micronutrients. So existence of hunger or undernourishment

[88] *Goal 2: Zero Hunger*, UNDP, https://www.undp.org/content/undp/en/home/sustainable-development-goals/goal-2-zero-hunger.html (last visited July 6, 2021).
[89] Zeigler, *supra* note 81, ¶ 6.
[90] *Id.*

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and malnutrition directly questions the existence of food security by questioning food production, food supply and quality of food. And it asserts that food insecurity exists.

Accordingly, the existence of hunger or undernourishment and malnutrition demonstrates that the claim made in the International Conference on Nutrition conferences that "there is enough food for all people and the resources to eliminate hunger and to reduce all forms of malnutrition"[91] is not sufficiently accurate. Hence, regrettably, hunger and malnutrition, still remains as a global issue.[92]

Moreover, it is predicted that by 2050 the world population will reach nearly 9.8 billion, which means more than 3 billion more mouths to feed. On the other side there is approximately 56% food gap which exists between the crop production and what is needed by 2050.[93] In contrast, approximately 1.3 billion tons of foods are being wasted each year according to FAO reports.[94] This clearly demonstrates that even after 100 years, food insecurity still remains a global issue and will remain if adequate institutionalization, food governance and a global food system are not built through a comprehensive legal framework.

In this trade globalization era, it is difficult to believe that the problem of food insecurity is still being wrangled over,[95] where the food produced in one place travels across the borders to another and affects the health and diet of the people living there.[96]More concerns are raised regarding food safety as many adults and children die[97]each year from food borne diseases caused by microbiological agents in contaminated food and water.[98] Moreover, it is an era where advanced technologies are being used full-fledged in almost every sector, including agriculture.[99] This era with technological innovations and new production methods of the industrial revolution has made the food systems complex and raised concerns

[91] *See supra* note 70.
[92] *Id.*
[93] Janet Ranganathan et al., *How to Sustainably Feed 10 Billion People by 2050, in 21 Charts*, WORLD RESOURCES INST. (Dec. 5, 2018), https://www.wri.org/blog/2018/12/how-sustainably-feed-10-billion-people-2050-21-charts.
[94] Ross Chainey, *Which Countries Waste the Most Food?*, WORLD ECON. F. (Aug. 13, 2015), https://www.weforum.org/agenda/2015/08/which-countries-waste-the-most-food/#:~:text=The%20Food%20and%20Agriculture%20Organization%20of%20the%20United,20%25%20of%20dairy%20products%20and%2020%25%20of%20meat.
[95] JOHN MADELEY, FOOD FOR ALL: THE NEED FOR A NEW AGRICULTURE 34 (2002).
[96] *Food Safety, Healthy Diets and Trade*, WTO, https://www.wto.org/english/tratop_e/sps_e/01_a_concept_note_food_safety_healthy_diets_and_trade_en.pdf (last visited July 6, 2021).
[97] ASIAN DEV. BANK, SUGGESTIONS ON STRENGTHENING FOOD SAFETY IN THE PRC 2 (2006), https://www.adb.org/sites/default/files/publication/29336/strengthening-food-safety.pdf.
[98] Ching-Fu Lin, *SPS-Plus and Bilateral Treaty Network: A "Global" Solution to the Global Food Safety Problem?*, 20(10) WIS. INT'L L.J. 103, 106-07 (2012).
[99] Anthony King, *Technology: The Future of Agriculture*, 544 NATURE S21, S21 (2017).

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regarding public health. Nevertheless, food safety and security are a predominant issue. Addressing these concerns requires multiple actions from a variety of stakeholders, such as government, international organisations, manufacturers, and distributors to work in cooperation to create food availability, safety and quality standards to protect everyone everywhere.[100]

## III. NEED OF A COMPREHENSIVE INTERNATIONAL FOOD LAW

Analysing the 100 years of international food law a different scenario is observed. Firstly, the international instruments that together are called the international food law have been enacted focusing on food trade and food safety. Mostly, because it is believed that food insecurity exists because of economic instability and food trade can bring economic stability. Secondly, it focuses on harmonizing food standards and food safety measures, in such a way so that food trade is not hampered. Thirdly, it is observed that there are multiple international instruments which are neither strictly binding in nature nor completely lacking in legal significance, such as Codex Alimentarius. The only two international instruments creating legally binding obligations are the SPS Agreement and TBT Agreement. Fourthly, in all countries, food trade is governed by a complex set of laws and regulations; hence, there is a lack of harmonization and cooperation at each and every level. However, national legal frameworks play their part as a key pillar in building an effective global food system. Fifthly, the contemporary international food law is not comprehensive, and is a collection of numerous non-binding and binding international instruments. In the following section of the paper two categories of international instruments will be discussed- first, the international instruments which are neither strictly binding in nature nor completely lacks legal significance, such as the Codex Alimentarius; secondly, the international instruments which are strictly binding in nature and holds legal significance, such as the SPS Agreement, the TBT Agreement, and UN General Assembly Resolutions.

### *A. Understanding the Codex Alimentarius*

The Codex focuses mainly on food safety, hence it has presented more than 300 Codex standards, guidelines and other recommendations relating to food quality composition and safety, such as the *Codex Code of Practice*

[100] *See, e.g.*, FAO & WHO, *supra* note 31.

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*General Principles of Food Hygiene*,[101] the *Code of Practice on Food Allergen Management for Food Business Operators*,[102] the *Code of Practice for Fish and Fishery Products*,[103] the *Code of Hygienic Practice for Low-Moisture Foods*,[104] *Regional Code of Hygienic Practice for Street-Vended Foods in Asia*,[105] *Code of Practice for the Prevention and Reduction of Mycotoxins in Spices*[106] and so forth. The Codex Alimentarius outlines mainly focus on ensuring that food products are not harmful to the consumer and can be traded safely between countries.

Analysing the Codex Alimentarius, it is observed that it is a collection of elaborated texts that provides certain food standards to ensure food safety during trade, certain codes of practices and guidelines. However, all these international codes are neither strictly binding in nature nor completely lacking in legal significance.

> [All the Codex texts typically aims] to develop and harmonize world-wide health standards, and to issue guidelines and recommendations on agricultural and fishery products, foodstuffs, food additives and contaminants, feedstuffs, veterinary drugs, pesticides, including labelling, methods of analysis and sampling, codes of ethics and good agricultural practice and guidelines of hygiene practice, in order to protect

[101] FAO & WHO, GENERAL PRINCIPLES OF FOOD HYGIENE (2020), http://www.fao.org/fao-who-codexalimentarius/sh-proxy/en/?lnk=1&url=https%253A%252F%252Fworkspace.fao.org%252Fsites%252Fcodex%252FStandards%252FCXC%2B1-1969%252FCXC_001e.pdf.

[102] FAO & WHO, CODE OF PRACTICE ON FOOD ALLERGEN MANAGEMENT FOR FOOD BUSINESS OPERATORS (2020), http://www.fao.org/fao-who-codexalimentarius/sh-proxy/en/?lnk=1&url=https%253A%252F%252Fworkspace.fao.org%252Fsites%252Fcodex%252FStandards%252FCXC%2B80-2020%252FCXC_080e.pdf.

[103] FAO & WHO, CODE OF PRACTICE FOR FISH AND FISHERY PRODUCTS (2020), http://www.fao.org/fao-whocodexalimentarius/shproxy/en/?lnk=1&url=https%253A%252F%252Fworkspace.fao.org%252Fsites%252Fcodex%252FStandards%252FCXC%2B52-2003%252FCXC_052e.pdf.

[104] FAO & WHO, CODE OF HYGIENIC PRACTICE FOR LOW-MOISTURE FOODS (2018), http://www.fao.org/fao-who-codexalimentarius/sh-proxy/en/?lnk=1&url=https%253A%252F%252Fworkspace.fao.org%252Fsites%252Fcodex%252FStandards%252FCXC%2B75-2015%252FCXC_075e.pdf.

[105] FAO & WHO, REGIONAL CODE OF HYGIENIC PRACTICE FOR STREET-VENDED FOODS IN ASIA (2017), http://www.fao.org/fao-who-codexalimentarius/sh-proxy/en/?lnk=1&url=https%253A%252F%252Fworkspace.fao.org%252Fsites%252Fcodex%252FStandards%252FCXC%2B76R-2017%252FCXP_076Re.pdf.

[106] FAO & WHO, CODE OF PRACTICE FOR THE PREVENTION AND REDUCTION OF MYCOTOXINS IN SPICES (2017), http://www.fao.org/faowhocodexalimentarius/shproxy/en/?lnk=1&url=https%253A%252F%252Fworkspace.fao.org%252Fsites%252Fcodex%252FStandards%252FCXC%2B782017%252FCXC_078e.pdf.

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> consumers' health and ensure fair practices in international trade.[107]

Although the Codex Alimentarius is voluntary in nature and needs to be translated into national legislation or regulations in order to be enforceable, it has gained importance with increasing international food trade, mostly because the SPS Agreement and TBT Agreement have encouraged the use of the Codex Standard making it a benchmark against which national food regulations are evaluated within the legal parameters of the WTO. However, under WTO influence, the Codex became more politicized[108] because significant trade interests were at stake in the Codex standard-setting processes.[109]

### *B. Understanding the SPS Agreement and the TBT Agreement*

The legal analysis of these two Agreements can be set out in four segments. In the first segment the reasons for the adoption of the SPS and TBT Agreements are set forth and the treatment of regulations is examined. The second segment examines the general scope of the SPS and TBT Agreements. The third segment deals with the general principles and rules of the SPS and TBT Agreements. Finally, the fourth segment deals with dispute settlement and institutional matters under the SPS and TBT Agreements.

Starting the discussion with the reasons for the adoption of the SPS and TBT Agreements, the SPS Agreement was adopted with the desire:

> [T]o improve the human health, animal health and phytosanitary situation in all Members . . . [by] establishment of a multilateral framework of rules and disciplines to guide the development, adoption and enforcement of sanitary and phytosanitary measures in order to minimize their negative effects on trade . . . . [And] use of harmonized sanitary and phytosanitary measures between Members, on the basis of international standards, guidelines and

[107] Roger Wood, *Recent Developments at the Codex Alimentarius Commission and the Inter-agency Meeting with Respect to Food Analysis*, 9(9) ACCREDITATION & QUALITY ASSURANCE 551, 551 (2004).
[108] *See generally* FAO & WHO, CODEX ALIMENTARIUS COMMISSION: PROCEDURAL MANUAL (TWENTY-FIRST EDITION) (2013), http://www.fao.org/3/i3243e/i3243e.pdf.
[109] Lin, *supra* note 67, at 19.

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> recommendations developed by the relevant international organisations.[110]

However, the SPS Agreement does not address food safety issues in a comprehensive and effective manner.[111] Rather it attempts to provide a guideline for the countries to enact food-safety laws alongside the purpose of trade liberalization.[112]

On the other hand, the TBT Agreement was adopted with the desire to "ensure that technical regulations and standards, including packaging, marking and labelling requirements, and procedures for assessment of conformity with technical regulations and standards do not create unnecessary obstacles to international trade."[113] Analysing the reasons for the adoption of the SPS and TBT agreements, a few things are clear. First, both these agreements focus on three issues—food safety, facilitating food trade, and harmonization in law. Second, both these agreements require advance technology; consequently, developing countries may encounter special difficulties in "complying with the sanitary or phytosanitary measures of importing Members" [114] and "in the formulation and application of technical regulations and standards and procedures for assessment of conformity with technical regulations and standards."[115] Thirdly, both of the Agreements do not focus on many food security issues such as food production, food availability and affordability, and market stability.

Considering the general scope of the SPS and TBT Agreements which is limited to the food involved in international trade, this means the agreement applies to importing and exporting countries and zones. Further analysing the general principles acknowledged by both Agreements, it is observed that the Agreements acknowledge the principle of non-discrimination, the obligation to prevent unnecessary obstacles to international trade, and the obligation to use international standards as a basis for technical regulations. However, the exception clauses have also provided the liberty to the countries to impose a higher level of protection

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[110] Agreement on the Application of Sanitary and Phytosanitary Measures pmbl., Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1867 U.N.T.S. 493 [hereinafter SPS Agreement].
[111] Lin, *supra* note 98, at 108.
[112] Bruce A. Silverglade, *The WTO Agreement on Sanitary and Phytosanitary Measures: Weakening Food Safety Regulations to Facilitate Trade?*, 55(4) FOOD & DRUG L.J. 517, 524 (2000).
[113] Agreement on Technical Barriers to Trade pmbl., Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1B, 1868 U.N.T.S. 120 [hereinafter TBT Agreement].
[114] SPS Agreement, *supra* note 110.
[115] TBT Agreement, *supra* note 113.

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measures according to their preference. This has sometimes led to discrimination and creates economic pressure on developing countries. It is also observed that the SPS and TBT Agreements have given a binding effect to the standards of the Codex Alimentarius. At the same time, it made the Codes Standards commercial[116] and political in nature.[117]

### *C. UN General Assembly Resolutions and Other Instruments*

The UN General Assembly Resolution A/RES/70/154, *The Right to Food*,[118]is one of the most important international instruments with legal significance, as in this document the right to food is acknowledged as a human right and the UN member states have promised to take adequate measures to protect the right. Furthermore, the UN Special Rapporteur on the Right to Food appointed under Resolution 2000/10 has contributed largely in the growing concern regarding right to food by defining it as follows:

> The right to food is the right to have regular, permanent and unobstructed access, either directly or by means of financial purchases, to quantitatively and qualitatively adequate and sufficient food corresponding to the cultural traditions of the people to which the consumer belongs, and which ensures a physical and mental, individual and collective, fulfilling and dignified life free from anxiety.[119]

Furthermore, the UN Special Rapporteur addressed the inequality, and the inequitable distribution of food and productive resources, and the right to food in international trade.[120] However, these reports of the UN Special Rapporteur lack legal significance but they form a strong ground for a government to ensure right to food.

Furthermore, the Universal Declaration on the Eradication of Hunger and Malnutrition (hereinafter "UDEHM") is another international instrument with legal significance securing "the right to be free from hunger" as an inalienable right. It states, "every man, woman and child has

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[116] *See generally* Frode Veggeland & Svein Ole Borgen, *Changing the Codex: The Role of International Institutions* (Norwegian Agric. Econ. Research Inst., Working Paper No. 2002-16, 2002), http://tinyurl.com/235njpz.
[117] ALBERTO ALEMANNO, TRADE IN FOOD: REGULATORY AND JUDICIAL APPROACHES IN THE EC AND THE WTO 262-63 (2007).
[118] G.A. Res. 70/154 (Dec. 17, 2015).
[119] Zeigler, *supra* note 81.
[120] Hilal Elver (Special Rapporteur on the Right to Food), *Interim Rep. of the Special Rapporteur on the Right to Food*, at 2/24, U.N. Doc. A/74/164 (July 15, 2019).

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the inalienable right to be free from hunger and malnutrition in order to develop fully and maintain their physical and mental faculties." Under this document the Governments are obliged to work together for higher food production and a more equitable and efficient distribution of food between countries and within countries; making it a fundamental responsibility of Governments. According to the UDEHM, all developed countries and others should collaborate technically and financially with the developing countries. Under the UDEHM, ensuring the availability of food at all times at fair cost and cooperation among the countries to establish an effective system of world food security is a common responsibility of the entire international community.

From the above analysis it is apprehended that the contemporary international instruments regarding food law lacks legal significance and general principles. The contemporary global food trade system is mainly governed by the SPS and TBT Agreements focusing particularly on trade and food safety standards in international trade. Hence, we find neither a food governance system nor an adequate global food system. The food governance framework pertains to a set of challenges which includes:

> (1) The demarcation and coordination between assessment and management of food safety threats;
> (2) The handling of scientific uncertainty;
> (3) The increase of transparency during the entire food safety governance process;
> (4) The involvement of a diversity of social groups and the wider public into the governance process;
> (5) The handling of highly controversial food safety issues.[121]

Therefore, food governance involves many conflicting dimensions of a global food system where food law, international trade, environmental problems, human rights, poverty reduction, and health problems are inter-connected. It forms an institutional framework where multi-actors, such as, private and public actors and multi-level actors, non-governmental organisations (hereinafter "NGOs") and different layers of government work in cooperation with each other. Principle 4 of the *FAO Principles* and Guidelines for National Food Control Systems can illustrate the roles and responsibilities of all participants to form food governance. It states:

[121] Marion Dreyer & Ortwin Renn, *Introduction*, *in* FOOD SAFETY GOVERNANCE: INTEGRATING SCIENCE, PRECAUTION AND PUBLIC INVOLVEMENT 3, 4 (Marion Dreyer & Ortwin Renn eds., 2009).

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> 11. All participants in a national food control system should have specific roles and responsibilities clearly defined.
> 12. Food business operators have the primary role and responsibility for managing the food safety of their products and for complying with requirements relating to those aspects of food under their control.
> 13. The national government (and in some cases a competent authority) has the role and responsibility to establish and maintain up to date legal requirements. The competent authority has the responsibility to ensure the effective operation of the national food control system.
> 14. Consumers also have a role in managing food safety risks under their control and where relevant should be provided with information on how to achieve this.
> 15. Academics and scientific institutions have a role in contributing to a national food control system, as they are a source of expertise to support the risk based and scientific foundation of such a system.[122]

However, due to the lack of legal binding effect of the Codex Alimentarius and other international instruments, there has been a failure to build food governance and form an institutional framework essential for the global food system. Consequently, there is a lack of uniformity in food standards resulting in discriminatory behaviour. Furthermore, the contemporary global food trade system failed to address food security issues. Hence, even after 100 years there is no global food system to resolve food security issues.

In response to this, bestowing legal significance on the contemporary international food instruments might seem to be an easy and effortless solution. But the contemporary international food instruments focus on food safety and food trade, and are more similar to International Food Safety Law which is a branch of International Food Law, but which, however, cannot be called a comprehensive International Food Safety Law. Although these international food instruments are referred as International Food Law, they perform more as a source of International Food Law. Furthermore, the multiplicity of the contemporary international food instruments will make the enforcement of these instruments complicated and the result will be a much complex global food system. However, creating comprehensive international food law will create food governance by regulating food production, distribution, safety, waste, relevant aspects

[122] CODEX ALIMENTARIUS COMM'N, PRINCIPLES AND GUIDELINES FOR NATIONAL FOOD CONTROL SYSTEMS 1 (2013).

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of food trade, and establishing guidelines and are source management system.

## IV. BUILDING A COMPREHENSIVE INTERNATIONAL FOOD LAW AND FRAMEWORK

The food issue is an extremely important issue and food security is an extremely important security. So international food law is another form of international security, which is not merely a set of rules regulating the maintenance and restoration of international peace and security. Rather, it can contribute significantly to maintain international peace and social order by ensuring the right to food for all at all times. Generally thinking about "food law" it is believed food law will be a form of legislation which will regulate the food production, food supply chain, food standards, food safety, food trade and other relevant aspects with an objective to build food security. So it can be asserted that a comprehensive food law must contain an aim and scope with some general principles, rules for food production, safety, trade and labelling, rules to prevent food waste, and rule for food assistance and aid. It means that a comprehensive food law must contain some rights and privileges, obligations and accountability. In pursuance of enacting a comprehensive international food law, the following aspects can be considered.

Beginning with the objective and goal of international food law, the objective of the comprehensive international food law must be preventing the violation of people's right to food because of food insecurity and set its goal at achieving food security to ensure people's right to food. Addressing notions like food insecurity, food security and right to food, an adequate legal definition of these notions including other relevant notions are also essential. The contemporary international instruments can act as a source and guidance in this regard. Furthermore, since the concept of international food law covers a wide range of areas such as nutrition, food safety, food trade, food standards, human rights, environment, and so forth, identifying the source or basis of international food law is a prerequisite to addressing the broader aspects of international food law and will also make the contemporary international instruments a source of the comprehensive international food law. Analysing the benefit bestowed by Article 38 of the International Court of Justice Statute upon the International Court of Justice (hereinafter "ICJ") will help to comprehend the benefit of identifying the sources of international food law. Moreover, because of the broader aspect International Food Law needs to acknowledge general principles and customary law alongside treaties, agreements and conventions. General principles act as a "gap filler" and "bridge" between customary law, contemporary law and measures, and creates delimited

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actions. Implication of principles such as the precautionary principle, the common but differentiated principle, and the principle of non-discrimination, equitable and sustainable utilization, due diligence in International Food Law also needs further research.

Withal, food security has four aspects, food production and supply, food standards, food safety, food trade and food waste. Hence, it will be convenient to divide the comprehensive international food law into segments. For instance, food safety is considered more as a food trade issue rather than a food security issue. However, food safety and food standards are more related to food security issues, because, food security exists when the supplied food is safe and provides adequate amounts of calories and nutrients. Despite comprehending that food security holds a health perspective, food safety is usually considered as an international trade related issue.

Implications of food safety at national level have also barely been grasped as an international concern. Similarly, food production and supply are also considered from international trade aspects and at global levels, but their nexus to maintain food security at national levels is not considered. Nor is any legal framework is suggested for food production and to maintain equitable distribution of food at global and national level. Hence, many prominent issues such as food waste during food production, technological and financial support for the developing and least developed countries, saving farmers and subsidies, has never gained concern at international level, despite the fact that, without solving these issues at national levels, food security at global level cannot be resolved. Furthermore, overtime food waste has been gradually increasing with the severity of food insecurity.

Moreover, dividing the comprehensive food law into segments also suggests the need for rights, obligations and responsibilities, hence ensuring rights such as the right to food, the right to adequate food, the right to have safe food, the right to have food of one's own preferences, and the right to have food with adequate nutrients, which become a prerequisite for international food law along with their adequate illustrations or definitions. However, unlike the right to food, the right to adequate food, and the right to have safe food, other relevant rights such as the right to have food of one's own preferences and the right to have food with adequate nutrients are not explored in the international arena. But by reading the definition of the rights to food and food security together we can get support for other relevant rights such as the right to have food of one's own preferences and the right to have food with adequate nutrients. However, these rights are on more general in nature, or can be referred to as more consumer oriented. But acknowledgement of other rights such as

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farmers' rights to technological support, the right to farming and adequate price for products is also essential.

Accordingly, to ensure any rights acknowledgement of obligations and responsibilities are also essential. Implementation of obligations and responsibilities upon different stakeholders will contribute significantly to the enforcement of International Food Law. These obligations and responsibilities will not only help to build a national food system but will also build a global food system and food governance. Besides, a dispute settlement mechanism is also essential for the enforcement of International Food Law, where national judicial systems, WTO dispute settlement and the ICJ can contribute. Additionally, International Food Law needs to set up a legal framework for risk assessment and risk management to provide food aid and assistance.

As a branch of International Law, International Food Law will represent the will and consent of nation-states with respect to the rules that will govern the global food system. So, International Food Law with its comprehensive and interdisciplinary approach will initiate some common practices, rights and obligations, cooperation, and codes of conduct by creating global food governance.

## V. CONCLUSION

The contemporary international food law, which is a collection of international instruments regarding food, emerged with the concept of "food security." Even after the 100 years since the concept of "food security" received global acknowledgement, contemporary international food law has failed to resolve "food security" issues. Still there are 690 million people waiting for food, which is predicted to increase in the near future. Analysing the 100 years of "food security," the present article observed the following.

First, the contemporary international food instruments focus on food safety, facilitating food trade, harmonizing food standards and ensuring food rights. And the contemporary international food law is governed by these international food instruments but lacks a comprehensive model for international food law, and is dependent on scattered binding and non-binding instruments. Hence, international cooperation in the form of a binding treaty or agreement is necessary for an effective response to food security which a comprehensive international food law can provide.

Secondly, the contemporary international food law lacks legal binding effect, and consequently has failed to build food governance, address food security issues, general principles, and so on. The contemporary international food law mainly focuses on food trade and food safety. However, it has failed to bring uniformity in food standards, remove

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discriminatory measures in food trade, and resolve food security and safety issues.

Thirdly, as the maximum contemporary international food instruments focus on food safety and food trade, they bear more resemblance to International Food Safety Law which is a branch of International Food Law and cannot be referred to a comprehensive International Food Safety Law, but can be referred to as a source of International Food Law.

Fourthly, the contemporary international food instruments of food safety are enacted from economic perspectives. However, the global food system has a humanitarian, ethical, environmental, public health and social aspect which can only be addressed adequately by a comprehensive approach.

Additionally, analysing how the international food law emerged, its development over time and the contribution of the international organisations in its development, it is clear that international food law is one of the branches of international law which requires a multidimensional, cooperative and comprehensive approach. Food security issues can be resolved only if a global food system comes into existence to function by enacting a comprehensive international food law with just and fair regulations. A comprehensive international food law will give a codified code of fair practice, rights and obligations, and guidance for trade and management by creating an institutional framework and food governance, which are prerequisites for a global food system to function efficiently.

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