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# STATE'S OBLIGATION FOR THE HUMAN RIGHT TO ADEQUATE (SAFE) FOOD AND GLOBAL TRADE: A CASE STUDY OF INDONESIAN NATIONAL-LEVEL INEQUALITIES IN FOOD SAFETY STANDARDS FOR IMPORTED FOODS

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## ABSTRACT

States have the obligation to respect, protect, and fulfill the right of their people to adequate food, including safe and nutritious food. The obligation to *fulfil (facilitate)* means states must proactively engage in activities intended to strengthen people's access to safe food. A lack of resources and capacities can hamper a state's capacity to develop a proper scientific justification as the basis to establish food safety regulations as mandated by the World Trade Organization (WTO) and thus can create inequality in public health protection between developed and developing countries. This thesis aims to present a case study of inequalities in international food trade vis-à-vis food safety standards and introduces how to tackle the issue by using a human rights-based approach (HRBA) to food safety and the concepts of self-determination, non-discrimination, and equality in food sovereignty.

Several human rights instruments especially the right to adequate food and nutrition will be applied to denounce the perception that "free trade" rules should prevail over public health protection. A secondary data analysis of maximum residue limits (MRLs) comparing six commodities (wheat, soybean, rice, apples, garlic, and peanuts) was created to display quantitatively the disparity of food safety standards between WTO members, particularly between nineteen developed, developing, and least-developed countries. Semi-structured interviews were conducted from April to June 2018 to gain insights and perspectives from 14 respondents from related stakeholders: public officials, civil society organizations (CSOs), importers, and researchers.

The findings from secondary data analysis indicate that a disparity in food safety standards, particularly in MRL standards between the WTO members, indeed exists. All developed countries reviewed establish their own national MRLs and add an extra layer of protection, the default MRL/positive list. Some developing countries have been developing a multi-step deferral policy, i.e., a hybrid process of adopting other international standards such as the Codex or the EU MRLs, along with their national standard, as well as adopting a default MRL. A multi-step deferral policy may be a strategy for lower-income countries to improve their food safety control on pesticide residues.

Furthermore, interview findings reveal structural conditions in international trade rules that, in the case of Indonesia, prevent the realization of the human right to food and food sovereignty for its people. Several recommendations to tackle the issues are proposed, as follows: increasing awareness and education of the right to food for both the state as duty-bearer and the communities; expanding the knowledge of CSOs and their involvement as CSOs in the area of food safety and global trade issues; increasing rights holders' participation and sovereignty in food-related policy; evolving the human right to food safety at the international level by addressing discrimination and lack of equity in international trade rules concerning food safety; democratizing local and national food governance through increased civil society participation including by traditional food producers; centralizing food safety governance at the national level to maximize food safety and to some extent, lowering subsidiarity to reduce market inefficiency; and conducting food law reform in Indonesia.

**Keywords:** *WTO; SPS; food safety; international trade; human rights; human right to adequate food; food sovereignty; Indonesia; inequality.*

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AND GLOBAL TRADE:**

**A CASE STUDY OF INDONESIAN NATIONAL-LEVEL INEQUALITIES  
IN FOOD SAFETY STANDARDS FOR IMPORTED FOODS**

by

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**Thesis**

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## INTRODUCTION

### OVERVIEW

Food is a basic human need that almost all governments have recognized as an international treaty right to adequate and safe food and nutrition that they, the governments, are obligated to respect, protect, and fulfill. The government of Indonesia has recognized the right to adequate food in Indonesia's Food Law Number 18 of 2012. It states that food is the essential human need and its fulfillment is part of human rights, which is guaranteed in the 1945 Constitution of the Republic of Indonesia as a basic component in creating quality livelihoods. It also emphasizes the obligation of the state to achieve availability, affordability, and fulfillment of food consumption that is sufficient, safe, and nutritionally balanced both on the national and local levels by utilizing local resources, institution and culture (Indonesia Food Law of 2012, p.1). Furthermore, Indonesia's Food Law defines food safety as:

A condition and effort that is required to prevent food from the possibility of biological, chemical and other contaminants that can interfere, harm and endanger the human health as well as not conflicting with religion, belief and culture of the society so that it is safe for consumption. (Indonesia Food Law of 2012, p.4)

This law has been used as the legal basis to develop technical regulations on foods, including food safety inspection for imported foods.

Food safety authority in Indonesia involves multiple food control agencies, e.g., the National Agency of Food and Drugs Control (NAFDC), Ministry of Maritime Affairs and Fisheries (MAFF), Ministry of Agriculture (MoA), Ministry of Trade (MoT), Ministry of

Industry (MoI), and other agencies with different roles and responsibilities. NAFDC and MoI have the responsibility to regulate processed food as food safety authorities. Meanwhile, MoA has the responsibility to conduct food safety control for fresh plant and animal products. The MoT has the role of ensuring the balance of regulatory activities between all related agencies while maintaining the Ministry's role as a trade facilitator.

Since 2009, Indonesia has been struggling to develop adequate import food safety policies while balancing international trade, political, and financial issues. In 2009, the Indonesian Agricultural Quarantine Agency (IAQA) was mandated by the MoA to conduct food safety inspections for imported and exported fresh agri-food products through the Regulation of the Minister of Agriculture Number 27 of 2009 in connection with the Regulation of the Minister of Agriculture Number 38 of 2009. This regulation became the foundation for food safety control of fresh agri-food products at the border, particularly for plant products. The regulation included border inspection, sampling, and laboratory testing for 38 fresh plant products. The food safety objective of the regulation is to prevent food-borne illnesses, i.e. chemical contamination such as pesticide residues, heavy metals, and aflatoxins. In 2011, this regulation was superseded by Regulation of the Minister of Agriculture Number 88 of 2011, which was designed to expand the scope of inspected foods from 38 commodities to 100 commodities and update the food safety standards. In this newer regulation, microbial contaminants such as *Escherichia coli* and *Salmonella* spp. were added as food hazards.

In 2015, because of the increasing demand from Indonesian society for more effective and efficient mechanisms to control the safety of agri-food products at the border, the Regulation of the Minister of Agriculture Number 88 of 2011 was then revised and replaced by the Regulation of the Minister of Agriculture Number 04 of 2015. This regulation contains new

significant changes to the mechanism of food safety control for imported fresh agri-foods, which has the potential to strengthen the food safety system in Indonesia. However, since it was deemed by some stakeholders (such as governments and exporters in the exporting countries, and importers) as “too restrictive,” the regulation was amended barely two months after its enforcement date and revised into the Regulation of the Minister of Agriculture Number 13 of 2016. Lastly, on November 18, 2016, it was superseded by the Regulation of Minister of Agriculture Number 55 of 2016, due to strong opposition from many stakeholders, including the governments and exporting firms from exporting countries; Indonesia’s importers and food industries; and other Indonesian government agencies.

Ensuring food safety to protect public health and promote economic development remains a significant challenge in both developing and developed countries (FAO, 2016). Josling, Roberts, and Orden (2004) contended that public authorities face the dilemma of developing food safety policies that are effective yet unobtrusive. These policies need to involve every stakeholder, including the private sector; ensure consumer confidence; and “reflect national conditions and local preferences and at the same time [remain] consistent with the realities of [the] global economy” (Josling et al., 2004, p. 2). The Institute of Medicine (US) and National Research Council (US) Committee (1998) stated that “the mission of an effective food safety system is to protect and improve the public health by ensuring that foods meet science-based safety standards through the integrated activities of the public and private sectors” (p. 64). Less developed countries are constrained inevitably by limited resources and insufficient knowledge to develop adequate food safety policies that are sufficiently protective and progressive. Thus, this lack of resources and capacities can hinder their ability to establish an adequate scientific justification as required by the World Trade Organization (WTO), and

thereby can lead to inequality in public health protection between developed and developing countries.

This study analyzes existing Indonesian food safety standards for imported fresh foods using a human rights framework and a food sovereignty perspective in order to identify the most suitable food safety control mechanism at the border, particularly for fresh products imported into Indonesia. It will focus on the disparity of food safety standards between WTO Members and the dynamic regulatory changes in the Indonesian Agricultural Quarantine Agency (IAQA), including the transition from the first regulation in 2009 to the most recent regulation (2016); the challenges confronted during the implementation of each regulation; and the dilemmas faced by policymakers to balance the obligation of public health protection and trade facilitation.

In this thesis, food safety policies are divided into three regimes, each with separate distinct mechanisms for food safety control, in order to describe the dynamic changes in Indonesia's food safety regulations over the last decade. The first regime, Regime 1, was under the Regulation of the Minister of Agriculture Number 27 of 2009 *in conjunction with* the Regulation of the Minister of Agriculture Number 38 of 2009 and the Regulation of the Minister of Agriculture Number 88 of 2011. The second, Regime 2, was under the Regulation of the Minister of Agriculture Number 04 of 2015 and Regulation of the Minister of Agriculture Number 13 of 2016, and the last regime, Regime 3, is the Regulation of the Minister of Agriculture Number 55 of 2016, which has been implemented since the end of 2016 until now.

A human rights-based approach, with particular reference to the human right to adequate food and nutrition, will be applied to challenge the notion that following trade rules is more important than protecting public health. The national standards for maximum residue limits (MRLs) of pesticide residues and the positive list system are also used to describe the disparities

of food safety standards between developing countries and developed countries. Semi-structured interviews will be used to provide perspectives from both experts in civil society and public sector officials, including policymakers and researchers in Indonesia. Both direct interviews conducted in Indonesia and online interviews conducted from the U.S. via Skype and Google Hangout provide knowledge, experiences, and opinions regarding the human right to adequate food, food sovereignty, food trade, food safety regulation/standards, and food safety inspection.

### **RESEARCH QUESTIONS:**

1. What is the most efficacious way of using a human rights-based approach to food safety and food sovereignty as an expression of group and national claims for self-determination, non-discrimination, and equality in order to assess existing Indonesian national-level inequalities in food safety
2. What specific food safety control mechanism (at the border) will enable Indonesia to can balance public health protection and trade facilitation?

### **RESEARCH METHODS**

The motivation for this research is drawn from the needs and gaps in Indonesia's food safety policies as identified by the researcher as one of the actors (a policy officer in IAQA) in this field of study. This research is a case study of Indonesia. According to Stake (1995), case study research is "the study of the particularity and complexity of a single case, coming to understand its activity within important circumstances." Another methodologist, Yin (2014), defines case study as "an empirical inquiry that investigates a contemporary phenomenon (the 'case') in depth and within its real-world context" (p. 16). This research project was conducted

using secondary sources and document analysis as well as primary sources in the form of interviews with field experts.

## **A. Literature Review**

A literature review is a “systematic, explicit, and reproducible method for identifying, evaluating, and interpreting the existing body of recorded work produced by researchers, scholars, and practitioners” (Fink, 1998, p. 3). This thesis draws on three categories of literature: food safety standards, the human right to adequate (safe) food, and food safety control mechanisms for fresh plant products at the Indonesian border. A set of regulations on food safety control for imported fresh agri-products was used to examine regulatory changes in Indonesia. Several human rights instruments, especially the right to adequate food and nutrition, were applied to challenge the perception that “free trade”<sup>1</sup> rules should prevail over public health protection. In addition, the literature related to the human right to *safe* food is limited, and there are few existing studies on food safety control in Indonesia, especially for imported fresh agri-products.

## **B. Secondary Data**

The national standards for maximum residue limits (MRLs) of pesticide residues and a positive list system were used to describe the existing food safety standards and disparities of food safety standards between developed countries, developing countries and least-develop countries (LDC). Regulations on national food safety standards, particularly MRLs for pesticides residues, from 18 countries (USA, Australia, Canada, New Zealand, Japan, South Korea, China, South Africa, Indonesia, Malaysia, Thailand, India, Singapore, Vietnam,

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<sup>1</sup> While the WTO continuously uses the term “free trade”, the UN body, Codex Alimentarius Commission, employs the term “fair trade” in place of “free trade”. Throughout this study, the author uses the term relevant to the WTO or Codex, depending on the context.



Bangladesh, Mozambique, Cambodia, and Myanmar) and the European Union (EU) were used to provide an overview of the disparity of food safety standards between selected WTO members. Testing pesticide residues is a process of selecting which specific pesticides to examine from the thousands of established and under development varieties on the market. While each state develops their own national standards (MRLs) for pesticide residues, the stringency of standard can differ, and some countries may have no or limited MRLs standard that may not adequately protect public health. According to WTO rules, to set a stricter standard to test pesticide residues (stricter than the international standard such as Codex standard), a country needs to undertake research to establish scientific justification for an MRL standard for each separate pesticide residue to be tested. Clearly, with the constant development of new pesticides, this process is ongoing, time consuming, expensive, and requiring of a high level of research expertise. The more MRLs a country can afford to set standards for, the more likely that that country has the tools to protect public health. A country does not necessarily, or does not typically, test all the MRLs for which it has established a standard. It has, however, the capacity to do so, and it follows that public health can generally be more protected with the authority to test. Comparison tables of MRL standards of six commodities were created to demonstrate the disparities between developing and developed countries. Using the data on fresh agri-products imported to Indonesia, six main commodities were chosen as representatives, i.e., wheat, soybean, rice, apples, garlic, and peanuts.

### **C. Primary Data: Semi-structured Interviews**

Gilham (2000) explained that qualitative methods such as key informant interviewing and observation focus mainly on the type of evidence (what people tell you; what they do) to

help illuminate issues and turn up possible explanations. Since this research aims to explore a unique approach to addressing food safety policy in the context of a human rights-based approach to food safety and food sovereignty, conducting interviews and a literature review to gain data and understanding are reasonable choices to achieve the research objectives.

Semi-structured interviews were conducted from April to June 2018 to gain insights and perspectives from related stakeholders: public officials, Civil Society Organizations (CSO), importers, and researchers. The Full Expedited Institutional Review Board (IRB) protocol from the Syracuse University IRB was approved on April 3, 2018 (See Appendix 1), and the first amendment request to add more public sector officials as participants was approved on May 10, 2018 (See Appendix 2). In addition, the second amendment to add an oral consent form was approved on May 30, 2018 (See Appendix 3).

Two methods of in-depth interviews were used: face-to-face and online. Face-to-face interviews were mostly conducted in three Indonesian cities (Jakarta, Tangerang, and Bogor) due to geographical limitations and time constraints. Only one direct interview was conducted in Syracuse. Online interviews were conducted using Skype or Google Hangout from Syracuse, New York. Participants were asked to return the signed consent form either before the interview was started, or after the interview if they had given verbal consent in advance. Online interviews were implemented as a result of time constraints related to conducting interviews directly in Indonesia. Interviews were generally conducted in Bahasa (an Indonesian language) for Indonesian interviewees, with English as an alternative option.

### **Sampling**

A mixture of expert sampling and snowball sampling was used to identify prospective interviewees. Participation selection for this study was purposive and limited to adults (21

years old or older) with at least two years of work experience related to food safety, food trade, the human right to food, or food sovereignty. Interviewees were identified and categorized into four groups: official public-sector actors or public officials, representatives from CSOs, researchers and exporters (See Appendix 5). Interviews were conducted using two similar sets of questions with different emphases (Appendix 4). Questions were designed to collect information on interviewees' perception, knowledge, and experience with food safety policy, food sovereignty, and the human right to food in Indonesia specifically.

### **Number of Interviews**

In total, twenty (20) participants were contacted, and fourteen (14) responded and agreed to be interviewed. The complete list of the interviewees can be seen on Appendix 5. According to Roller and Lavakras (2015),

the number of interviews can be decided by four considerations: (i) the breadth, depth, and nature of the research topic; (ii) the heterogeneity or homogeneity of the population of interest; (iii) the level of analysis and interpretation required to meet research objectives; and (iv) practical parameters, such as the availability of and access to interviewees, budget or financial resources, time constraints, and also travel and other logistics associated with conducting face-to-face interviews (p. 76).

Since guidelines for determining non-probabilistic sample sizes for interviews are virtually nonexistent (Guest, Bunce, and Johnson, 2006), the number of interviews was based on the “theoretical saturation” concept, when no new information or themes are observed in the data. Researchers have different opinions on how many interviews should be conducted before the data saturation point is reached. Guest et al. (2006) concluded that data saturation can occur at the level of twelve interviews, but admitted that the result might not be

generalizable. Romney, Batchelder, and Weller (1986) calculated that a small sample (four individuals) with a high degree of cultural competence can provide extremely accurate information at a high confidence level (0.999).

A study by Hennik, Kaiser, and Marconi (2017) compared two approaches to assessing saturation. They considered code saturation and meaning saturation by examining the sample sizes needed to reach saturation in each approach, what saturation meant, and how to assess saturation. They concluded that nine out of 25 in-depth interviews were needed to reach code saturation (when researchers have “heard it all”), while meaning saturation (when researchers have “understand it all”) was reached after 16-24 interviews (Hennik et al., 2016, p. 591). However, Saunders, et.al., (2017) argued that when and how saturation may be determined to have been reached will vary depending on the type of study, “as well as assumptions about whether it represents a distinct event or an ongoing process”. Moreover, Francis et al. (2010) proposed a method to decide saturation in a theory-based interview by following two principles: (i) specify an initial analysis sample; and (ii) specify how many more interviews will be conducted without new ideas emerging (p. 1229).

#### **D. Limitation of methods**

Geographical and technical limitations complicated the research and may have influenced data collection. The 12-hour time difference between the U.S. and Indonesia made online interviews difficult to arrange. Reliance on online communication was hampered by unstable internet connections. The result may have impacted the participation rate and depth of discussion. Furthermore, the idea of saturation provides “little practical guidance for estimating samples, prior to data collection, necessary for conducting quality research”

(Guest et al., 2006, p. 59). Therefore, the degree to which interviews are or are not gaining meaningful new information might be biased, which might cause incomplete data. In addition, with limited sampling and data, the findings might not be generalizable and only applicable to Indonesia as the case study, although Stake (2006, p. 8) argues that “the power of case study is its attention to the local situation, not in how it represents other cases in general.”

## Summary

Indonesia ratified the International Covenant on Economic, Social and Cultural Rights in 2005, and therefore has the obligation to respect, protect, and fulfill the right of Indonesian people to adequate food, including safe and nutritious food. The obligation to *fulfil (facilitate)* means that Indonesia must engage proactively in activities intended to strengthen people’s access to safe food. The lack of resources and human capacities a disadvantage Indonesian capacity to develop proper scientific justification (as mandated by the World Trade Organization (WTO) on which to base satisfactory food safety regulations. This can create inequalities in public health protection between developed and developing countries.

This study focuses on a case study of inequalities in food safety standards in international food trade and introduces how to resolve disparities by using a human rights-based approach (HRBA) to food safety. Human rights instruments from the global and Indonesian national levels that articulate the right to adequate food and nutrition will be applied to challenge the perception that “free trade” rules, as promoted by WTO, should prevail over public health protection. Codex theoretically promotes an approach to setting food safety standards that calls for a balance between public health and “fair trade” objectives. The apparent dominance of trade rules at the expense of public health protection calls for a reevaluation of the ratified international treaty and

national legal obligations that unequivocally endow the Indonesian population with rights to food and food safety. A secondary data analysis of maximum residue limits (MRLs) of pesticides on six commodities (wheat, soybean, rice, apples, garlic, and peanuts) was created to display quantitatively the disparity of food safety standards between selected WTO members, specifically nineteen countries, differentiated by developed, developing, and least-developed status. Semi-structured interviews were conducted from April to June 2018 to gain insights and perspectives from 14 stakeholder respondents representing public officials, civil society organizations (CSOs), importers, and researchers.

## CHAPTER 1

### LITERATURE REVIEW

The term “safe food” represents different meanings to different audiences based on their perspectives (Seward II, 2003). Some consumers tend to have a rigorous definition of safe food and expect it to be absent of health risks, while scientists, public health officials, and international organizations expect safe food to “provide maximum nutrition and quality while posing minimal threat to public health” (Shank and Carson, 1992). According to the FAO (2018), “food safety implies the absence or safe levels of contaminants, bacteria, naturally occurring toxins or any other substance that may make food injurious to health.” The decision on the minimum risk level that is acceptable can be different, which can be based on science or might be driven by commercial or self-interested motives” (Nestle, 2010, p.16).

National governments have an obligation to ensure the right to adequate food, including safe food. The FAO (2005), in *The Voluntary Guidelines on the Right to Food: to support the progressive realization of the right to adequate food in the context of national food security*, emphasized the equality and non-discrimination principle, contending that “[f]ood should not be used as a tool for political and economic pressure” (Preface, p. 2). The guidelines included the obligation of states in realizing the right to safe food: “States should take measures to ensure that all food, whether locally produced or imported, freely available or sold on markets, is safe and consistent with national food safety standards” (Guideline 9, pp.19-21). Therefore, to safeguard food safety, “states need to develop a comprehensive and rational food-control system by reducing the risk of food-borne disease using risk analysis and supervisory mechanisms” (FAO, 2005, Guideline 9, pp. 19-21).

This chapter is divided into three parts: food safety standards, the human right to adequate (safe) food, and a case study in Indonesia regarding food safety control mechanisms for fresh plant products at the border. The first part of this chapter provides an overview of food safety standards, including the role of the World Trade Organization (WTO) in food trade and food safety; the international food safety standard organization, Codex Alimentarius Commission (CAC); two general approaches in the development of food safety standards; and the advantages and disadvantages of the harmonization of food safety standards. The second part talks about the concept of the human rights, the right to adequate food, food safety as a human right, and the disparity in food safety standards, particularly between rich and poor countries. The last part explains the dynamics of regulatory changes in food safety policies for imported fresh plant products in Indonesia, particularly at the border during the last decade.

## **I. Food Safety Standards in Indonesia**

The authority to conduct food safety inspections of agricultural fresh-foods in Indonesia—including the inspection of fruits and vegetables—belongs to the Agricultural Quarantine Agency under the Ministry of Agriculture (MoA). The Indonesian Agricultural Quarantine Agency (IAQA) was mandated by the Minister of Agriculture to conduct food safety inspections for imported fresh agri-food products in 2009. The Regulation of the Minister of Agriculture Number 27 of 2009, in conjunction with Regulation of The the Minister of Agriculture Number 38 of 2009, became the foundation for food safety control for fresh agri-food products at the border, particularly for plant products. The Regulation included inspecting, sampling, and testing thirty-eight fresh plant products for chemical contaminations such as pesticide residue, heavy metals, and aflatoxins. The following example (Box 1) is a case study of microbial contamination in apples imported in Indonesia from the United States.



Box 1. Case study of *Listeria monocytogenes* contamination in apples imported from the United States

At the beginning of 2015, the issue regarding contamination of *Listeria monocytogenes* in apples imported from the United States became national news in Indonesia. It was started by a notification from the U.S. Food and Drug Agency (FDA) to the government of Indonesia regarding the recall of Gala and Granny Smith apples supplied by Bidart Bros. Company. This was due to an outbreak of bacterial contamination caused by the consumption of caramel apples (Central for Disease Control and Prevention [CDC], 2015). Bidart Bros., of Bakersfield, California, voluntarily recalled Granny Smith and Gala apples because environmental testing revealed contamination with *L. monocytogenes* at the firm's apple-packing facility (CDC, 2015). According to the CDC, 35 people from 12 states were infected, and 34 people were hospitalized. Three out of the seven deaths were reportedly caused by Listeriosis. Several countries such as Malaysia, Singapore, Thailand, and the Philippines immediately announced a ban or recall on imported Granny Smith and Gala apples from the U.S. (The Strait Times, 2015), while Indonesia became the last country in Southeast Asia to declare a temporary stop on the importation of apples from the U.S.

The news caused a food-scare among Indonesian consumers since imported apples were sold and consumed widely. CNN Indonesia covered the story with a report entitled "Recognizing *Listeria Monocytogenes*, Contaminant Bacteria in Imported Apples." The national newspaper, The Jakarta Post, came up with the headline, "RI Banned Some Apples from the United States" (Wahyuni, 2015; Yulisman, 2015). Another well-known national newspaper, Kompas, published articles such as "Fruit Sellers Should Stop Selling Imported Apples," which asserted that the case should be used as momentum to begin food safety testing, especially for *L. Monocytogenes* in imported fruits (Auliani, 2015; Zamzani, 2015). The case was ended after Indonesia's government reaffirmed that no Granny or Gala apples were imported from the U.S. to Indonesia prior to and during the outbreak (Detik Finance, 2015).

Microbial contaminations were not regulated until 2011 when the regulation standard was revised and substituted by the Regulation of the Minister of Agriculture Number 88 of 2011. This ordinance expanded the scope of inspected foods from 38 commodities to 100 commodities and updated the food safety standards. However, this regulation, which was implemented during

the outbreak in 2015, did not have a microbial contamination standard for *L. monocytogenes*. The microbial contamination standards included in the 2011 regulation were for *Escherichia coli* and *Salmonella spp.* The 2011 regulation was renewed into the Regulation of the Minister of Agriculture Number 04 of 2015 that provides new, significant changes to the mechanism of food safety control for imported fresh agri-foods with no substantial change to the food safety standards. In April 2016, the regulation was amended again into the Regulation of the Minister of Agriculture Number 13 of 2016 to revise some provisions and delay the enforcement date. However, those regulations, the Regulation of the Minister of Agriculture Number 04 in conjunction with the Regulation of the Minister of Agriculture Number 13, were deemed as “too restrictive” (Detik Finance, 2015), and therefore superseded by the Regulation of the Minister of Agriculture Number 55 on November 18, 2016. The microbial contamination standards are still unchanged, and no standard for contamination of *L. monocytogenes* on fresh fruits has been established.

The case of the *L. monocytogenes* outbreak detailed above illustrates the significance of adequate food safety standards during this era when the trade globalization of food has become an integral part of the food system. However, achieving an appropriate level of protection sufficient enough to ensure public protection can be challenging, especially for developing countries like Indonesia (Iwantoro, 2002). The food safety standards regulated in Indonesia’s food safety regulations mentioned previously are adopted mostly from the harmonized international standard developed by Codex Alimentarius Commission (CAC), except for the microbial contamination standards which are adopted from an outdated Indonesian National Standard (*Standard National Indonesia* [SNI] 7388:2009) regarding the maximum limits of microbial contamination on foods. The limited resources and expertise in less-developed

countries can hinder the ability to establish adequate national food safety standards, which might weaken consumer protection in those countries. During the FAO/WHO Global Forum of Food Safety Regulators in 2002, Syukur Iwantoro, the Indonesian Director for the Centre of Standardization and Accreditation, reported that “recent experiences in Indonesia have shown that constraints in application of [food safety] regulation are mainly due to the limitation of resources (human resources, technology, information, funding, etc.)” (Iwantoro, 2002). On the other hand, several studies showed how increasingly restrictive sanitary and phytosanitary (SPS) measures, including food safety standards, could limit market access and negatively affect the economy of poor exporting countries (Otsuki, Wilson, & Sewadeh, 2001; Joseph, 2011).

### **I.1. World Trade Organization (WTO), Sanitary and Phytosanitary (SPS) Measures, and Codex Alimentarius Commission (CAC): Internal contradictions between trade and public health**

The World Trade Organization (WTO) was established on January 1, 1995, as the successor to the General Agreement on Tariff and Trade (GATT), and until now has 160 members representing 98% of world trade (WTO, n.d.)<sup>2</sup>. The WTO’s primary goal is to “ensure that trade flows as smoothly, predictably and freely as possible” (WTO, n.d.)<sup>3</sup>. The Agreement on the Application of Sanitary and Phytosanitary (SPS) Measures (the SPS Agreement) was enforced with the establishment of the WTO in 1995, with the purpose of ensuring the right of WTO members to carry out their expressed duties while also avoiding unnecessary barriers to trade (WTO, n.d.)<sup>4</sup>, as stated in text of the agreement:

[N]o Member should be prevented from adopting or enforcing measures necessary to protect human, animal or plant life or health, subject to the requirement that these

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<sup>2</sup> WTO, no date. What is the WTO. Retrieved December 15, 2018, [https://www.wto.org/english/thewto\\_e/thewto\\_e.htm?](https://www.wto.org/english/thewto_e/thewto_e.htm?)

<sup>3</sup> Ibid

<sup>4</sup> Ibid

measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between Members where the same conditions prevail or a disguised restriction on international trade” (WTO, 1995, p. 69).

Each country, as a member of the WTO, has an obligation to comply with the SPS Agreement. In addition, the SPS Agreement encourages members to “base their regulations on the health and safety standards developed by three relevant international bodies: the Codex Alimentarius Commission/CAC (for food safety); the International Plant Protection Convention/IPPC (for plant health); and the World Organization for Animal Health (for animal health and animal diseases transmittable to humans)” (WTO, 2015). The CAC was created in 1963 by the Food and Agriculture Organization (FAO) and the World Health Organization (WHO) with two primary purposes: “protecting the health of consumers and ensuring fair practices in food trade” (Fortin, 2017). The CAC carries the responsibility of developing and establishing international food standards and guidelines called the Codex Alimentarius (Food Book/Food Code) or simply “Codex” (Fortin, 2017). Currently, the CAC consists of 188 member countries and one member organization (the European Community/EU) (FAO, n.d.). Fortin explained that “membership in the Commission confers no duties on a nation but allows a nation to contribute fully to the development of the standards” (p. 482).

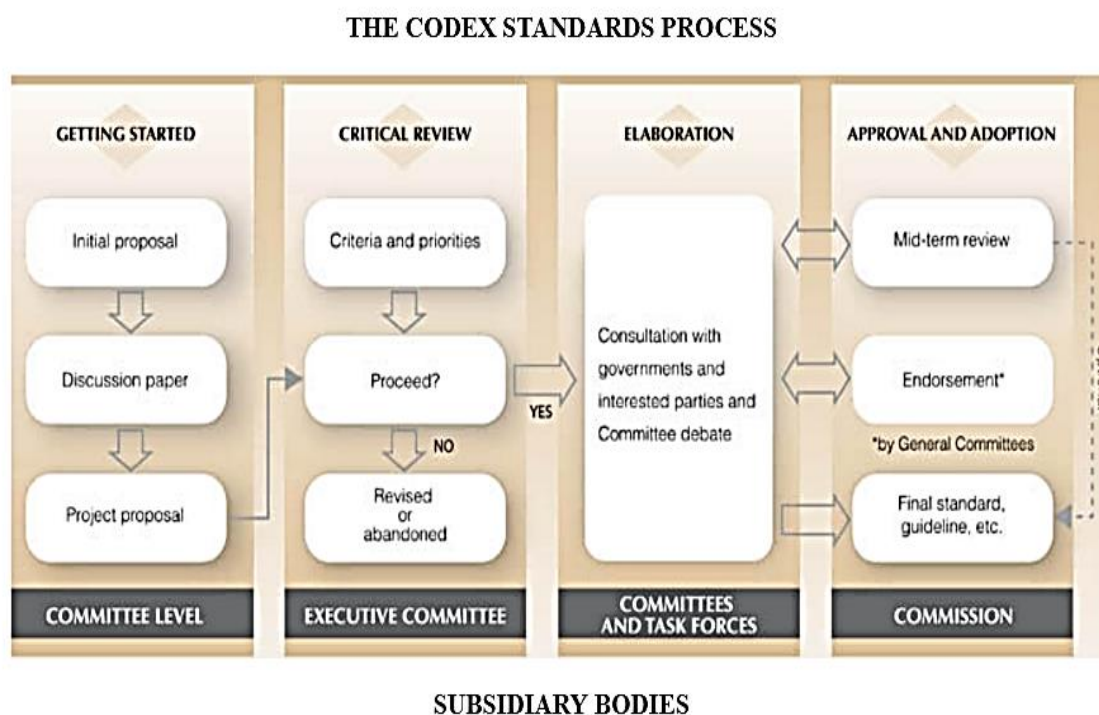
There are criticisms of the CAC’s dual roles in health and trade. Khanna and Saxena (2003) explained that the second responsibility of the CAC, which is to ensure fair trade, may be interpreted differently at times. Some may argue that Codex ought to ensure that consumers are not misled or deceived by trade practices, while others may regard Codex simply as a way of promoting trade interest, asserting that food safety standards should not hinder the free trade process (Khanna & Saxena, 2003). Post (2005) pointed out that the main critique of the CAC’s

dual mandate is that “public health protection takes a back seat to trade interest” (p. 170). She argued that “states agree to free their markets to trade... at the same time, they reassert their rights to determine their own safety standards” (p. 171). Furthermore, Fortin (2017) shared the same sentiment regarding the dualism of Codex in his book, *Food Regulation: Law, Science, Policy, and Practice*: “The fact that Codex has two goals, ensuring fair international trade and protecting public health, raises the concern that trade may override health concerns” (p. 483).

## I.2. How CAC Develops its Standards

FAO/WHO (2003) described the procedure of food safety standard development within the CAC as shown in Figure 1 below.

Figure 1. How the Codex Develop their Standards (FAO/WHO, 2003)



The CAC developed two kinds of subsidiary bodies: *Codex Committees*, to formulate draft standards for submission to the CAC, and *Coordinating Committees*, to coordinate food standard

activities in the region, including the development of regional standards (FAO/WHO, 2003). Each committee (with few exceptions) is hosted by a member country, which is primarily responsible for the cost of the committee's maintenance and administration and for providing its chairperson (FAO/WHO, 2003). The process of establishing standards in the CAC can take a long time because decisions must be made under a consensus agreement (FAO/WHO, 2003). Khanna and Saxena (2003) ascertained that the slowness of the Codex standard formulation process could hamper the effectiveness of the standard and its relevance to the newest food safety risks or threats. They believed that to ensure that consumer interest becomes the priority, a more proactive approach is necessary, and a mechanism should be created to prevent commercial parties from influencing decision making in the development of standards (Khana & Saxena, 2003).

Livermore (2006) pointed out a disparity between the parties in the Codex process, especially between developing countries and developed ones. He argued that the participation of the developing countries in the Codex be limited due to lack of resources and "a bias toward industry groups, with many fewer active consumer group participants" (Livermore, 2006, p. 783). Downes agreed that limited participation from the public might cause a bias toward industrial interest. He observed that the public's interest in food policy might be weakened by international rules in three ways: "the WTO is perceived to be advancing values other than those most important to the general public; the processes the WTO establishes through the SPS Agreement act to marginalize public values, and the public is institutionally sidelined by inadequate access to decision-making processes" (p. 78). He also argued that since there is a bias towards industrial interest in Codex due to limited public participation, heavy reliance on

international rather than national standard-setting might marginalize public interest (Downes, 2014).

### I.3. Two General Approaches to the Development of Food Safety Standards

The 1995 SPS Agreement allows countries to develop their own national food safety standards if the scientific justification has been provided (Art. 2). Fortin (2017) stated that some countries adopt Codex standards legislatively, while others—predominantly developing countries—use Codex as a model in the development of their own food safety standards (p. 483). He further explained that the reason why most developing countries chose to adopt Codex is that they consider Codex a strong starting point when initiating a food law. On the other hand, “countries with established food laws have generally been unwilling to amend their laws to match Codex” (Fortin, 2017, p. 483).

In her book *Safe Food: The Politics of Food Safety*, Nestle (2010) compared two approaches in the development of food safety standards: “the science-based approach” and “the value-based approach.” Nestle summarized the comparison of both approaches in Table 1 below.

Table 1. “Science-based” and “value-based” approaches to evaluating the acceptability of food safety risks (*Nestle, 2010, p.17.*)

Science-based	Value-Based
<p><b>Count and calculates</b></p> <ul style="list-style-type: none"> <li>• Cases</li> <li>• Severity of illnesses</li> <li>• Hospitalization</li> <li>• Deaths</li> <li>• Cost of the risk</li> <li>• Benefits of the risk</li> <li>• Costs of reducing the risk</li> <li>• The balance of risk to benefits</li> </ul> <p><b>Balance risk against <i>benefit and cost</i></b></p>	<p><b>Assesses whether risk in:</b></p> <ul style="list-style-type: none"> <li>• Voluntary or imposed</li> <li>• Visible or hidden</li> <li>• Understood or uncertain</li> <li>• Familiar or foreign</li> <li>• Natural or technological</li> <li>• Controllable or uncontrollable</li> <li>• Mild or severe</li> <li>• Fairly or unfairly distributed</li> </ul> <p><b>Balance risk against <i>dread and outrage</i></b></p>

She argued that even though those two approaches can overlap and lack detail, the categories can be used to make some further generalizations. For example, a scientific-based approach to determine the acceptability of a new GMO corn, StarLink corn, might lead to the decision that there are no significant reasons to reject the products since there is a low probability of corn allergy. However, a value-based approach may assert that without proper labeling or regulatory approval, the fact that it is a GMO product can be a reason enough for prohibition (Nestle, 2010, p.17).

Nestle also believed that the differences in the two approaches to food safety risk might have an additional political dimension (p. 21). She described, for example, the differences between how the U.S. government and the E.U. develop their food safety policies: the U.S. adopts the science-based approach, while the E.U. has been using the precautionary principle approach (Nestle, 2010, p. 21). Pascal Lamy, the Trade Commissioner of the European Union in 1999, said that "[i]n the U.S. they believe that if no risks have been proven about a product, it should be allowed. In the EU we believe something should not be authorized if there is a chance of risk" (quoted in Charnovitz, 2000, p. 295, n.181). In the U.S, regulators decide which foods or ingredients are likely to cause harm and approve of the foods that are presumably safe.

According to Nestle, this approach is used by the U.S. Food and Drug Administration (FDA) for food additives characterized as "generally recognized as safe" with some modification for genetically engineered foods. This approach does not require pre-market testing or labeling but requires the producers to show "reasonable certainty of no harm," which then translates as an arguably subjective perception of "safe enough to be acceptable" (p. 21). The E.U., on the other hand, applies the precautionary principle, which requires foods to be deemed as safe before they can be distributed or marketed. The precautionary principle is sometimes seen as "too restrictive"



from a commercial vantage point, but it is welcomed by other parties, such as environmental advocates or opponents of food biotechnology (Nestle, 2010, p. 22).

#### **I.4. Harmonization of International Food Safety Standards**

The WTO promotes the global harmonization of SPS measures including food safety standards, as described in article 3 of the SPS Agreement: “[T]o harmonize sanitary and phytosanitary measures on as wide a basis as possible, Members shall base their sanitary or phytosanitary measures on international standards, guidelines or recommendations, where they exist” (WTO, 1995). Khanna and Saxena (2003) argued that since other factors such as social, economic, and cultural aspects will affect the choice of food and the level of risk that people are willing to take, the Codex standard should include the broader socio-cultural factors that embody consumers’ attitudes to foods in addition to its sound scientific basis. Other issues, including environmental and animal welfare, may fall between the responsibility of the “three sisters”: the CAC for human health, the International Plant Protection Convention (IPPC) for plant health, and the World Organization for Animal Health/ *Office International des Epizooties* (OIE) (WTO, n.d.).

FAO/WHO (2006) emphasized the importance of the harmonization of food standards because it is “generally viewed as contributing to the protection of consumer health and the fullest possible facilitation of international trade” (p. xxviii). As mentioned in the 2004 FAO/WHO Global Forum of Food Safety Regulators, “The Codex system provides an important opportunity for countries to work together to develop international standards in a representative manner. ... Developing countries would benefit from greater use of basic Codex texts when building their food control systems” (FAO/WHO, 2006). Meanwhile, Veggeland and Borgen (2005), in line with Victor (2011) and Vogel (1995), argued that “the WTO has “politicized” the

Codex” (p. 701). The role, position, and perception of the CAC have shifted after being referred to by the WTO as the “central reference point for the elaboration of international food standards” (Veggeland & Borgen, 2005, p. 675). Veggeland and Borgen (2005) explained that the 1995 SPS agreement created a semi-binding effect on governments, a shift from the previous voluntary nature of the Codex (p. 683). The semi-binding nature of the Codex after 1995 was captured by a comment from a European Commission representative:

In the past, if we disagreed with Codex Standards or Code of Practice, we could ignore it and take our own legislation. Now we can't. If we decide to go beyond the Codex standards... we must demonstrate the scientific basis of our measure and how this measure complies with the level of protection fixed by the Codex committee... Experience shows that it is very difficult to do that (quoted in Veggeland & Borgen, 2005, p. 683).

## **II. Human Rights and Food Safety**

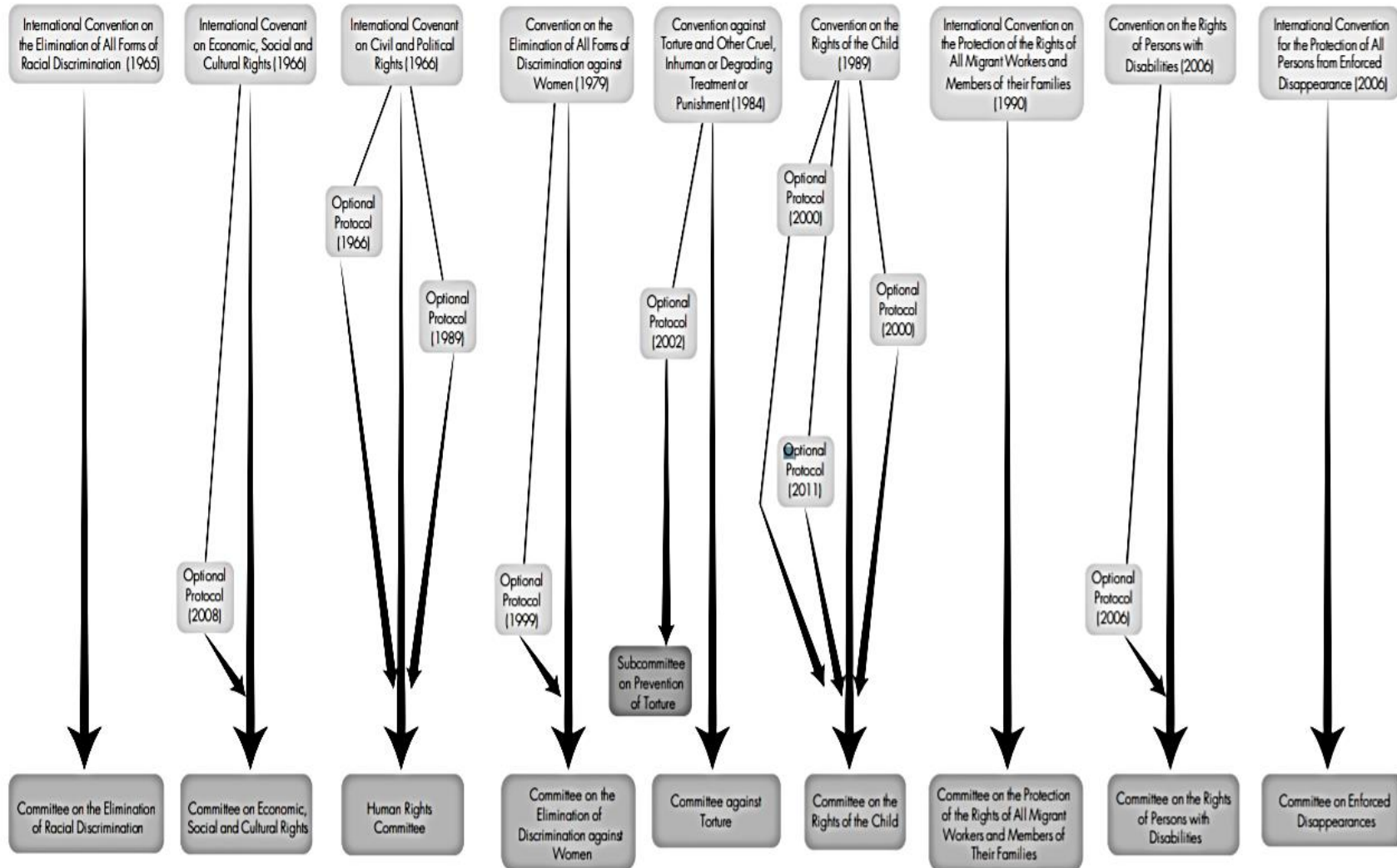
Human rights were barely recognized in international law (Joseph, 2011) until the devastation of the Second World War pushed the international community to ensure such catastrophes would never be repeated. This provided the momentum to develop an international system of binding human rights protections (OHCHR, 2012). In 1945, the term “human rights” was first used in Article 45 and 55 of the Charter of the United Nations (UN), where all members of the UN pledged to take action to achieve a “universal respect for and observance of, human rights and fundamental freedoms for all without distinction as to race, sex, language and religion” (Aaronson and Zimmerman, 2008). On December 10, 1948, the Universal Declaration of Human Rights (UDHR) was adopted by the UN General Assembly (OHCHR, 2012). The UDHR set a general prohibition of discrimination (against race/color, sex, language, religion,

political affiliation, national/social origin, property, and birth, among other distinctions) and enumerated more than thirty specific group rights that member states are bound to promote and protect (OHCHR, 2012).

The 1948 UDHR, however, is not a legally binding treaty (Aaronson and Zimmerman, 2008). Instead, it aids in establishing a high moral force, representing the first internationally agreed upon definition of human rights (OHCHR, 2012) including economic, social and cultural rights, which include the right to adequate food. The UHDR also set the groundwork for the treaty structure that developed in the following decades, as can be seen in Figure 2. By comprehensively pulling together different types of rights, the UHDR emphasizes “the commonality, interrelatedness, and interdependence of all rights, a fundamental point reaffirmed later in the 1993 Vienna Declaration of the World Conference on Human Rights” (OHCHR, 2012).

The struggle to develop the UHDR into legally binding conventions (Aaronson and Zimmerman, 2008), culminated in 1966 with the International Covenant on Civil and Political Rights (ICCPR) and the International Covenant on Economic, Social, and Cultural Rights (ICESCR). Both of these documents entered into force in 1976 (OHCHR, 2012). Together, the UHDR, the ICCPR, and the ICESCR are often called “The International Bill of Rights” (Joseph, 2011). The Covenants differ from the UDHR because the Covenants are legally binding to the member states that have accepted them by ratification or accession, while the Declaration applies universally to everyone, regardless of the state’s ratification status (Aaronson and Zimmerman, 2008).

Figure 2. The United Nations human rights treaty system (OHCHR, 2012)

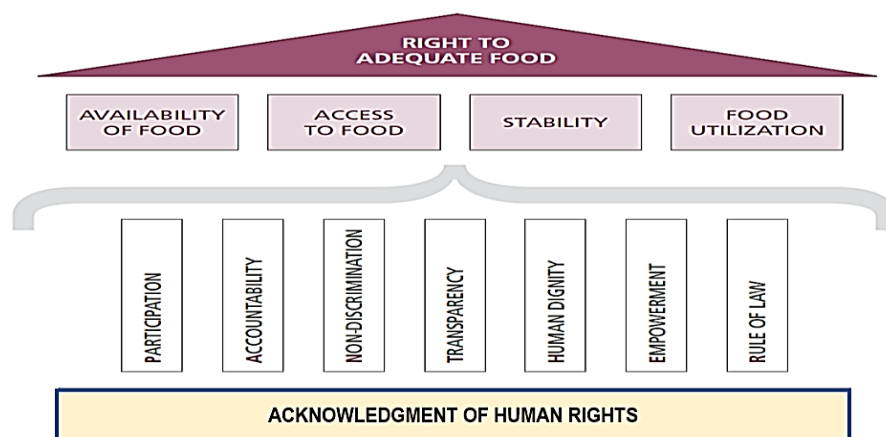


## II.1. The human right to adequate food: locating food safety

### II.1.1. PANTHER Principles

According to FAO (2011), the right to food sets up the PANTHER framework, a human rights-based approach (HRBA) to the right to adequate food, food security, and nutrition that should guide decision-making and implementation processes. Inventing from different human rights treaties, the seven principles of PANTHER that should be integrated in the work with the right to adequate food are: **P**articipation, **A**ccountability, **N**on-Discrimination, **T**ransparency, **H**uman dignity, **E**mpowerment and **R**ule of law (FAO, 2011).

Figure 3. Right to Adequate Food and Panther Principles (FAO, 2009, p.6)



Of all of the PANTHER principles, the most relevant principles to this thesis are participation and non-discrimination (including equality). Diokno (2013) explained that participation is “the direct control, ownership, and management by the people of public decision making” (p.3). Participation is inclusive and must be voluntary, recognized by law, free or not subject to sanction or threat and active (IAP2, 2007). The UN OHCHR (2003) stated four stages of participation in policy-making related to poverty reduction strategies: preference revelation; policy choice; implementation; and monitoring, assessment and accountability. According to UNDP/CSOPP (1197), there are 9 levels or degrees of participation: manipulation (non-

participation); information; consultation; consensus-building; decision-making; risk-sharing; partnership; self-management (the “pinnacle” of participation). Furthermore, Diokno (2013) described nondiscrimination as:

[T]he entitlement to all human rights without distinction of any kind, exclusion, restriction or preference based on race, color, ethnic origin, sex, gender stereotypes, prejudices and expected roles, language, religion, political or other opinion, national or social origin, descent, inherited social status, property, birth, disability, age, nationality, marital and family status, sexual orientation and gender identity, health status, place of residency, economic and social situation and membership in group (p.11).

while equality ensures that women and men enjoy all human rights on an even, like or same basis (p. 12).

Table 2. PANTHER principles (*Bellows, Núñez, de Lara, & Viana, 2017, pp. 28-30*)

<b>Participation</b>
<p><b>The public sector must conduct:</b></p> <ul style="list-style-type: none"> <li>• Active encouragement of people to organize and to genuinely, freely, actively participate in decision-making</li> <li>• Outreach to, and inclusion of, those most affected by public decisions into the decision-making</li> <li>• Mandated incorporation of people’s views (voluntary, legally recognized, free) in all public decisions and actions</li> <li>• Formal mechanisms for claim holders and other actors to question policies, bring complaints, demand compensation/restitution, hold governments, and through them non-state actors, accountable</li> <li>• Involvement of people in the monitoring of public policy implementation</li> </ul>
<b>Non-discrimination (focus on marginalized and excluded groups)</b>
<p><b>The public sector must guarantee:</b></p> <ul style="list-style-type: none"> <li>• The enjoyment of all human rights without distinction of any kind, exclusion, restriction, or preference based on race, color, ethnic origin, sex, gender stereotypes, prejudices and expected roles, language, religion, political or other opinion, national or social origin, descent, inherited social status, property, birth, disability, age, nationality, marital and family status, sexual orientation and gender identity, health status, place of residency, economic and social situation, and membership in group.</li> </ul>

Adopting Diokno (2013), Bellows, Núñez, de Lara, and Viana (2017) described the expectation of public sector in the context of the HRBA in Table 2. Participation and non discrimination principles are essential to achieve the right to adequate food. Based on the country visits and questionnaire review during the evaluation of the Codex Alimentarius Commission (CAC) in 2002<sup>5</sup>, FAO/WHO reported that:

[D]eveloping countries feel unable to participate as effectively as they would wish in Codex, and developing country participation is recognized as a problem too, by developed and middle-income countries. Overall, 78% of respondents scored below the mid-point for the balance in involvement and influence of poorer countries in Codex. Ninety six percent of low-income countries and 87% of middle-income countries do not participate in Codex to the extent they think desirable, the overwhelming reason given being lack of financial resources (FAO/WHO, 2002, p. 14).

The WHO has been developing Codex Trust Fund (CTF) to foster effective participation in Codex, including support for meeting attendance (FAO/WHO, 2002, p.7). According to FAO/WHO (2018), in 2004 – 2015, CTF supported over 2300 participants from developing and less-developed countries to participate in the development of Codex standard-setting and offered FAO/WHO Codex training to more than 1200 people to increase the effectiveness of their participation in the Codex Alimentarius Commission (FAO/WHO, 2018). FAO and WHO expressed their satisfaction with the results of the final evaluation of the first Codex Trust Fund

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<sup>5</sup> Newer reference is not available.

(2003-2015), although they noted the limited evidence from the evaluation on the real impact of Codex Trust Fund activities at country level due to several factor as follows:

(T)he difficulty in attributing changes at country level to CTF (rather than as a result of other interventions by FAO, WHO, other bilateral or multilateral actors and/or as a result of all these interventions taken together) and; the lack of baselines at country level against which to measure change (FAO/WHO, 2015).

In January 2016, following the success of the first CTF, FAO and WHO started a second Codex Trust Fund/CTF2 (FAO/WHO, 2018). Ghana, Kyrgyzstan, Madagascar and Senegal became the first countries who received the Codex Trust Fund for three years in 2016. In 2018, ten countries: Bhutan, Burkina Faso, Cabo Verde, Republic of Macedonia, Guinea, Honduras, India, Mali, Nepal and Rwanda are the identified countries to be supported in the second round (WHO, 2018).

### **II.1.2. Right to Adequate food**

The right to food is recognized in the 1948 UHDR as part of the right to an adequate standard of living: “Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, **including food**, ...” (art. 25). It is elaborated in the 1966 ICESCR: “The States Parties to the present Covenant recognize the right of everyone to an adequate standard of living for himself and his family, **including adequate food**, clothing, and housing, and to the continuous improvement of living conditions” (OHCHR, 2002, art. 11). The notion of adequacy introduced by UN Committee on Economic, Social, and Cultural Rights/CESCR (1999) as particularly significant to the right to food because it lays out several



factors that must be considered in deciding whether particular foods or diets are genuinely accessible and available according to diverse lived circumstances.

In response to the result of the FAO World Food Summit in 1996, the CESCR issued its general comment No. 12 (1999), which expands the minimally introduced legal right of 1966 and defines the right to food, including attention to food safety. Eight years later, FAO established the Voluntary Guidelines to Support the Progressive Realization of the Right to Adequate Food in the Context of National Food Security (2005) as practical guidance to States in their implementation of the right to adequate food (OHCHR, 2002). The Right to Food Guidelines addresses both States parties and non-States parties to the ICESCR regardless of how developed a country is and encourages the state to use the guidelines for drafting their national strategies and programs to fight hunger and malnutrition (OHCHR, 2002).

The right to adequate (including safe) food is explained by the CESCR (1999) in General Comment 12, Paragraph 8:

The core content of the right to adequate food stipulates:

The availability of food in a quantity and quality sufficient to satisfy the dietary needs of individuals, **free from adverse substances**, and acceptable within a given culture;

The accessibility of such food in ways that are sustainable and that do not interfere with the enjoyment of other human rights” (ICESCR GC 12, 1999, para. 8).

The aspect of food safety is clarified further in Paragraph 10:

*[F]ree from adverse substances* sets requirements for **food safety** and for a range of protective measures by both public and private means to prevent contamination of foodstuffs through adulteration and/or through bad environmental hygiene or

inappropriate handling at different stages throughout the food chain; care must also be taken to identify and avoid or destroy naturally occurring toxins (ICESCR GC 12, 1999, para. 10).

Adequate access to safe and nutritious foods is an essential part of human right to adequate food, therefore states have the obligation to ensure a progressive realization of the right to adequate (including safe) food.

## **II.2. Right to Adequate Food and Trade**

Joseph (2011), in her book, *Blame it on the WTO*, pointed out the concern that “SPS measures can set up a clash with human rights interests” (p. 120). She argued that despite the positive impact of the SPS Agreement on the right to health (art. 12 of the 1966 ICESCR), the agreement can cause a highly problematic issue for developing countries, since SPS measures can interfere with the right to development (art 1 of the 1966 ICCPR), especially for farmers (Joseph, 2011). Since most of poorest people in the world depend on agriculture for their livelihood, SPS measures can create serious trade barriers, which threaten their livelihoods and hinder the ability of agricultural workers to overcome poverty in their own countries (Joseph, 2011, p. 125). For example, she explained that the aflatoxins standards imposed by the EU (2 ppb for Aflatoxin B<sub>1</sub>), which are higher than the international (Codex) standards, have been reducing the potential export of nuts and grains from Africa to the EU (p. 125).

Aflatoxins are toxic for humans and animals, with Aflatoxin B<sub>1</sub> being the most toxic. At high doses, aflatoxin can cause acute poisoning and death in both humans and animals, and at chronic lower-level doses, it causes liver cancer, immunomodulation, stunting, and kwashiorkor in young children (Okoth, 2016, p. 56). Compared to the Codex standard for Aflatoxin B<sub>1</sub> (approximately 9 ppb), Otsuki, Wilson, & Sewadeh (2001) estimated that the stringent EU

standard could decrease the African export by 64 percent or US\$ 670 million per year (p.1).

Joseph (2011) argued that this trading loss creates significant human rights issues regarding the right to work (art. 6 of the 1966 ICESCR) and the right to an adequate standard of living (art. 11 of the 1966 ICESCR) for African people (Joseph, 2011, p. 125). On the other hand, she also points out that, as reported by Otsuki, Wilson, and Sewadeh, the EU standard would reduce health risk from aflatoxins by 1.4 deaths per billion per annum.

This case shows the “difficult conundrum from a human rights point of view” (Joseph, 2011, p.125). Joseph articulated the dilemma as follows:

Should Europe be required to lower its SPS standard and jeopardize the lives of 1.4 people per billion in order to safeguard the livelihoods and the rights of those dependent on the nut and grain export industry? .... Is the subjection of a person to such a low risk a breach of the right to life?” (Joseph, 2011, p. 125).

A human rights approach can be applied to both importing and exporting countries. Wealthy importing countries, like those from the EU, have an obligation to protect the public from aflatoxins. However, implementing a stringent standard without providing the capacity building to help poor exporting countries (i.e., African countries) meet this same high standard may hamper the right to life of African people.

It is also essential, on the other hand, to implement an adequate standard for aflatoxins in Africa. The newest report by Okoth (2016) showed that contamination levels of aflatoxins in foods and feeds in Africa exceed internationally acceptable levels, with reported aflatoxin levels as high as 138,000 ppb in pre-harvest maize samples in Nigeria and 48,000 ppb in their stored maize (p. 56). The high level of aflatoxins has caused the death of humans and animals in Kenya,

Nigeria, South Africa, Tanzania, and Uganda due to its toxic presence in human organs, while liver cancer causes about 26,000 deaths annually in sub-Saharan Africa (Okoth, 2016, p. 56).

A study by Folletti and Shingal (2014) showed that stricter food safety regulations could create economic benefits for the exporting country. They asserted that stricter food safety standards create an incentive for farmers in the exporting countries to improve their agricultural practices and increase the value of exports as a result of higher quality products. Foletti and Shingal found that "... greater difference of MRLs between trading partners increases the value of exports when the exporters have to comply with stricter regulations in their domestic market. Thus, a stringency in exporter market is positively correlated with the value of export" (Folletti & Shingal, 2014, p. 15). Arguably, developed countries with more established food safety standards achieve an advantage by setting higher food safety standards. They can provide higher protection for their people, regulate (protect) their trade by creating indirect trade barriers to limit imports, and increase the value of their exports.

### **II.3. Right to Adequate Food, Food Sovereignty, Food Self-Sufficiency, Food Security and Food Safety in Indonesia**

According to Safa'at (2013), the concept of human rights to food is unpopular in Indonesia due to limited understanding of human rights concepts (p. 104). Human rights in Indonesia are usually only part of a discourse associated with violence that has claimed people lives, restrictions on the right to form a union or freedom of speech, or the state's repression of people (Safa'at, 2013, p. 104). Almost no human rights or other civil society organization activists, including the (Indonesia) National Commission on Human Rights, has brought up hunger and malnutrition issues as a violation to human rights (Khudori, 2005 as cited in Safa'at, 2013). This narrow understanding of human rights affected the drafting

of the 1945 Constitution of Indonesia, which does not explicitly include the human right to food (Safa'at, 2013).

In 1999, Indonesia stipulated the Human Right Laws Number 39 that defines human rights as follows:

... a set of rights bestowed by God Almighty in essence and being of humans as creations of God which must be respected, held in the highest esteem, and protected by the state, law, Government, and all people to protect human dignity and worth (Hadipriyatno, 2010).

Hadipriyatno (2010) argued that the Human Rights Laws in Indonesia have adopted the equality and non -discrimination principle, but not the principle of self-determination. She added that the concept of human responsibilities is recognized and defined in Article 2 of the Human Rights Law which requires everyone to be personally responsible for upholding equality and self-determination; the Human Rights Law does not frame Indonesian people's right to address human rights violations to public sector duty-bearers. The right to food is implicitly addressed in Article 9 of the 1999 Law, paragraph 1: "(1) Everyone has the right to life, to sustain life, and to improve his or her standard of living." This can be understood to be parallel to the UDHR paragraph 21 which references the *adequate* standard of living, which includes, among others, the entitlement to food (Hadipriyatno, 2010, p.4).

The range of human rights protections in the 1945 Constitution was broadened during the fourth amendment in 2002, where the entire article 28 (A-J) is devoted solely to fundamental human rights (Hadipriyatno, 2010). Although the right to food was not explicitly stated in the 1945 Constitution of the Republic of Indonesia, according to FAO

(n.d) the implicit protection of the right to adequate food can be inferred from Article 28C Paragraph 1 and Article 28H Paragraph 1 and 3:

**Article 28C:**

“(1) Every person has the right to self-realization through **the fulfillment of his basic needs**, the right to education and to partake in the benefits of science and technology, art and culture, **to improve the quality of his life and the well-being of mankind**”.

**Article 28H:**

“(1) Each person has **a right to a life of well-being in body** and mind, to a place to dwell, to enjoy a good and healthy environment, and to receive medical care.

(3) Each person is entitled to social security enabling him to **develop his entire self-unimpaired as a dignified human being**.” (FAO in The Right to Food around the Globe, n.d.)

Hadipriyatno (2010) and Safa’at (2013) consider the right to food dimension to be also included in Article 27A Paragraph 2: “Each citizen shall be entitled to occupation and an existence proper for a human being,” as well as in Article 34 which guarantees the State’s protection for impoverished persons and abandoned children.” The 1945 Constitution, Article 33, also incorporates the state’s effective legal control over the land, water, and natural resources and the obligation to utilize it for the greatest benefit of Indonesia’s people (Limenta & Chandra, 2017).

In 2005, Indonesia adopted and ratified both the ICESCR and ICCPR by Law Number 11 of 2005 and Law Number 12 of 2005. The country is therefore accountable to the treaties and subsequent related human right developments, including the right to food.

The Government of Indonesia recognized the right to adequate food through Food Law 18 of 2012 which states that “food is the most essential human need, and its fulfillment is part of human rights that are guaranteed in the 1945 Constitution of the Republic of Indonesia as a basic component in creating quality human resources” (p. 1). The 2012 Food Law also emphasizes “the obligation of the state to achieve availability, affordability and fulfillment of food consumption that is sufficient, **safe**, excellent and nutritionally balance both on the national and local levels to individuals equally in entire territory of the Republic of Indonesia at all times utilizing local resources, institution and culture” (Indonesia Food Law of 2012, p.1). Therefore, Indonesia’s government has an obligation to ensure access to adequate and safe food for all its people.

According to Surnaya and Khalil (2017), the 2012 Food Law was initiated by the House of Representatives and issued in 2012 to replace the previous 1996 Food Law because “it was considered to be incapable of providing guidance for solving problems and challenges of national food development.” As stated in the consideration part: “that Law Number 7 Year 1996 on Food is no longer in line with the external and internal dynamic development conditions, democratization, decentralization, globalization, law enforcement and several regulatory legislations produced is then needed to be replaced.” (The 2012 Food Law, p.1). Surnaya and Khalil (2017) claimed that the process of drafting the 2012 Food Law involved not only representative parliamentary members and government representatives on a Working Committee coordinated by Ministry of Agriculture. The process also reflected, they argued, popular aspirations for food security, safety and justice through public consultations including food experts, academics, CSOs, and private sector actors (Surnaya and Khalil, 2017).

Surnaya and Khalil (2017) identified the three most significant differences between the 2012 Food Law and the 1996 Food Law as follows:

1. The concept of food security in the 1996 Food Law does not include the supply of food at the individual level but is more focused on the downstream aspects of the food system, such as regulations on food industries and processed food safety. Governance and control of the food supply and its affordability was not discussed. In the 2012 Food Law, these weaknesses are corrected so that the fulfillment of foods applies to the community, households, and individuals;
2. The roles of regulation, sanctions, and law enforcement in the 1996 Food Law were still relatively weak, even though irregularities in food business are extremely dangerous for human health and political stability more generally. These aspects are arranged in more detail with relatively heavier sanctions in the 2012 Food Law; and
3. The ratification of the 1966 ICESCR in 2005 brought legal consequences for Indonesia that resulted in the review of various instruments of national legislation to ensure that they were in accordance with the principles of progressive realization and protection of human rights. The ratification of the ICESCR had an immediate impact on diverse human rights in Indonesia, with particular regard to the right to food, which was re-formulated in the 2012 Food Law according to the 1966 Covenant (Sunaya & Khali, 2017).

However, Tisnanta, Firmansyah, & Evendia (2015) argued that one of the repercussions of becoming the WTO's member and joining the Agreement of Agriculture (AoA) is trade liberalization specifically in agriculture. They mentioned that in 1995, Indonesia joined the WTO and started to implement the termination of agricultural inputs subsidies e.g. fertilizers, pesticides and seeds. Furthermore, as a WTO member, Indonesia has the obligation to follow all



the WTO's policies, including its laws and regulations (Tisnanta, Firmansyah, & Evendia, 2015). Tisnanta, Firmansyah, & Evendia (2015) asserted that the provisions of the 2012 Food Law are arranged to accommodate the trade liberalization policies of the WTO in the food sector, which cause certain problems for Indonesia as a sovereign state. Meanwhile, Limenta & Candra (2017) contended that some articles in the 2012 Food Law, that emphasize food self-sufficiency, indicate the nationalistic and protective nature of Indonesia's food import policy. Some consequences of this type of policy are creating trade disputes between Indonesia and its international trading partners and negatively affecting Indonesia's domestic market (Limenta & Candara, 2017).

In the 2012 Food Law, the food system is basically organized based on the principles of sovereignty, independence, security, safety, benefit, equality, sustainability, and equity (Rafani, 2018). Rafani (2014) asserted that food sovereignty, food self-sufficiency, food security, and food safety, to some extent, are considered as the most essential principles (Rafani, 2014). The definition of those principles compared to international understanding is provided on Table 3. As can be seen from Table 3, the definition of food sovereignty and food security in the 2012 Food Law are parallel to the international one, while the definition of food self-sufficiency/independence and food safety are different.

Table 3. Definition of Four Main Principles in the 2012 Food Law

<b>Terminology</b>	<b>The 2012 Food Law</b>	<b>International</b>
<b>Food Sovereignty</b>	The right of the state and nation to independently establish food policy that guarantees the right to food for the people and to grant the right to the society to establish a food system that is appropriate to the available local potential resources (Indonesia's Food Law, 2012)	The right of people to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define their own food and agriculture systems. It puts the aspirations and needs of those who produce, distribute and consume food at the heart of food systems and policies rather than the demands of markets and corporations." (Declaration of Nyéléni, 2007)

Table 3 (Continued)

Terminology	The 2012 Food Law	International
<b>Food Self-Sufficiency</b> <b>(Food Independence)</b>	The ability of the state and nation in producing (to produce) various foods domestically that can guarantee the sufficient <b>fulfillment of food demand</b> that sufficiently reach individual needs using local available <b>potential natural, human, social, economic resources, and local wisdom with dignity</b> (Indonesia’s Food Law, 2012).	The concept of food self-sufficiency is generally taken to mean the extent to which <b>a country can satisfy its food needs from its own domestic production</b> (FAO, 1999).
<b>Food Security</b>	The fulfillment of food for the state up to the individuals, that is reflected by food availability that is sufficient, both in quantity and quality, and safe, diverse, nutritious, prevalent and affordable as well as not conflicting with religion, belief and culture, to live healthy, active and productive in a sustainable manner (Indonesia’s Food Law, 2012).	Food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food which meets their dietary needs and food preferences for an active and healthy life (World Food Summit, 1996).
<b>Food Safety</b>	A condition and effort that is required to prevent food from the possibility of biological, chemical and other pollution that can interfere, harm and endanger human health as well as not to conflict with religion, belief, and culture of the society so that it is safe for consumption (Indonesia’s Food Law, 2012).	Food safety implies the absence or safe levels of contaminants, bacteria, naturally occurring toxins or any other substance that may make food injurious to health (FAO, 2018).

Indonesia’s definition for food self-sufficiency is unique, compared to the brief explanation from the FAO. According to the Organization for Economic Cooperation and Development/OECD (2015), the term of “*Kemandirian Pangan*” in the 2012 Food Law is frequently translated into “food independence”, “food self-reliance”, or “food self-sufficiency”, which creates confusion (p. 61). Rafani (2014) argues that the phrase “food independence” is related to food self-sufficiency and food resilience, semantically (p. 2). Yet, he claimed that “*kemandirian pangan*” in the 2012 Food Law means “food independence” not “self-sufficiency”,

and it might be because national? *independence* is understood as the most important aspect of *kemandirian pangan* and it also has incorporated self-sufficiency concept (p.6). He added that “independence” might be understood as one hundred percent food self-sufficiency requiring zero food imports:

The word “independence” entails the ability of the state and nation to produce its own food diversity by utilizing the potential of natural resources in the country.

This definition must be interpreted alertly since it may lead to the interpretation that Indonesia should produce its own food while import indicates the failure of the state, which should be restricted or prohibited (Rafani, 2014, p.2).

The definition of food security in the 2012 Food law is in line with the FAO’s definition, and an enriched concept of food sovereignty in the first food law, the Food Law Number 7 of 1996. It includes the fulfilment of food up to individual level, and also incorporates respect for religious and other beliefs, in addition to cultural aspects of food (Rafani, 2014). Compared to the FAO’s definition, Indonesia has a more elaborate definition for and a wider scope of attention to food safety because it includes the requirements that food must be free from substances that might conflict with religion, belief systems, and culture in Indonesia. As the most populous Muslim country in the world, halal is an integrated part of food safety in Indonesia (Sparringga & Puspitasari, 2015).

### **III. The Case Study of Indonesia: Food Safety Control Mechanism for Fresh Plant Products at the Border**

The globalization of food trade has increased the challenge for national food control authorities to provide consumers adequate protection and to ensure all circulated foods are safe,

wholesome, and fit for human consumption. FAO-WHO (1998), in *Assuring Food Safety and Quality Guidelines for Strengthening National Food Control System*, states:

The challenges for food control authorities include increasing the burden of food-borne illness and new and emerging foodborne hazards; rapidly changing technologies in food production, processing and marketing; developing science-based food control systems with a focus on consumer protection; international food trade and need for harmonization of food safety and quality standards; changes in lifestyles, including rapid urbanization; and growing consumer awareness of food safety and quality issues and increasing demand for better information (FAO/WHO, 1998, p. 2).

The Republic of Indonesia, located in Southeast Asia, is the world's largest archipelago country and the fourth most populous country in the world with a population of 262 million (Focus Economic, 2018). In 2016, Indonesia exported \$380 billion worth of total goods and became the 28th largest export economy in the world with GDP \$932 billion and GDP per capita \$11.6k (OEC, n.d.). The most recent reports by the Observatory of Economic Complex/OEC showed that the top exported products from Indonesia are coal briquettes, palm oil, and petroleum gas, and the top imports are refined petroleum, crude petroleum, and telephones. According to the Ministry of Trade/MoT (2018), the top ten main export commodities in Indonesia are textiles, electronics, rubber, palm oil, forestry products, footwear, automotive, shrimp, cocoa, and coffee. The most significant export destination countries for Indonesia are the USA, Japan, China, Malaysia, and the EU (MoT, 2018). A report from MoA in 2015 showed that the top imported fresh agri-foods in Indonesia are milk, beef (live cows), wheat grain, soybean, rice garlic, corn, apple, grapes, oranges, and peanut (p.5). The biggest importer

countries are the USA, Australia, Brazil, Argentina, China, India, Thailand, New Zealand, Canada, and Vietnam (MoA, 2015, p.10)

Figure 4. Indonesian Map (Google, 2018)



Indonesia defines food sovereignty in its food law as “the right of the state and nation that independently establish food policy that guarantees the right to food for the people and grant the right for the society to establish a food system that is appropriate for the potential local resources” (Indonesia Food Law of 2012, p.2). This Food Law has been used as the basis for developing technical regulations regarding food, including food safety. Furthermore, as a member of the World Trade Organization (WTO), Indonesia must follow the international trade agreement related to food trade, such as Sanitary and Phytosanitary (SPS) Measures and Technical Barriers to Trade (TBT). These measures allow members to take scientifically based measures to protect public health. Nevertheless, the same measures might prevent developing countries like Indonesia from protecting their public health due to the limited resources that can hinder the ability to establish appropriate scientific justification as required by the WTO. Table 4

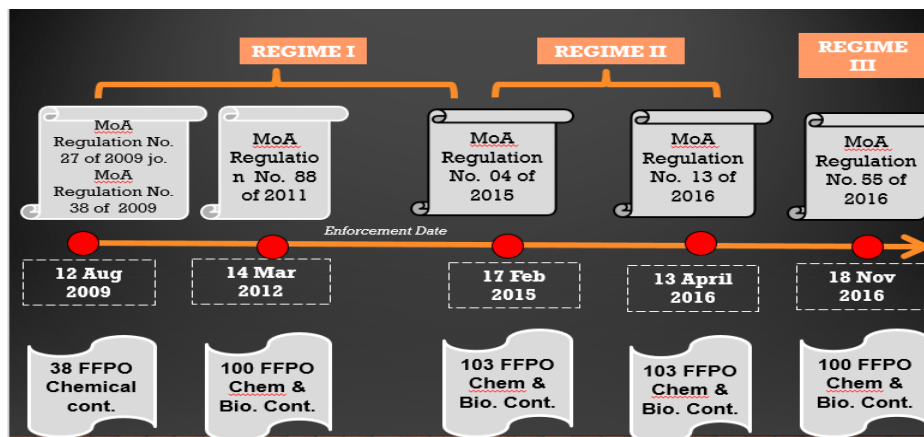
below shows the dynamic transformation of food safety regulations for importation of fresh agri-foods in Indonesia.

Table 4. Food safety regimes and regulations for importation of agri-fresh products in Indonesia

Food Safety Regimes	Title of Regulation	Enforcement Period	Regulated Objects	Main Changes
<b>REGIME 1</b>	MoA Regulation No. 27 of 2009 jo. MoA Regulation No. 38 of 2009	May 2009 – 18 March 2012	38 types of fresh Agri-foods  Chemical Contaminant (Pesticide Residue, Heavy Metals, dan Mycotoxin)	-
	MoA Regulation No. 88 of 2011	19 March 2012 – 16 February 2015	100 types of fresh Agri-foods  Chemical Contaminant (Pesticide Residue, Heavy Metals, dan Mycotoxin), Biological Contaminant and Formalin.	<ul style="list-style-type: none"> <li>- Adding new fresh Agri-foods</li> <li>- Updating the food safety standards with the Newest Codex Standards</li> </ul>
<b>REGIME 2</b>	MoA Regulation No. 04 of 2015	17 February – 12 April 2016	103 types of fresh Agri-foods  Chemical Contaminant (Pesticide Residue, Heavy Metals, dan Mycotoxin) and Biological Contaminant.	<ul style="list-style-type: none"> <li>- Adding new fresh Agri-foods</li> <li>- Updating the food safety standards with the Newest Codex Standards</li> <li>- Renewing the food safety control mechanism (“more stringent”)</li> </ul>
	MoA Regulation No. 13 of 2016	13 April 2016 - 17 November 2016	103 types of fresh Agri-foods  Chemical Contaminant (Pesticide Residue, Heavy Metals, dan Mycotoxin) and Biological Contaminant.	<ul style="list-style-type: none"> <li>- Amending several administrative provisions</li> <li>- Postponing the enforcement for specific requirements.</li> </ul>
<b>REGIME 3</b>	MoA Regulation No. 5 of 2016	18 November 2016 - Now	100 types of fresh Agri-foods  Chemical Contaminant (Pesticide Residue, Heavy Metals, dan Mycotoxin) and Biological Contaminant.	<ul style="list-style-type: none"> <li>- Deleting cacao beans, dates, and olives from Annex I.</li> <li>- Updating the Food safety standards with Newest Codex Standard</li> <li>- Adding a “less stringent” mechanism for food safety inspection.</li> </ul>

In seven years, food safety regulation has been revised and amended five times, and the last three adjustments occurred in less than a year. The alterations were carried out because of demands from several stakeholders including exporters, importers, the government of exporting countries, Indonesia’s food industries, and public sectors. The Indonesian Agriculture Quarantine Agency (IAQA) is the national border authority under the Ministry of Agriculture that has been conducting the food safety inspection of imported fresh plant products since 2009. The types of food that are regulated are called “fresh food of plant origin (FFPO)” and defined as “unprocessed food of plant origin which can be directly consumed, processed minimally, and/or can be used as raw material in the food processing” (MoA Regulation 27 Of 2009, Art. 1). As can be seen in Figure 5 below, three regimes characterize the five regulations that frame the mechanism for food safety control at the border.

Figure 5. The food safety regulations on the import of fresh plant products



The first regime, Regime 1, provides four mechanisms for exporting countries to export their products to Indonesia: (A) Recognition of food safety system of origin country; (B) Equivalence Agreement of food safety system between Indonesia and exporting country; (C) Recognition of food safety system of production sites in exporting country; and (D) Regular Inspection: food

safety inspection for every consignment (regular inspection) at entry port in Indonesia (MoA Regulation 27 Of 2009, art. 4; MoA Regulation 88 Of 2011, art. 5). In the second regime, Regime 2, the Regulation of the Minister of Agriculture Number 04 of 2015 offers limited options with only two mechanisms: (1) Recognition of food safety system of origin country and (2) Registration of food safety testing laboratory/ies in exporting country (MoA Regulation 04 of 2015, art. 5, 6 & 20). In the last regime, Regime 3, another mechanism is added to accommodate exporting countries without recognition or registered laboratory (MoA Regulation 55 of 2016, Art. 7-9). It also excludes cacao, olives, and dates from the list of regulated FFPO to facilitate industry and reduce the inspection objects to 100 types of produce.

### **III.1. REGIME 1**

Regime 1 started with the implementation of the Regulation of the Minister of Agriculture Number 27 of 2009 in conjunction with the Regulation of the Minister of Agriculture Number 38 of 2009 and the Regulation of the Minister of Agriculture Number 88 of 2011 with 38 FFPO as the inspection objects. Both regulations have the same provisions for food safety inspection which importing countries should follow at least one particular mechanism as follows:

**R1-Mechanism A** Recognition of food safety system of origin (exporting) country;

**R1-Mechanism B** Equivalence Agreement of food safety system between Indonesia and exporting country;

**R1-Mechanism C** Recognition of food safety system of production sites in exporting country; and

**R1-Mechanism D** Regular Inspection: food safety inspection for every consignment (regular inspection) at entry ports in Indonesia (MoA Regulation 27 of 2009, art. 4; MoA Regulation 88 of 2011, art. 5).



These mechanisms were adopted from Codex Guidelines for Food Import Control System CAC/GL 47-2003. Codex (2003) advised importing countries to provide a mechanism to recognize food control system applied by an exporting country's competent authority, including using an equivalence agreement or mutual recognition agreement (Art. 13). Accordingly, R1-Mechanism A, recognition of food safety system of origin country, means Indonesia's government will recognize food safety control systems in exporting countries if their systems achieve at least the same level of protection required by Indonesia's government (Codex, 2003, Art. 32). The second mechanism, R1-Mechanism B, followed the Codex Guidelines CAC/GL 34-1999, which defined equivalence as "the capability of different inspection and certification systems to meet the same objectives" (Codex, 1999). R1-Mechanism C, recognition of food safety system of production sites in exporting country, is similar to Mechanism A, but with a smaller scope which Indonesia's government will recognize food safety system of production sites for specific commodities in an exporting country. The last mechanism, R1-Mechanism D, was developed for exporting countries without Indonesia's recognition or equivalence (MoA Regulation 27 Of 2009, art. 15; MoA Regulation 88 Of 2011, Art. 5).

In general, food safety control at the border for fresh food in Indonesia consists of three types of inspections: (i) document inspection; (ii) physical inspection; and (iii) sampling and laboratory testing. Document inspection is conducted to ensure all required documents are valid and complete. Physical inspection is conducted to verify the information on the documents conform to the produce and the information on the produce. The main difference for countries that follow R1-Mechanism D, is that every exportation from these exporting countries would undergo food safety laboratory testing at the border in Indonesia, regardless of whether or not they have been tested prior to exportation. Meanwhile, for other countries that follow R1-

Mechanisms (A), (B), or (C), the regular inspections are limited to document and physical inspection (MoA Regulation 27 Of 2009, art. 18-21; MoA Regulation 88 Of 2011, art 13-15). Sampling and laboratory testing was conducted randomly and for monitoring purposes only (irregularly) (MoA Regulation 27 of 2009, art. 20; MoA Regulation 88 of 2011, art 7-12).

Under Regime 1 and the provision of R1-Mechanism A, only four countries were recognized for their food safety control system (i.e., The United States, Australia, Canada, and New Zealand), although more than 60 countries were exporting their fresh plant products to Indonesia (MoA, 2018). Produce from all other countries without recognition or the equivalence agreement (R1-Mechanism D) were being regularly inspected, sampled, and tested each time they were exported to Indonesia (MoA Regulation 27 of 2009, art. 25-29; MoA Regulation 88 of 2011, art 7-9). Fees for laboratory testing will be charged to the importer (MoA Regulation 27 of 2009, art. 27; MoA Regulation 88 of 2011, art 9). The produce shall be accompanied by a Food Safety Certificate issued by the Food Safety Authority or the Accredited Laboratory in the exporting country (MoA Regulation 88 of 2011, art 7). Therefore, there might be a testing redundancy under Mechanism D since the produce probably was tested prior to export to Indonesia. Because of the increasing demand for a more effective and efficient mechanism to control the food safety of agri-food products at the border (MoA Regulation 88 of 2011, Consideration), the IAQA conducted a technical assessment to modernize its food safety inspection model in 2014. The assessment was then used as the scientific justification to revise the regulation into Regulation of the Minister of Agriculture Number 04 of 2015. This regulation made significant changes to provisions for food safety control for imported fresh Agri-foods with the objective of strengthening the food safety system in Indonesia.

### III.2. REGIME 2

Regime 2 began with the implementation of the Regulation of the Minister of Agriculture Number 04 of 2015 on February 17, 2015. The new Regime 2 regulation was aimed at reducing the burden of regular samplings and laboratory testing at the border and shortening the port dwelling time (the time cargo/containers spends within the port or its extension). The required laboratory testing remained a continuing challenge. All four private laboratories with the capacity and competency to conduct the testing for quarantine purposes and that can comply with the time limit (2-4 days testing time) are located on Java Island, particularly in Jakarta, West Java, and East Java provinces. There are fifty quarantine stations around Indonesia; thus, shipping the samples from quarantine stations outside Java Island to laboratories on Java Island is time-consuming and incurs additional costs.

It is difficult, moreover, to maintain the sample's condition during the shipping which can affect the sample's quality and the testing results, notably for microbial contaminants and mycotoxins. Bacteria like *E. coli* and *Salmonella* are susceptible to temperature; higher temperature can kill them whereas they will proliferate under favorable temperatures. The Food and Agriculture Organization/FAO (1997) recommended that samples for microbiological analysis should be refrigerated in ice at 0-4°C and transported in a sample chest with a suitable refrigerant capable of maintaining the sample at 0-4°C until arrival at the laboratory. The refrigerated samples should not be analyzed more than 36 hours after collection (FAO, 1997, p.3). Therefore, samples for microbial and mycotoxin testing must be kept at a specific temperature to obtain a valid and reliable testing result. A valid laboratory testing result is critical because the quarantine inspectors rely on those results to determine whether a shipment will be

allowed to enter Indonesia. Hence, a more effective and efficient food safety inspection is required to improve and strengthen the food safety inspection system at the border.

The scope of inspection under Regime 2 included 103 commodities consisting of fruits, vegetables, grains, nuts, lentils, and estate crops (MoA Regulation 04 of 2015, Annex I). Additionally, the MRLs standards for pesticide residues was updated following the Codex Standards of 2014. Generally, there was no significant change for other standards such as heavy metals, mycotoxins, and microbial contaminants since there it was still referring to the 2014 Codex Standard and the same Indonesian National Standards.

Provisions for food safety inspection at the border under Regime 2 were simplified from four mechanisms to only two mechanisms:

**R2-Mechanism A** Recognition of the food safety control system of origin country; and

**R2-Mechanism B** Registration of food safety testing laboratory/is in the exporting country (MoA Regulation 04 of 2015, art. 5, 6 & 20)

R2-Mechanism A in Regime 2 is the same mechanism as R1-Mechanism A in Regime 1, while R1-Mechanism B, C, and D were removed, and R2-Mechanism 2 was added. R2-Mechanism B was established to shift the food safety inspection (sampling and laboratory testing) from at-the-border to pre-border. The recognized laboratories in the exporting country are responsible for guaranteeing that products that have been tested are safe for human consumption before exportation (MoA Regulation 04 of 2015, Art. 6). Therefore, there is no need for a regular inspection at the border in Indonesia, and the food safety control was conducted through monitoring based on risk analysis.

R1-Mechanism D was removed as an effort to push the exporting countries to apply for recognition or registration mechanisms. During the previous Regime, the traditional food safety

control was focused on regular sampling and testing of imported products to determine their compliance with Indonesia's food safety standard. Regime 2 tried to shift to a modern food safety conception which focused on more "preventive" actions than "reactive" actions by using risk-based approaches to food control and requiring that all operators in the food supply chain share responsibility for food safety. The aim was to strengthen consumer protection from hazardous food and provide a more accurate approach to food safety control particularly in entry/exit points which utilized a risk-based inspection method. Random inspection as part of the monitoring program would be conducted irregularly based on the food safety risk level. It was expected to effectively reduce the dwelling-time in the ports while ensuring safe food supplies for consumers in Indonesia. The Regulation of the Minister of Agriculture Number 04 of 2015 can be considered as the most restrictive regulation since only countries with recognition, or recognized laboratories could export their fresh plant products to Indonesia (Indreswari, 2016). A grace period of one year was given to provide adequate time for food safety authorities in the exporting countries to prepare all necessary actions needed to comply with Indonesia's regulation (MoA Regulation 13 of 2016).

The Regulation of the Minister of Agriculture Number 04 of 2015 was revised within two months of its enforcement. Even though a one-year transitional period had been arranged to ensure a smooth and successful implementation, contrary reactions from different parties were inevitable. The Regulation was strongly challenged by many stakeholders, including the governments of exporting countries and exporters, Indonesia's importers and food industries (Aziliya, 2016), and even other Indonesian government agencies. They argued that the new mechanism might cause an unnecessary import barrier and disturb the trade and economic relationships between Indonesia and exporting countries. In addition, some food industries claimed that the restriction would

disturb their raw materials supply and affect their businesses which may later cause job loss. The industry mostly imported cacao from African countries such as Ghana and Côte d'Ivoire that did not have any competent laboratories to conduct the food safety testing (Aziliya, 2016). On April 13, 2016, the regulation was amended barely two months after its enforcement date into Regulation of the Minister of Agriculture Number 13 of 2016. Since the Regulation of the Minister of Agriculture Number 13 of 2016 still deemed the amendment “too restrictive,” it was superseded by a “less stringent regulation,” (Aziliya, 2016) which marked the beginning of the Regime 3.

### **III.3. REGIME 3**

In this newest Regime, Regime 3, another mechanism was added to accommodate exporting countries without recognition or registered laboratories. It also excluded cacao, olives, and dates from the list of regulated fresh agri-food products. Cacao was removed to facilitate the outcry from a domestic industry that relies on the imported raw material. There are three provisions for food safety inspection under Regime 3 as follows:

**R3-Mechanism A** Recognition of the food safety control system of origin country;

**R3-Mechanism B** Registration of food safety testing laboratory/is in the exporting country;

**R3-Mechanism C** Non-recognition/registration: Food safety inspection of FFPO importation from countries with a non-recognized food safety control system and a non-registered laboratory (MoA Regulation 55 of 2016, Art. 7-9).

With the addition of R3-Mechanism C, Regime 3 has less restrictive requirements since every country can export their products to Indonesia without undergoing regular sampling and testing (MoA Regulation 55 of 2016, Art. 51). Unlike Regime 1, the new mechanism, R3-Mechanism C, allows any product to enter as long as it is accompanied by the required document:

a food safety certificate, as a guarantee from the exporter or government in the exporting country that the food is safe for human consumption (MoA Regulation 55 of 2016, Art. 9). Considering that there is no standard food safety certificate available, this may weaken consumer protections against hazardous imported foods. All types of documents which indicate that the food is safe and fit for human consumption are accepted. These could include a Health Certificate, a Certificate of Analysis (CoA), or other similar documents. Therefore, the food safety level of the exported products that come to Indonesia will be diverse depending on the level of the food safety system in the exporting countries. Ever since regular testing at the border was terminated, monitoring through irregular sampling and laboratory testing has been conducted to ensure the compliance of exporters. An adequate monitoring program becomes a very significant tool to ensure the exporting country comply with Indonesia's food safety requirement. If the risk assessment can be adequately conducted, the new provisions under Regime 3 can be considered as more efficient risk-based food safety inspection policy, in comparison to Regime 2. However, like other developing countries, with limited capacities to develop adequate risk assessment criteria, the newest food safety mechanism (R3-Mechanism C) might weaken public health protections in Indonesia.

## **Summary**

Ensuring food safety to protect public health and promote economic development remains a significant challenge in both developing and developed countries (FAO, 2016). Since 2009, Indonesia has been struggling to develop an adequate import food safety policies while balancing the international trade, politic, and financial issues. The newest regulation was developed to strengthen the consumer protection from hazardous food and to provide a more effective approach to food safety control particularly in entry/exit points based on a risk-based inspection method. However, some main challenges still need to be addressed to ensure the food safety objectives are

met. In general, the implications for food safety of imported fresh agri-products in the context of the human rights to food and food sovereignty in Indonesia are:

- The need to modify food safety policies to meet trade rules or the demand from related stakeholders including exporting countries which might have a negative impact on the human right to adequate food, and also the right to life and health.
- Food safety policy in Indonesia seems susceptible to pressure from the private sector (e.g., in the case of excluding cacao during Regime 3). Strong opposition from stakeholders including exporting countries and private sectors is possibly jeopardizing government authority and public health.



## **CHAPTER 2**

### **FINDINGS**

This chapter provides research findings as derived from the research questions. The chapter is divided into two parts: the findings from secondary data analysis to demonstrate the disparity of food safety standards between selected WTO Members, and from interviews as primary data to explore the human rights-based approach to food safety, especially for imported fresh agri-products in Indonesia. The chapter investigates inequality in food safety standards between more and less developed countries and identifies strategies less developed countries may be taking to improve their food safety inspection and monitoring.

#### **II.1. Secondary Data Analysis: Disparity of Food Safety Standards between Selected WTO Members**

##### **II.1.1. National Food Safety Standards (Pesticide Residues) of Selected WTO members**

The disparity of food safety standards among selected WTO members was explored by comparing the national food safety standards of selected countries, particularly the standards of maximum residue limits (MRLs) for pesticides residues of six (6) commodities and 19 countries which later summarized using a table and graphs. The MRL standards of pesticide residues in certain commodities from several countries were chosen to exhibit the inequality of food safety standards amid countries. MRLs were used in this study because can be quantified in number (for example, the number of MRLs by commodity and by country) and the global MRL data are also freely available. In addition, pesticide residues are one of the main concern for food safety in Indonesia. More MRLs for the specific commodities in one country versus another country suggests a higher scope of monitoring to ensure the safety of food supply (food safety control), particularly for pesticide residues. Thus, graphic presentation of those differences might

demonstrate unequal food safety standards between countries, specifically because countries with fewer MRLs have fewer tools to monitor and manage the number of pesticide residues contained in their food.

Six commodities were selected as samples to test the trend or consistency of the differences (of MRL standard) between countries across commodities. Since Indonesia was used as a case study, the commodities were chosen based on the import data of fresh agri-products to Indonesia in 2017 to represent key import food commodities. The dataset was collected from the Online Database of Import-Export Agricultural Commodities, the Ministry of Agriculture, The Republic of Indonesia (MoA, 2018). Data processing was conducted using Microsoft Excel. Six main imported commodities with the most significant import volume were selected as representative of each food categories (grains, fruits, vegetables, beans, and nuts). The selected commodities are wheat grain, apples, garlic, soybean, peanuts, and rice. Rice was added due to its importance as a staple food in Indonesia.

Using the same data set, in addition to Indonesia, 18 countries (including the European Union/EU) with the most significant import volume of fresh agri-products to Indonesia were selected. In this analysis, the EU is regarded as one “country” because every EU member must follow the same food safety standards developed by the European Commission/EC (EC, n.d.). These selected countries are divided into three categories: developed countries, developing countries, and least-developed countries (LDCs). According to the United Nations Conference on Trade and Development/UNCTAD (2018), “[t]here is no established convention for the designation of ‘developed’ and ‘developing’ countries or areas in the United Nations system.” The WTO also has no definition of “developed” and “developing” countries as quoted below:

There are no WTO definitions of “developed” and “developing” countries. Members announce for themselves whether they are “developed” or “developing” countries.

However, other members can challenge the decision of a member to make use of [trade] provisions [such as getting technical assistance from developed countries or a longer transition period before they are required to fully implement an agreement] available to developing countries (WTO, 2018).

UNCTAD (2018) classifies countries based on their economic development into three categories: developing economies, transition economies, and developed economies. Additionally, the WTO (2018) recognizes a list of “Least-developed countries/LDCs” which are designated by the UNCTAD. Currently, 36 of 47 LDCs on the UN list are WTO members, and eight more are negotiating to join the WTO as LDCs: Bhutan, Comoros, Ethiopia, Sao Tomé & Príncipe, Somalia, South Sudan, Sudan, and Timor-Leste (WTO, 2018). Furthermore, countries’ classifications based on the level of income from the World Bank were also included in the table. The World Bank (2018) defines each category as follows:

For the current 2019 fiscal year, low-income economies are defined as those with a GNI [Gross National Income] per capita, calculated using the World Bank Atlas method, of \$995 or less in 2017; lower-middle-income economies are those with a GNI per capita between \$996 and \$3,895; upper middle-income economies are those with a GNI per capita between \$3,896 and \$12,055; high-income economies are those with a GNI per capita of \$12,056 or more (The World Bank, 2018)

The existing national food safety standards for pesticide residues of 19 countries (including Indonesia and the EU) were summarized from the information provided on a website developed by Bryant Christie Inc. (BCI): GlobalMRL.com and can be seen in Table 5 below.

Table 5. National Food Safety Standards for Pesticide Residues (*Source: BCI, 2018*)

No	Country	Development status	Income level	National Food Safety Standard	Defer to the Codex MRLs?	Using Uniform Limit/ Default MRL
1	Australia	Developed	High Income	FSANZ Joint Food Standard Code -Schedule 20- MRL	No, but Australia will consider work the Codex has undertaken when conducting its reviews. (NZ MRLs are recognized)	No, but until 2017, had been using zero tolerance (“No detectable residue)
2	Canada	Developed	High Income	PMRA MRL Database 2016	No	0.1 ppm (General MRL)
3	EU	Developed	High Income	Regulation 369/2005 Annexes amended to Regulation 2016/11016	No (EU member states adopted the EU MRL)	0.01 ppm
4	Japan	Developed	High Income	MHLW (FCRT Database)	No	0.01 ppm
5	New Zealand (NZ)	Developed	High Income	Food Regulation 2015, Food Notice MRLs 2016	Yes, for imported food, even if there is an established NZ MRL, a higher value (less restrictive) The Codex MRLs will be accepted. (Australia MRLs are recognized)	0.1 ppm (Higher value (less restrictive) the Codex MRLs are also accepted if the NZ MRLs is set at the default MRL of 0.1 ppm.)
6	US	Developed	High Income	EPA 40, CFR 180	No	No, but using zero tolerance
7	South Korea	Developing	High Income	KFDO Food Code 2015	Yes, if no national MRL, but only for a specific commodity, not on a crop group	0.01 ppm on Jan 1, 2017, for Nuts, Seeds and Tropical and Subtropical 0.01 ppm for Fruits and others in Dec 2018
8	China	Developing	Upper Middle Income	ICAMA Regulation to GB 2763 2016	No (but will consider The Codex MRLs in cases where there is a residue dispute on specific shipments.)	No
9	Malaysia	Developing	Upper Middle Income	Amendment of Regulation 41 and Sixteenth Schedule, Food Regulations 1985: Pesticides Residue	Yes, if no national MRLs	0.01 ppm
10	Singapore	Developing	Upper Middle Income	AVA – Food Regulation – the Sale of Food Act (CAP 283)	Yes, if no national MRLs	No
11	South Africa	Developing	Upper Middle Income	Foodstuffs, Cosmetics, Disinfectant Act 1972, amended 19 Jan 2012	Yes, if no national or the EU MRLs exist	0.01 ppm

Table 5 (continued)

No	Country	Development status	Income level	Food Safety Standard	Defer to the Codex MRLs?	Default MRL
12	Thailand	Developing	Upper Middle Income	Ministry of Agriculture (AFCS) TAS 9002-2013, TAS 9003-2004	Yes, (and also ASEAN MRLs)	0.01 ppm
13	Indonesia	Developing	Lower Middle Income	Regulation of Minister of Agriculture 04 of 2015	No, but the national standard is fully adopting (Codex MRLs 2014)	No
14	India	Developing	Lower Middle Income	The Food Safety and Standard Regulation 2011	No (after August 28, 2014) *)	<i>In the process of proposing a positive limit of 0.01 ppm</i>
15	Vietnam	Developing	Lower Middle Income	MoH Circular 50/2016/TT-BYT of 30 December 2016.	No (Only national MRLs currently applied to food safety inspections, including imported products)	No
16	Bangladesh	Least Developed	Lower Middle Income	'Bangladesh Food Safety (Contaminants, Toxins, and Harmful Residues) Regulations, 2017'	N/A **)	No
17	Cambodia	Least Developed	Lower Middle Income	No National MRLs (in the process of officially adopting The Codex standards, but as of late 2012 this was not yet official)	Yes, generally defer to the Codex or ASEAN MRLs	No
18	Mozambique	Least Developed	Lower Middle Income	No National MRL	N/A **)	No
19	Myanmar	Least Developed	Lower Middle Income	No National MRL	defers fully to the Codex	No

\*) It was formerly understood that India accepted the Codex MRLs if no national MRL was established; however, a High Court Order from August 28, 2014, indicates that the Codex MRLs may no longer be accepted (BCI, 2018).

\*\*\*) No data for national MRL, GlobalMRL.com displays the Codex MRLs (July 2018)

### **II.1.2. Maximum Residue Limit (MRL) and Default MRL**

The Codex Alimentarius Commission (CAC) described Maximum Residue Limit (MRL) for Pesticide Residues as “the highest level of a pesticide residue that is legally tolerated in or on food or feed when pesticides are applied correctly in accordance with Good Agricultural Practice” (FAO/WHO, 2018). The European Commission (2005) defined MRL as “the upper legal levels of a concentration for pesticide residues (expressed in mg/kg) in or on food or feed based on good agricultural practices (GAP) and to ensure the lowest possible consumer exposure.” On the other hand, the U.S. used the term “tolerances” in place of MRL, which define as the maximum amount of a pesticide allowed to remain in or on food commodities (EPA, 2018). Furthermore, the European Commission (2014) in EC SANCO/3346/2001 rev 7, Guidance Document on Notification Criteria for Pesticide Residue Findings to the Rapid Alert System for Food and Feed explained:

MRLs are often mistaken for toxicological safety limits. MRLs are safe limits that define the maximum expected levels of a pesticide on a food commodity after safe and authorized use of that pesticide. They serve both to prevent illegal and/or excessive use of a pesticide (e.g., to prevent damage to the environment or to the health of workers and bystanders) and to protect the health of consumers of the harvested product (EC, 2014).

MRLs can be understood as the relative capacity of a country to test for pesticide residue. Countries with more MRLs theoretically can safeguard against more pesticide residues (although a country does not have to test all of the MRLs they have established) and presumably can therefore better protect their country’s public health.

As can be seen in Table 5 above, both developed and developing countries have their own national MRLs, while the LDCs do not, with the exception of Bangladesh which has

established recently a national food safety regulation in 2017. Additionally, most developed countries have robust national MRLs and do not recognize the Codex MRLs whose standards they consider insufficient (BCI, 2018). NZ has a different approach and will consider the Codex MRLs only when it has a higher value (less restrictive) than NZ MRLs (BCI, 2018). Developed countries also utilize a uniform limit for other pesticide contaminants that have not developed in their national standard. However, the terminology used differs between countries. On May 29, 2006, Japan introduced the term “positive list system” following the EU that had been established the system since 2005 (MHLW, 2006). Japan Ministry of Health, Labour, and Welfare/MHLW (2006) stated that “the objective of establishing a positive list system for agricultural chemicals [including pesticide residues] is to prohibit the distribution of foods that contain agricultural chemicals above a certain level if maximum residue limits (MRLs) have not been established.” Japan sets a uniform limit of 0.01 ppm as the maximum level of chemicals that can remain in foods to protect public health and provided an argument as follows:

The uniform limit has been set at 0.01 ppm so that the estimated intake of agricultural chemicals to which the limit would be applied does not exceed 1.5 µg/day when calculated based on the food consumption of Japanese population. In January 2005, the European Union, which would introduce the positive list system, established the uniform level at 0.01 ppm. Considering such circumstances, the MHLW has decided that the limit is reasonable (MHLW, 2006).

As shown in Table 5, other developed countries also have their own uniform limit with different levels and different terms. Canada and New Zealand (NZ) referred to the positive list as “default MRL” and set the same 0.1 ppm as their standard. New Zealand, regarding their Food Regulations (2015), defined the default MRL as:

[T]he residue level of the agricultural compound present in the food does not exceed 0.1mg/kg, and there is no notice (i) specifying a maximum residue level of the agricultural compound that may be present in the food; or (ii) providing that no maximum residue level for the agricultural compound applies to the food (NZ Food Regulation, 2015).

Australia previously had a stricter limit by using the term “not traceable,” which means the limit depends on the detection limit of the analysis instrument used to detect the residue. However, in their new Food Standard Code – Standard 1.4.2. - Agvet Chemicals (2016), the term has been removed, and Australia has developed a new approach to avoid application of ‘zero tolerance’ to the presence of low-level pesticide residues in food commodities (FSANZ, 2016). Meanwhile, the U.S. addressed the positive list as “zero tolerance” in their regulation, EPA Title 40– Protection of Environment – Part 180 Tolerances and Exemptions for Pesticide Chemical Residues in Food:

A zero tolerance means that no amount of the pesticide chemical may remain on the raw agricultural commodity when it is offered for shipment and may be established if: (i) the pesticide chemical is toxic, but is normally used at times when, or in such manner that, fruit, vegetables, or other raw agricultural commodities will not bear or contain it, or (ii) all residue of the pesticide chemical is normally removed through good agricultural practice such as washing or brushing or through weathering or other changes in the chemical itself, prior to introduction of the raw agricultural commodity into interstate commerce (EPA Title 40, §180.6).

Recently, developing countries began to include a positive list approach to their national food safety standards. Malaysia has been adopting positive list as part of their food safety standard since 2015. In their Food Regulations 2015, Malaysia sets 0.01 ppm as a default MRLs that



applied if there are no established national standard or the Codex standards for specified pesticide on foods. South Africa is also using default MRL 0.01 ppm when there is no Codex, the EU, or nationally established MRLs (BCI, 2018). South Korea, a developing country with high income, on January 1, 2017, applied default MRL 0.01 ppm for specific products (nuts, seeds, and tropical and subtropical fruits). The same default MRL will be applied to other fruits and other produce in December 2018 (BCI, 2018). On January 27, 2017, the Thai Food and Drug Administration notified the WTO (G/SPS/N/THA/183/Rev.1) on the Ministry of Public Health (MOPH) Notification regarding Food Containing Pesticide Residues, that Thailand will be adding default MRL to their food safety standards (USDA FAS, 2017).

The process of establishing MRLs (Maximum Residue Limits) can be costly and time-consuming, which might limit the capacity of a lower income country (or a country with limited resources) to establish their national MRLs. The European Commission (2016) explained the procedure for setting MRLs under Regulation (EC) Number 396/2005 in a Guidance Document for MRL Setting Procedure. The procedure consists of nineteen (19) rigorous steps where the overall process takes at least 24 months to establish a single MRL (EC, 2016). The Ministry of Food and Drug Safety (MFDS) of Korea (2014) mentioned that the processing period for establishing a new MRL in Korea is 365 working days and the processing cost is \$25,000 for toxicology data and approximately \$4,500 for residue data per one MRL. Likewise, the U.S. government stipulated the fees for setting new MRLs (tolerance) or an MRLs higher than already established at \$80,950, plus \$2,025 for each raw agricultural commodity more than nine on which the establishment of tolerance is requested (EPA Title 40, §180). Evidently, establishing new MRLs requires a financial cost that can create an additional burden for national food safety authority.

### II.1.3. Comparison of MRLs between Countries

The MRLs data set from each country (19 countries) and for each commodity (6 commodities) was collected from a US-based MRL database. Bryant Christie Inc. (BCI) developed this data set, known as the Global MRL Database, to analyze disparities in food safety standards between WTO members. The Global MRL Database collects data using several sources as follows:

- U.S. Federal Register;
- USDA Foreign Agricultural Service (FAS) GAIN Reports;
- Official Journal of the European Union;
- World Trade Organization (WTO) notifications issued by the Sanitary and Phytosanitary (SPS) and Technical Barriers to Trade (TBT) committees;
- FAO/WHO Food Standards Codex Alimentarius;
- Over 60 additional national government regulatory agencies and websites;
- In-country experts and regulators who are also frequently consulted on policy matters (BCI, 2018).

Before being managed by BCI, the Global MRL Database was previously maintained by the U.S. Department of Agriculture (USDA) (FAO, n.d.). Free access to the Database for US-based users (sponsored by USDA and EPA) is available with online registration. The database is designed specifically for users in the US are only reported when the same US MRL regulation is applied in each, separate commodity (BCI, 2018), i.e., the active ingredient of pesticide residues and commodity menus available in the Global MRL Database are limited to those listed in the U.S. Code of Federal Regulations (CFR) Title 40 CFR 180 Subpart C for pesticide-specific tolerances (BCI, 2018). The limitation of using the Global MRL Database is that the MRLs data excluding some MRLs that are regulated by a country but are not established by the US.

The MRLs data were processed using Microsoft Excel. The six graphs presented as part of Figure 6 below were created to show the differences of MRL standards between selected countries.

Figure 6. Comparison of the MRLs of Pesticide Residues (Source: Global MRL, 2018)

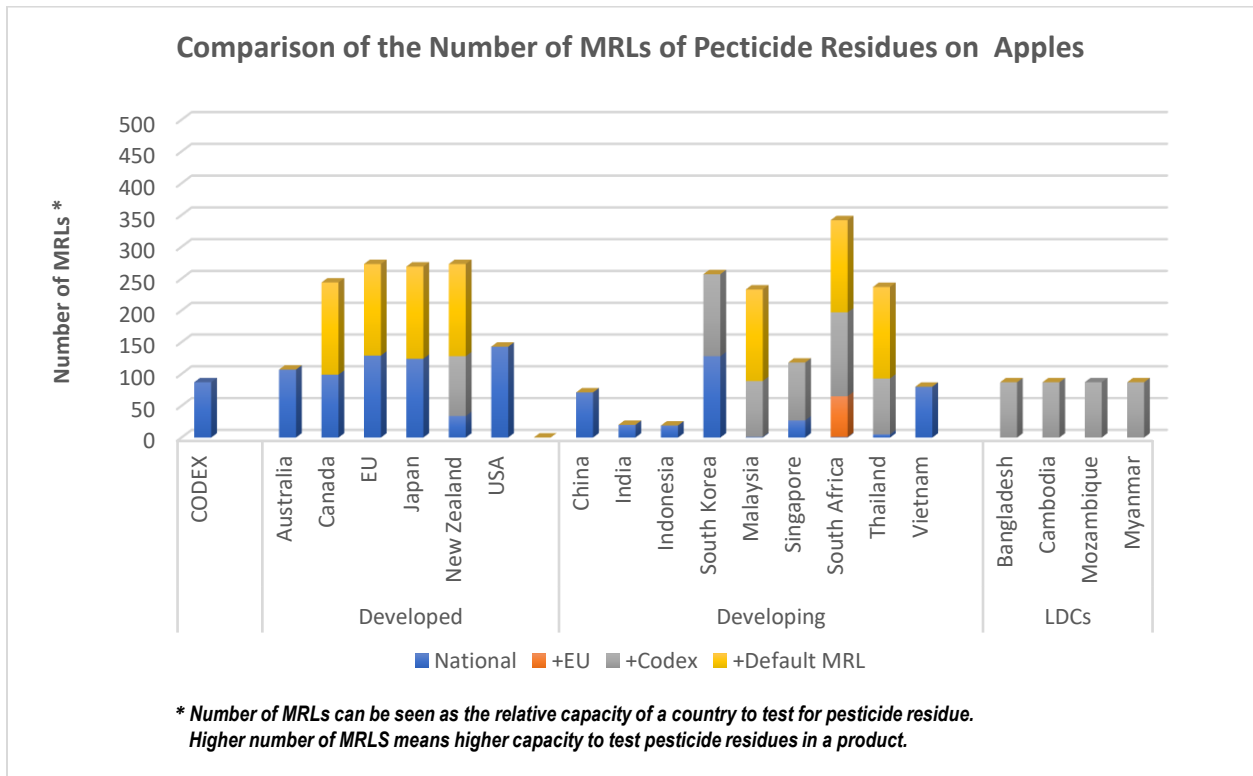
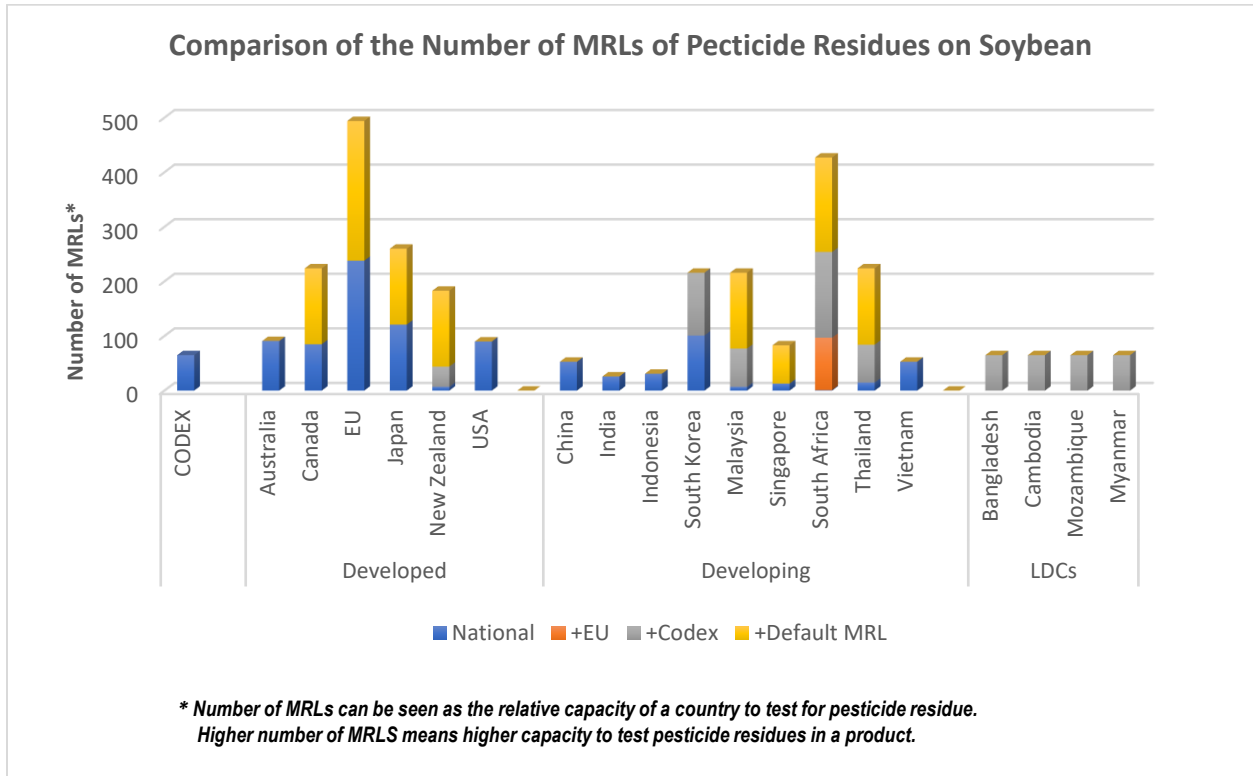


Figure 6 (Continued)

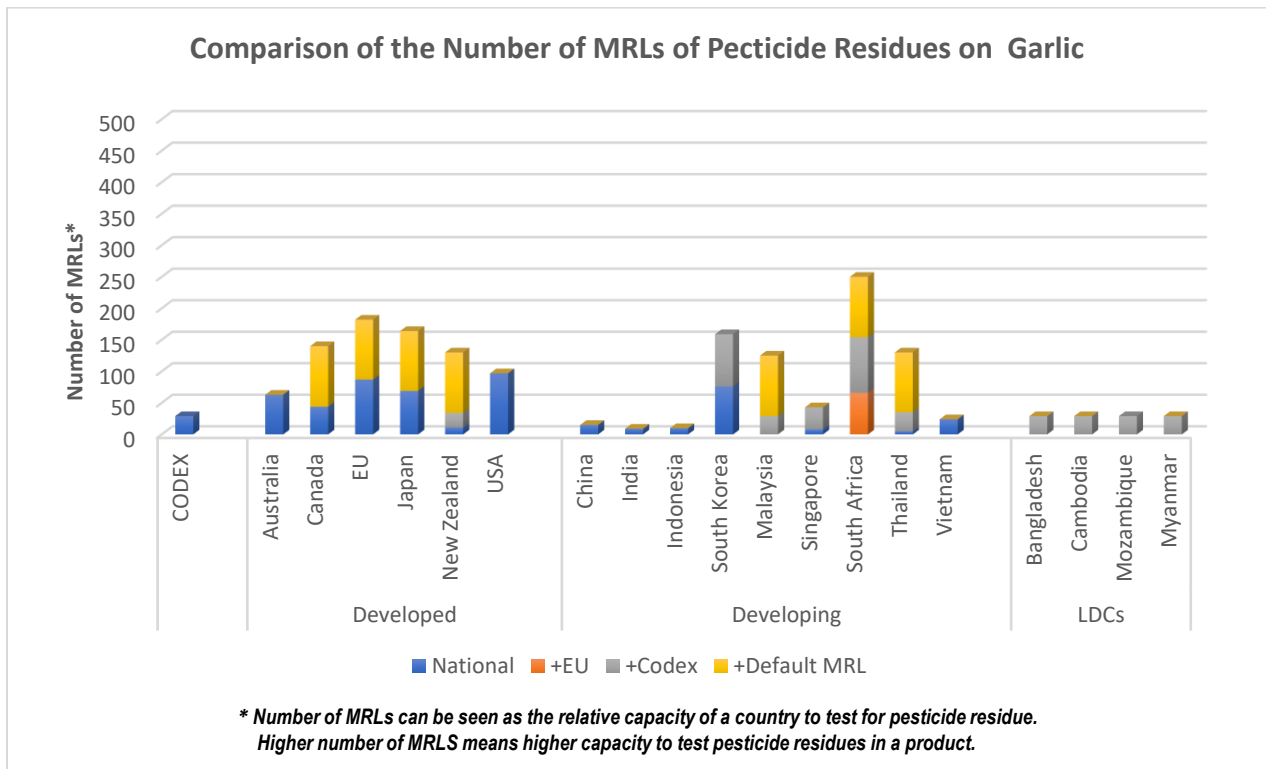
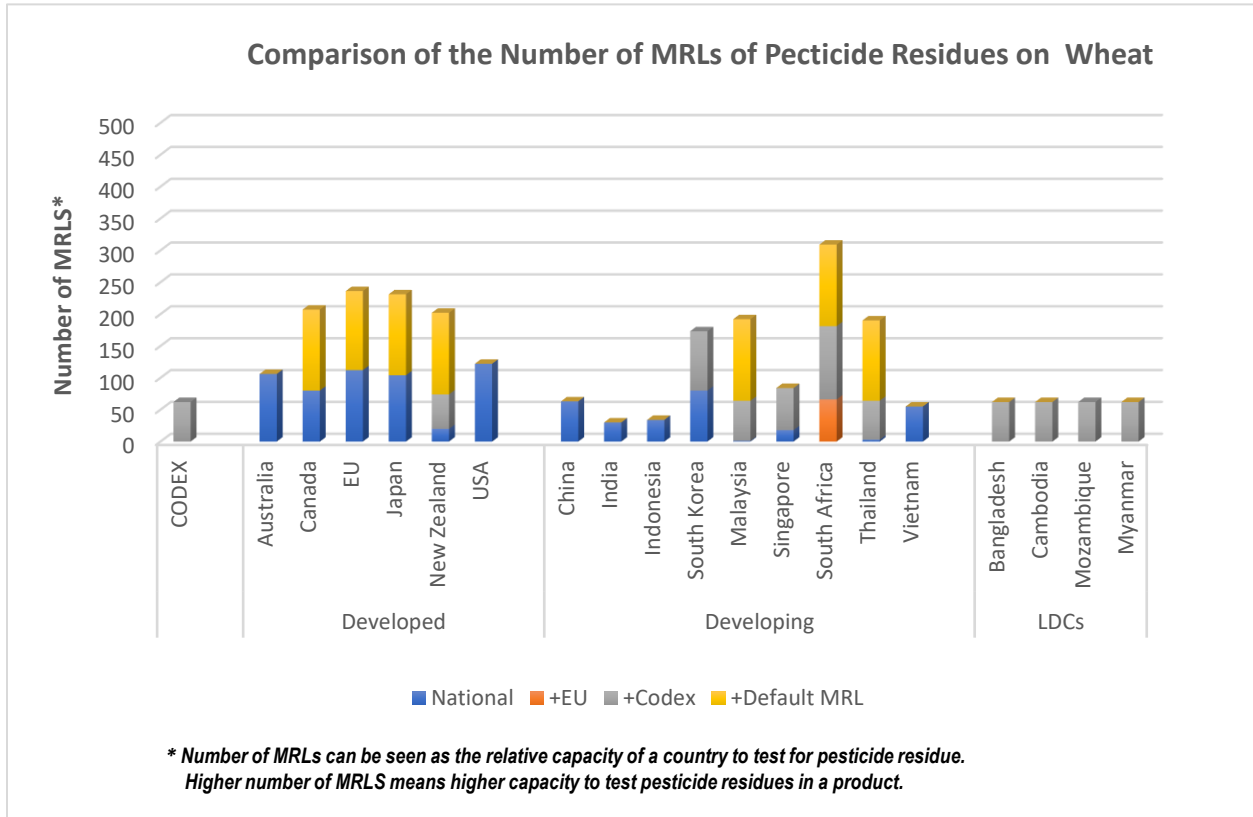
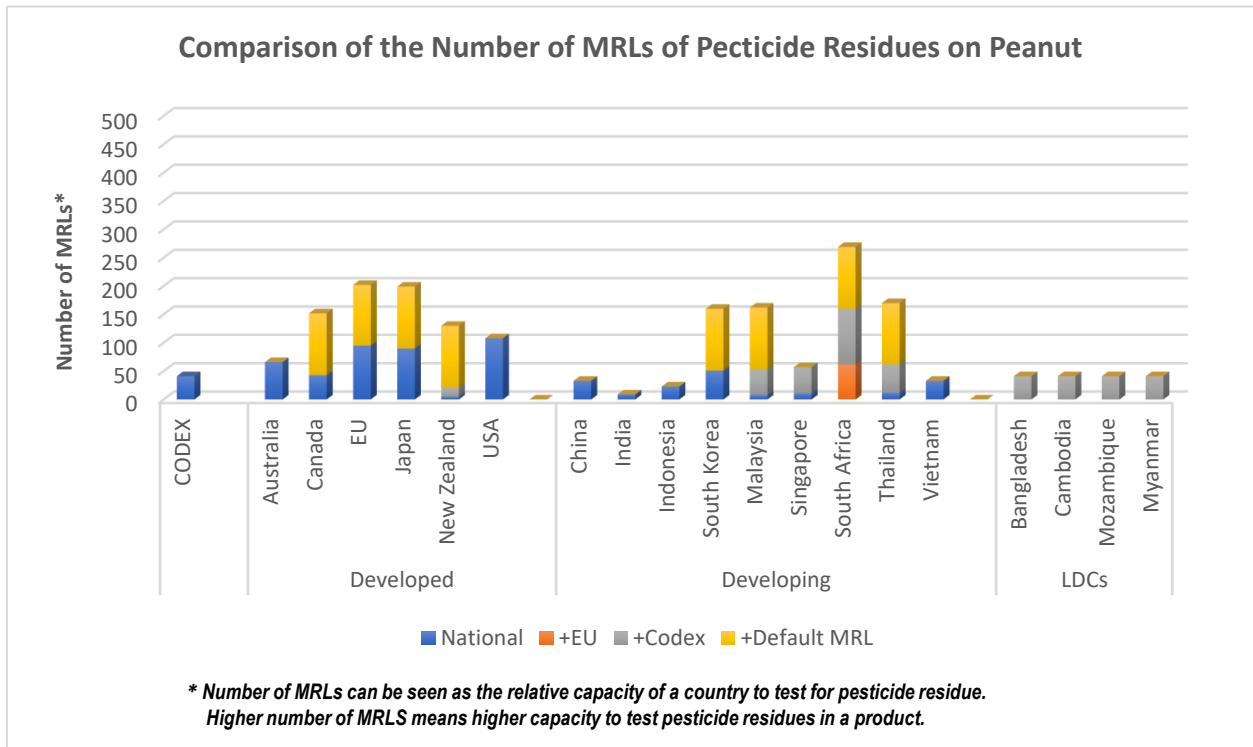
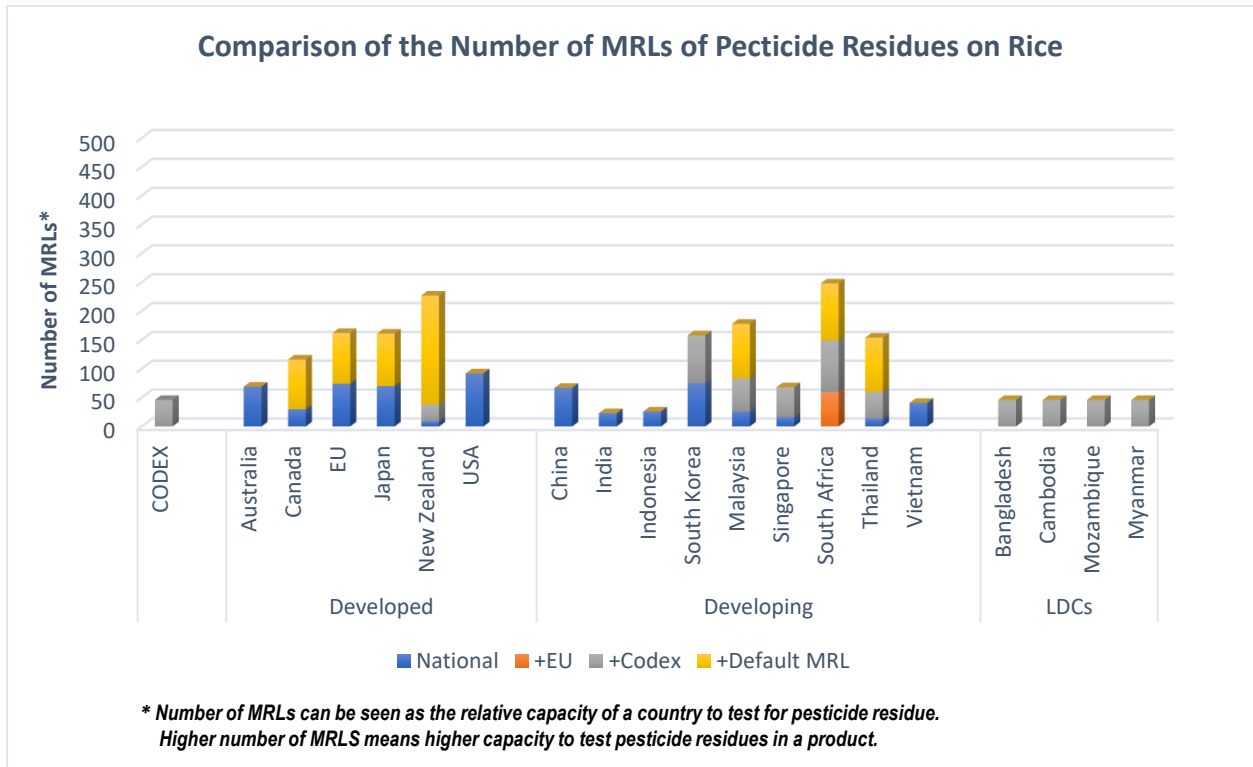


Figure 6 (Continued)



In each graph above, the bars showed the number of MRL standards set by each country. There are 4 sets of color for each bar. The blue color represents the number of national MRLs, established as described earlier in the chapter. The grey stands for the number of the Codex MRLs adopted by the country. As discussed in Chapter 1, the Codex MRLs are international standards set by Codex Alimentarius Commission (CAC) and freely available to all countries; encouraged by the WTO to be adopted; generally fully or partially followed by countries with no or limited national MRLs, or serving as an addition to national MRLs. Orange bars represent the number of the EU MRLs adopted by other country. The EU produced a number of MRLs; these are both used by EU countries like national MRL standards and by non-EU countries alike i.e. South Africa. The yellow bar represents the number of default MRLs applied in each commodity.

Higher bars indicate that countries with greater numbers of MRL standards for respective individual commodities can be assumed to have more stringent, complex, and thorough food safety standards than do countries with less coverage of MRLs (Curzi, Luarasi, Raimondi & Olper, 2018). For example, Figure 6 showed that generally, the developed countries reviewed such as the EU, Japan, the US, and Australia have more robust national food safety standards/national MRLs (blue bars) for all six commodities portrayed than do other fifteen countries reviewed. Further, those more developed countries do not refer to or adopt the international Codex standards (note absence of grey bar), with the exception of New Zealand (NZ). Codex MRLs are used to supplement its national list (BCI, 2018). For imported food, even if there is an established NZ MRL or the default MRL of 0.1 ppm, NZ will accept the Codex MRLs when it has a higher value (less restrictive) (BCI, 2018). Australia and the U.S. do not use the term “default MRL,” but they are establishing “zero-tolerance” policy (see Table 5).

However, BCI (2018) interpreted that those two countries do not apply the default MRLs system. If we exclude the zero-tolerance policy, Australia and the U.S. have less MRLs standard compare to other developed countries (smaller total composite bar).

Based on the data in Table 5 and Figure 6, it is noticeable that in general, the domestic protection from unsafe imported food, most specifically protection from pesticide residues, that can be provided by national governments in developed versus developing countries can be unequal. Developed countries have the capability and capacity to develop their own national MRLs to provide a higher level of protection from the hazard of pesticide residues. Higher income developing countries (e.g., South Korea) have stricter standards with higher number of national MRLs (blue bar), in addition to default MRLs, as compared to developing countries with higher-middle or lower-middle incomes; see Figure 6 e.g. China, South Africa, Thailand, Malaysia, Vietnam, and Indonesia. Meanwhile, most LDCs have no national food safety standards established and can only rely entirely on the Codex standards (grey bar). BCI (2018) clarified that Cambodia, Mozambique, and Myanmar do not appear to maintain a national pesticide regulation program and the U.S. exporters are recommended to refer to the Codex MRLs when exporting to those countries.

A noticeable pattern can be seen from some developing countries that have been applying a multi-step deferral policy such as Malaysia, Thailand, and South Africa. Deferral paths are “the decision trees used by some countries to determine acceptable MRLs when a national MRL is not established” (BCI, 2018, FAQ). Countries with basic deferral paths, such as most LDCs, do not have a national MRL regulation. Although in the database, as a precaution, BCI consider all countries that do not have national MRL to defer wholly to international MRL regulation, specifically, to the Codex MRL standard (BCI, 2018). For other developing countries, in cases



where a national MRL is not established, might apply a deferral policy. Deferral paths can be complex and may involve multiple standards from other markets (e.g., the Codex, the EU, etc.) and default MRLs (BCI, 2018). For example, a country might defer to the MRL standard from the EU MRL regulation, in addition to the Codex and default MRL.

Malaysia is one of the first developing countries that has been adopting the positive list as part of their food safety standard. They are using a unique deferral path, as follows: (1) National MRLs; (2) the Codex MRLs; (3) ASEAN MRLs; and (4) Default MRL of 0.01 ppm (BCI, 2018). Using a layered standard, even though their national standard seems to be very limited and far less than other developing countries, their policy to adopt the positive list system might arguably be able to leverage the public health protection in Malaysia. Thailand has been following the same path with a more complex deferral process, as follows: (1) National MRLs (Schedule 2) and extraneous MRLs (Schedule 4); (2) the Codex MRLs; (3) Pesticide-specific default MRLs set in the Schedule 3; (4) Default MRLS of 0.01 ppm.

As can be seen from the graphs in Figure 6, Malaysia and Thailand have almost the same number of MRLs (total bars) as does South Korea. South Africa has also been developing a deferral policy by adopting three layers of standards: the EU MRLs, the Codex MRLs, and default MRL (BCI, 2018). However, the South Africa deferral policy differs from those of Malaysia and Thailand because South Africa will first refer to higher MRLs from the Codex and the EU before applying their national MRLs. Africa's multi-step deferral policy can be summarized as follows:

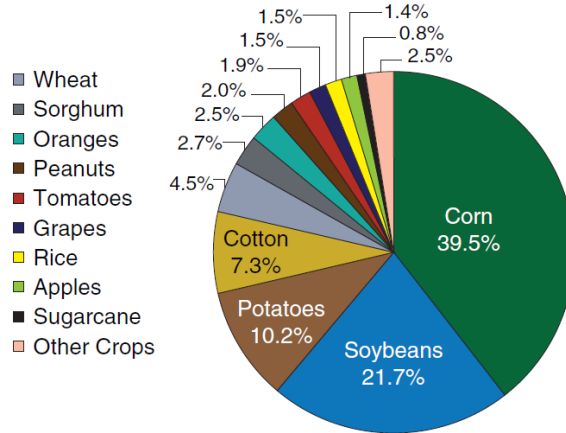
- 1) The higher (less restrictive) value of international the Codex and the European Union MRLs is accepted.

- 2) If there is neither a Codex MRL nor an EU MRL, then the South African national MRL applies, if established.
- 3) If there is no Codex, the EU, or South African established MRL, then the default MRL of 0.01 ppm applies (BCI, 2018)

South Africa's multi-step deferral policy probably gives it higher protection because it helps increase the number of MRLs. As shown in Figure 6, South Africa barely has national MRLs (blue bars) for those six commodities. However, by adopting the rigorous EU standard (orange bar) and default MRL (yellow bar), in addition to the Codex MRLs (grey bar), South Africa's policy provides very high coverage of MRLs (total bar), which is sometimes even higher than developed countries.

A comparison across commodities shows consistent country MRL standard differences. The EU has the highest number of MRL standards for soybeans (494 MRLs) compared to other five products, which is double the MRL standard in other developed countries such as Canada, Japan, and NZ. South Africa is in the second place with 427 MRLs. Soybeans are known as a crop grown with heavy use of pesticides, (Stanley, 2017), and most developed countries grow soybeans. The United States Department of Agriculture/USDA (2014) collected and compiled the data of pesticide used in the US on 21 crops for in 2008 (Figure 7). Those twenty-one crops account for approximately 72 percent of total conventional pesticide use in U.S. agriculture (USDA, 2018). The data showed that soybean is in the second top pesticide-using crop in the US (21.7%); wheat shared 4.5% of pesticide use in the US; peanuts 2%, rice 1.5%; apples 1.4%; and no data for pesticide use in garlic (USDA, 2018). In order to protect public health, it is therefore unsurprising that the MRL standard for soybean in average is high relative to other commodities.

Figure 7. Pesticide use by 21 selected crops in the U.S. in 2008 (USDA, 2018)



Although the USDA data showed that pesticide use in wheat is three times more than pesticide use in apple, the average number MRLs for apple is slightly higher than for wheat. Unlike soybeans, the number of the EU MRLs for apple and wheat are similar to other developed countries while South Africa has the biggest number of MRLs. Garlic has the lowest average number of MRLs standard and the country with the highest MRLs number is South Africa (250 MRLS), followed by EU at 182 MRLs. Referring to the USDA’s data, it is possible that the lower number of MRLs garlic is correlated to its lower use of the pesticide. For rice, most countries with high rice consumption per capita such as Bangladesh, Vietnam, Indonesia, and Myanmar have smaller number of MRLs than developed countries or countries with deferral policy. In 2013, Bangladesh ranked the highest in rice consumption per capita with 172 kg (Helgi Library, 2018). Vietnam, Indonesia, and Myanmar were ranked, respectively, fourth, fifth, and sixth in rice consumption per capita (Helgi Library, 2018). However, as can be seen from the graph, the number of established national MRLs in those four countries is limited compared to other countries reviewed, even though most of them referring to the Codex standards.

Moreover, although China ranked first in peanut-producing and is also the top peanut-consuming country in the world, their national standards for peanut are minimal compared to other commodities such as wheat, soybean, rice, and apple. With the exception of soybeans, South Africa with its unique multi-step deferral policy has the most significant number of MRLs in all five commodities, exceeding the developed countries MRLs. Developing countries that do not defer entirely to the Codex MRLs or another standard such as India, Indonesia, Vietnam have the lowest number of MRLs in general for all commodities, including rice: a staple food for those countries. The LDCs, however, will have more MRL standard **when (if)** they are fully adopting the Codex standards.

#### **II.1.4. Implications of MRL Comparisons**

The MRL comparison presented in this section was created to display quantitatively the disparity of food safety standards between WTO's members, particularly between developed, developing, and least-develop countries. The findings showed that developed countries generally establish their own national standards and further, they add an additional layer of protection, i.e., default MRL/positive list. Some developing countries have been developing a multi-step deferral policy, i.e., a hybrid process of adopting other international standards such as the Codex or the EU MRLs, along with their national standard, as well as adopting default MRL. The MRLs comparison provided data to show that a multi-step deferral policy may be a strategy for lower-income countries to improve their food safety control on pesticide residues. Developing countries such as Malaysia, Thailand, and South Africa are able to leverage their MRL standard, i.e., they have increased the number of MRLs they can test, by utilizing a multi-step deferral policy, i.e. adopting the Codex or the EU standards and default MRL. Further research is necessary to understand how and why those countries are able to implement other countries'

standards without providing their own scientific justification given that this process of adoption seemingly contradicts WTO rules.

## **II.2. Primary Data: Interviews**

Semi-structured interviews were conducted to analyze the interpretations from different stakeholders regarding food sovereignty, the human right to adequate (safe) food in Indonesia, food trade, and Indonesia's food safety regulation. Interviewees in this research were divided into several categories based on their occupations: government food safety officials (5 interviewees), civil society organizations/CSO (5 interviewees), university-based food safety experts (2 interviewees), and importers (2 interviewees) (See Appendix 5). Each table below summarizes what the interviewees had to say about several key issues, as follows: right to adequate food, food self-sufficiency/food independence<sup>6</sup>, food sovereignty, food security, food safety, free trade, the WTO, the SPS Agreement, the Codex, and Indonesia's food safety regulation, in the context of food safety and trade. Note that the first four categories following the right to food reflect key aspects of national food policy as iterated in the 2012 Indonesian Food Law. The latter five reflect the thesis question direction related to national food safety policy, especially on imported fresh agricultural products.

### **II.2.1. Right to Adequate Food**

As can be seen from Table 5, interviewees from government food safety officials (Indonesia Agriculture Quarantine Agency/IAQA) are not familiar with the right to food,

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<sup>6</sup> The word "*Kemandirian Pangan*" in the Indonesia 2012 Food Law has been translated into either food self-sufficiency or food independence. According to Dr. Iqbal Rafani from Indonesian Center for Agricultural Socio Economic and Policy Studies (ICASEPS), Ministry of Agriculture, Indonesia, "Food independence is semantically related to food self-sufficiency and food resilience. The word "independence" entails the ability of the state and nation to produce its own food diversity by utilizing the potential of natural resources in the country, and the word "self-sufficiency" refers to a situation in which a state may meet all or most of the food needs of the population from domestic production" (See Chapter 1. Literature Review and Chapter 3. Discussion).

particularly the field inspectors. When asked about what he knows about the right to food, a laboratory analyst at the Agricultural Quarantine Major Service (AQMS) of Tanjung Priok said, “Safe, wholesome ---safe, and halal, if I am not wrong though. I don’t really understand” (PO2, 2018). Interviewees who are or were working in the IAQA’s Central Office in Jakarta or were involved in food safety related policy-making seem to recognize the term of the right to food.

Table 6. Summary of Interview Findings A: Right to (Adequate) Food

Indonesia’s Food Law	Government food safety officials (n=5)	CSOs (n=5)	University-based food safety experts (n=2)	Importers (n=2)
<p>“Food is the essential human need, and its fulfillment is part of human rights that are guaranteed in the 1945 Constitution of the Republic of Indonesia as a basic component in creating quality human resources” (The 2012 Food Law, p.1).</p>	<ul style="list-style-type: none"> <li>• Interviewees, particularly the field inspectors are not familiar with the right to food.</li> <li>• Other interviewees viewed the RtF as the basic need that must be fulfilled by the government, but the dignity or the access aspect of right to food were not mentioned.</li> </ul>	<ul style="list-style-type: none"> <li>• Generally, CSOs have an adequate understanding of the right to food, especially regarding accessibility.</li> <li>• The first principle of the right to food is to respect people’s right to determine what to eat and to produce based on their own culture and methods.</li> <li>• The right to food must be fulfilled, respected, and protected by the government and respected by the private sectors.</li> <li>• The recognition of the right to food in Indonesia is relatively low, even more for the right to adequate food.</li> <li>• The United Nation needs to promote a more progressive right to food approach.</li> </ul>	<ul style="list-style-type: none"> <li>• The international definition of right to food is analogous with food security.</li> <li>• The right to food concept was translated to food sovereignty by the CSOs.</li> <li>• In Indonesia, the adaption of the right to food leans toward food sovereignty which applied through the 2012 Food Law.</li> </ul>	<p>By providing quality food for people in Indonesia, the food industry is probably assisting the realization of the right to adequate food.</p>

no one has, however, an in-depth knowledge of the right to food as can be gleaned from a comment from a senior officer who works at the Central Office of IAQA: “Human right to safe food is one of the basic needs that has to be fulfilled by the government for their people, so Indonesia’s people can achieve a decent quality life” (PO5, 2018). Moreover, he and a senior official who used to work at the central office—but now serves as Head of Plant Quarantine in

the AQMS of Tanjung Priok—mentioned the obligation of Indonesia’s government to fulfill the right to food but never connect it with the accessibility or dignity dimension.

Meanwhile, almost all respondents from CSOs convey a better understanding on the right to adequate food as shown by the answer from Said Abdullah, National Coordinator for People’s Coalition on Food Sovereignty (*Koalisi Rakyat untuk Kedaulatan Pangan/KRKP*): “I think the international convention has regulated the right to food right, that everyone does have the right to---not only get or have access but also to consume food and not only food but healthy and adequate food so that he might be able to live according to---what---according to what---periodization [life expectancy] that he must [could] achieve. For example, children, not only how he eats, not only can he get a plate of rice, fish and so on, but also eat, what is being eaten also must have the nutritional value of course, and the second is, free from germs, for example” (Abdullah, S., 2018). Tejo Wahyu Jatmiko, National Coordinator from Indonesia Berseru—an institution that works on poverty and sustainable natural resource management and pro-community groups, adults and children, men and women—shared similar thoughts about right to adequate food: “Right to food...right to food it's not just about the sufficiency or the quantity, but also from the nutrition and safety side, which means [that food] do not contain hazardous contaminants”. He then continued with the obligation of the state in the realization of the right to food: “... and then we have adopted it [right to food] into the new law, that food is a human right. I think the right to healthy and safe food must be fulfilled by the State because the State must fulfill human rights--- respect, protect, fulfill” (Jatmiko, TW., 2018).

From the CSO respondents, another interviewee, Wiwid Widiyanto, project manager from Oxfam Indonesia, argued that the private sector also needs to respect the right to food:

“... An adequate food, healthy food, it is also included in---as part of one of the human rights that must be fulfilled by the government and *respected by the company*” (Widiyanto, W., 2018). Some CSOs also pointed out that the realization of the right to food in Indonesia is relatively low, much less the right to *adequate* food. As illustrated by Lutfiyah Hanim, a senior researcher from Indonesia Global Justice (IGJ) “... Since food is a human right, so every citizen has the right to food---and---in this case, the Government and also all parties strive to ensure the right to food is achieved. Right now---it's still about food supply. ... So, the truth is, the right to food for citizens, even farmers are not guaranteed. ...” (Hanim, L., 2018). IGJ is a CSO that works on global trade liberalization issues, particularly on monitoring and responding to trade-related priority issues including the WTO (IGJ, n.d).

University-based food safety experts present a distinct perspective regarding the right to food. Dasep Wahidin, a food inspector from National Agency of Food and Drug Control (NAFDC) and a doctor in food law, explained how by definition, according to international law, right to food can be translated to food security because the description of the right to food in CESCR is corresponding to food security. He explained: “... The concept---the concept, per se, is appropriate if we read in CESCR, they---they define what right to food means, which is very rigid, very, what is it---very similar with the definition of food security. ... So, what--- what is meant by the right to food is the fulfillment of food security” (Wahidin, D., 2018). He then added that, in Indonesia, the right to food is transcribed as food sovereignty. “... At the international level, the right to food leans towards food security, by definition, this is from the definition eh. But, in Indonesia, right to food essentially is more about food sovereignty, and it had been established since the Food Law Number 18 Of 2012 was enforced” (Wahidin, D., 2018).



An importer of industrial raw materials (Unilever) assumed that they might contribute to the realization of the right to adequate food by providing what they perceived as quality food: “... No, I mean --- (I) don't have a lot of knowledge (about it). But actually, maybe, in practice, what we do is to fulfill that. Because at Unilever, we're very serious in developing our food and beverage products, you know. So, we're thinking about the sugar content, salt content, things like that. Because we believe, consumers should have the best. So, I think more or less; the concept is like that eh.. that everyone in Indonesia has the right to get quality food” (I2, 2018).

### **II.2.2. Food Sovereignty, Food Self-sufficiency, and Food Security.**

Interview results from government officials show that interviewees who are working or were working in the head office of IAQA in Jakarta recognized the concept of food sovereignty from the Food Law No 18 of 2012, even though, based on their answers, they seem to have an un-examined acceptance of food sovereignty as the objective of the 2012 Food Law:

I had read the Food Law Number 18 Year 2015---2012---regarding food sovereignty concept, and I think it's strong enough to welcome our food sovereignty in the era of 2020 and so forth. That's my opinion since it's quite detailed, and quite---what should be done is that the Food Law 18 [of 2012] per se, must have the Government Regulation [abbreviated as GR, Regulations that stipulated by the Government to implement the Law at the operational level], the GR for operational, comprehensively, that has not been born yet. So, the Food Law 18 [of 2012] is still using the GR Number 28 [of 2004 regarding Food Safety, Quality and, Nutrition]. This isn't right. So, [the new GR] must be---immediately---stipulated” (PO1, 2018).

Another senior official stated:

Yes, the food sovereignty concept is surely---the Government must provide food that is safe, sufficient, nutritious, for the livelihood of Indonesia's people. The implementation of the policies has still---not, has not achieved the desired results. But, gradually the Government has tried to realize the systems to achieve food sovereignty itself" (PO5, 2018).

Table 7 below summarizes the interviewee's view on food sovereignty, food self-sufficiency, and food security.

Table 7. Summary of Interview Findings B: Food Sovereignty, Food Self-sufficiency, and Food Security

Topics	Legal Definition (Indonesia's Food Law)	Government food safety officials (n=5)	CSOs (n=5)	University-based food safety experts (n=2)	Importers (n=2)
<b>Food Sovereignty</b>	<p>"The right of the state and nation that independently establish food policy that guarantees the right on food for the people and grants the right for the society to establish food system that is appropriate with the local potential resources" (The 2012 Food Law, Article 1, para 2).</p>	<ul style="list-style-type: none"> <li>• Either:               <ol style="list-style-type: none"> <li>1) An un-examined acceptance of food sovereignty as the objective of the 2012 Food Law; or</li> <li>2) Not familiar with the adoption of food sovereignty in the 2012 Food Law.</li> </ol> </li> <li>• The food sovereignty concept in the 2012 Food Law is adequate.</li> <li>• Different opinion regarding the implementation, one said it is acceptable, the other thinks the goal has not been achieved yet.</li> </ul>	<ul style="list-style-type: none"> <li>• Due to a lack of understanding, the government cannot differentiate between food sovereignty and food security.</li> <li>• Food sovereignty concept has been reduced into food security, i.e., neglecting the accessibility dimension.</li> <li>• Food sovereignty is about people's sovereignty, the right to govern themselves.</li> <li>• Indonesia's CSOs claim responsibility for the inclusion of food sovereignty language in the 2012 Food Law.</li> <li>• Most of Indonesian CSO interviewees think that even though the food sovereignty has been adopted to the 2012 Food Law, the government still interprets it as food security or food self-sufficiency (i.e., the focus is on the food production, and not in the producers' right),</li> <li>• The food sovereignty concept might sound utopist, in regards independency on food production, but it is do-able.</li> </ul>	<ul style="list-style-type: none"> <li>• Food sovereignty will be achieved when "the mouth of Indonesia's people" has been liberated (when people has the freedom to decide what they want to eat).</li> <li>• Internationally, there is no consensus on a formal, public, and institutional definition of food sovereignty (as in the case of FAO's definition of food security)</li> <li>• The food sovereignty is an extension of food security/geographically or culturally defined food security.</li> <li>• Food sovereignty means the government can provide guaranteed access (to food), based on national self-sufficiency.</li> <li>• Food sovereignty concept was not established in Indonesia's law until the 2012 Food Law.</li> <li>• The political factor has a considerable influence on the achievement of food sovereignty, and the concept sometimes might sound utopist.</li> </ul>	<ul style="list-style-type: none"> <li>• The food sovereignty or food security should be about guaranteed food availability, regardless it's from import or local.</li> <li>• Not familiar with the adoption of food sovereignty in the 2012 Food Law.</li> <li>• Do not distinguish between food security and food sovereignty.</li> </ul>

Topics	Legal Definition (Indonesia's Food Law)	Government food safety officials (n=5)	CSOs (n=5)	University-based food safety experts (n=2)	Importers (n=2)
<b>Food Self-sufficiency</b>	<p>"The ability of the state and nation in producing various food domestically that can guarantee the fulfillment of sufficient Food demand that reach individual levels using potential natural, human, social, economic resources, and local wisdom with dignity." (The 2012 Food Law, Art. 1, para 3).</p>	N/A	<ul style="list-style-type: none"> <li>Indonesia's government reduces the interpretation of food sovereignty into food self-sufficiency for political expediency.</li> <li>Food self-sufficiency should be determined locally not nationally. The staple food identified as establishing local self-sufficiency should be based on the local specificity and should take into account the rights of indigenous people to determine their culturally-determined staples (i.e., rice vs sago).</li> </ul>	<ul style="list-style-type: none"> <li>There are four entities in Indonesia's food system: food sovereignty, food self-sufficiency, food security, and food safety.</li> <li>Food self-sufficiency is a requirement to achieve national food sovereignty.</li> <li>Until now, only the Government Regulation on Food security (as one of regulations to implement the 2012 Food Law) has been enforced.</li> <li>New Government Regulations regarding food sovereignty, food self-sufficiency, and food safety to implement the 2012 Food Law have not been established.</li> </ul>	N/A
<b>Food Security</b>	<p>"The fulfillment of Food for the state up to the individuals, that is reflected by Food availability that is sufficient, both in quantity and quality, safe, diverse, nutritious, prevalent and affordable as well as not conflicting with religion, belief and culture, to live healthy, active and productive in a sustainable manner." (The 2012 Food Law, Art. 1, p.4).</p>	Food security, particularly food availability has been prioritized by Indonesia's government.	<ul style="list-style-type: none"> <li>Generally, government policies on food security focus on availability and access to affordable food while overlooking the source of food (domestic or imported)</li> <li>Food security talks about not the right of people to eat but the right of exporters to export.</li> <li>Food security is strongly related to free trade.</li> <li>Food security is too often defined by the market instead of actual quality food and quality food access.</li> <li>Based on the financial budgeting, Indonesia's government prioritized food security more than food safety and food sovereignty.</li> <li>Indonesia's government translates food security mostly into guaranteed food availability and increased food production.</li> </ul>	<ul style="list-style-type: none"> <li>The 1996 Food Law is limited to food security concept.</li> <li>Based on the definition, food sovereignty is an extension of food security.</li> </ul>	The food sovereignty or food security should be about guaranteed food availability, regardless it's from import or local.

Moreover, Indonesia CSOs and university-based food safety experts show a dichotomy in the interpretation of food sovereignty and food security. Based on the interview with CSOs, most interviewees argued that food sovereignty should be about the right of people to govern themselves, and the government has been reducing food sovereignty concept into food security, mainly into food production or self-sufficiency and ignoring small farmers as food producers. Flavio Valente, the Secretary General of FoodFirst Information and Action Network (FIAN), asserted that

.... Food sovereignty concept has been reduced---the Food Law reduces understanding, in our opinion, CSOs for example, if---in food sovereignty context, we cannot just talk about production, but what need to be discussed is about the subject, not the object, if the Food Law the one that becomes the object---the subject is food, so how does food increase, how is food available, even though in our conception of food sovereignty, the subject is farmers (Valente, F., 2018).

This concern is also echoed by Indonesia's CSOs. According to Jatmiko (2018), "... [F]ood sovereignty is still considered as---just as terminology but the implementation is merely on food security level. .... Food sovereignty must be based on the subject, i.e., farmers---all this time, they're still seen as an object" (Jatwiko, T.W., 2018).

Other CSOs also argued that the inclusion of food sovereignty in the 2012 Food Law does not change how Indonesia's government develops food policy and that the 2012 Food Law is the same as its predecessor, the 1996 Food Law,

.... It's true that the [2012 Food] Law mandates food sovereignty as the final goal, and the recent government, Jokowi [in] 2014 said that food sovereignty is an essential part

of Nawacita [the 9 Development Agenda] but in practice, I think, there's nothing new, and nothing has changed, which means--- the approach, strategy, programmatic, everything is still very food security biased (Abdullah, S., 2018).

Furthermore, according to Jatwiko from the Indonesia Berseru, to some extent, CSOs appreciate the government's courage to adopt food sovereignty into the Law. However, he also shared the same sentiment regarding the misinterpretation of food sovereignty:

... There are differences on definition and understanding between us who work in food sovereignty and the State. For us, (food sovereignty) in the Law, it has been jumbled. In our opinion, if it's food sovereignty regime, food security should have been done, because our understanding is, with food sovereignty we should have been able to decide what to produce and to consume with all the resources we have" (Jatwiko, 2018).

On the other hand, Wahidin (2018), the food safety expert, explained the four entities in Indonesia's food system: food sovereignty, food self-sufficiency, food security, and food safety. He pointed out that to date, there is no international consensus on a definition of food sovereignty unlike food security. The concept of food security has a largely accepted definition by the FAO. He argued that food sovereignty is an extension of food security that is geographically or culturally defined:

.... Food sovereignty, in my opinion, is more---in my language, it's "food security plus plus" ---what I mean by "plus plus" is, food security which is adjusted to the local

wisdom, with local content or local policies that apply in the country. ... (Wahidin, D., 2018).

All respondents from CSOs and university-based food safety experts identified food access as a principal component of food sovereignty or food security, albeit with different perspectives. Some discussed it with the notion of food self-sufficiency, for example, the food safety expert, Wahidin (2018) stated that "... Because in essence, food sovereignty at the national level is, to guarantee consumer access to food, [and] whenever possible, the food is produced by domestically". One of the importers argued that food security has no frontiers and the government should focus on producing only food that can be grown naturally according to the climate in Indonesia:

I think, as the industry actually err... we couldn't say anymore that everything has to be local because foodstuffs are heavily related to climate, soils, and weather. So, food sovereignty or food security is more---in my opinion, more about how Indonesia strategically [can] always have a sustainable food supply for its people, regardless [whether the food is] from import or local [sources] (I2, 2018).

Unsurprisingly, the food security concept was criticized by all CSOs. They argued that food security focuses on availability and access to affordable food while diminishing the importance of food sources. Some also indicated that food security had become a tool to support the WTO's objective on free trade, as conveyed by Valente (2018):

Food security basically is a fallacy, that is---it is the framework that goes hand in hand with---free trade. Because food security talks about the right of people to have you

know access to food, at all times, at the best cost, the cheapest cost, whatever---either it's imported or exported or locally produced, it doesn't make any difference theoretically under food security thing [concept]. .... Food security talks about not the right of people to eat but the right of exporters to export (Valente, F., 2018).

Food availability has always been a political issue in Indonesia. Indonesia's CSOs explained how their government reduces the interpretation of food sovereignty into food self-sufficiency due to political motives. For example, Jatmiko (2018) stated:

.... The recent government was promoting food sovereignty as the success of government, translated into programs and policies, technical policies, which end up as how to increase rice production, how to increase corn production, how to increase soybean production, and meat, and sugar. So how.. how reductionist is this interpretation of food sovereignty (Jatmiko, T.W., 2018).

Widyanto (2018) expressed the same concern and explained how the government policies of food self-sufficiency, particularly rice self-sufficiency, might impact the realization of the right to food for indigenous people:

Food security is translated by the government as national food supply sufficiency. ... The government suddenly came with a dominant concept---rice self-sufficiency. Which means it might become a threat for the Eastern people and their local food, notably Papua's [people], which culturally not---from social-cultural don't have the preference to eat rice, for example. Therefore, it might cause a critical issue for food diversification (Widyanto W., 2018).



In other words, when food self-sufficiency is defined at the national scale, it easily overlooks local concepts of self-sufficiency which may be culturally or environmentally determined as different from national definitions. Local identification of what constitutes self-sufficiency frames food sovereignty as a condition of negotiation and process across geographic scales.

Table 8. Summary of Interview Findings C: Food Safety and Food Trade

Topics	Government food safety officials (n=5)	CSOs (n=5)	University-based food safety experts (n=2)	Importers (n=2)
<p><b>Food Safety:</b>                      “A condition and effort that is required to prevent food from the possibility of biological, chemical and other pollution that can interfere, harm and endanger the human health as well as not conflicting with religion, belief and culture of the society so that it is safe for consumption.” (Indonesia Food Law of 2012, p.5).</p>	<ul style="list-style-type: none"> <li>Food safety has not become a priority for Indonesia people.</li> <li>Food safety standards must be based on risk assessment.</li> </ul>	<ul style="list-style-type: none"> <li>Due to a limited understanding of food security or food sovereignty concept, food system actors have been reducing food security concept into food safety.</li> <li>Food safety has been used as a protectionist tool and the stringent food safety standard might hamper the right of small producers, local farmers.</li> <li>The private sector has been lobbying government and influencing food safety policy-making for example, by funding biased research to support their interests.</li> <li>Government has not yet prioritized food safety.</li> </ul>	<ul style="list-style-type: none"> <li>Indonesia’s government started to recognize the importance of food safety with the enforcement of the Government Regulation Number 28 of 2004 on Food Safety, Quality, and Nutrition.</li> <li>Food safety is an integral part of food security while food security is the foundation for food sovereignty.</li> </ul>	<ul style="list-style-type: none"> <li>Food industry generally has strict food safety standards.</li> <li>Government’s control over food safety is not even; there is a lack of control over the small-scale industry.</li> <li>The government should harmonize its food safety policy (e.g. the MoA and NFDCA) to prevent overlapping regulations and unnecessary food safety inspection.</li> </ul>
<p><b>Free Trade, WTO, SPS, Codex</b></p>	<ul style="list-style-type: none"> <li>Interviewees working or formerly working in the Head Office are familiar with the WTO, the SPS, and the Codex while field or laboratory officer are not but have a general idea about the Codex from the Regulations of Minister of Agriculture.</li> <li>Indonesia must follow the WTO rules including SPS measures because Indonesia has ratified the agreement.</li> </ul>	<ul style="list-style-type: none"> <li>The WTO’s rules limited government capacity to regulate their own food system and it might hamper the realization of the right to food.</li> <li>Food should not be regulated in the WTO.</li> <li>The WTO promotes free trade which creates injustice between members.</li> <li>The WTO purports to respect human rights in case of development and poverty alleviation but insists on open free trade.</li> <li>The WTO is being ambiguous by respecting human rights in the case of development and poverty alleviation but insisting open free trade.</li> <li>Some of the interviewees recognized Codex and its relationship with food safety but admitted that they have limited understanding of it.</li> </ul>	<ul style="list-style-type: none"> <li>Indonesia must comply with the WTO and SPS measures, not just due to its legal obligation (ratification) but also to gain guaranteed access for export.</li> <li>The Codex is not a harmonized standard but based on the reports from member countries. Therefore, the development of the Codex Standards might be heavily influence by rich and developed countries.</li> <li>Developed countries have more political and economic power and are able to direct the policies in an international organization such as the UN and the WTO.</li> </ul>	<ul style="list-style-type: none"> <li>Have no knowledge of the WTO but heard about SPS from quarantine regulations (presumably respondent misunderstands it as one of the quarantine documents i.e. Phytosanitary Certificate).</li> </ul>

Table 8 (Continued)

Topics	Government food safety officials (n=5)	CSOs (n=5)	University-based food safety experts (n=2)	Importers (n=2)
<b>Free Trade, WTO, SPS, Codex (Continued)</b>	<ul style="list-style-type: none"> <li>The WTO roles provide guidelines that might help Indonesia regulate its food policy to fulfill the right to food.</li> <li>Neither the WTO nor the Codex influence the government approach on designing food safety policies.</li> <li>Indonesia needs to fully adopt the Codex standards.</li> </ul>	<p>Either:</p> <ol style="list-style-type: none"> <li>Claimed that the Codex standards are established based on biased science and politically negotiated standards (heavily influenced by rich countries and private sectors); or</li> <li>The Codex should be followed to promote exports.</li> </ol>	<ul style="list-style-type: none"> <li>Developing countries should be working together to strengthen their political power in the Codex, i.e., ASEAN countries should harmonize their standards and create regional standards.</li> <li>For certain products, the Codex might give insufficient protection for Indonesia</li> </ul>	<p>Importer applies some Codex standard as its internal standards.</p>
<b>Food Safety Disparity &amp; Codex Dual Roles</b>	<p>Either:</p> <ul style="list-style-type: none"> <li>Argued that scientific justification is a must regardless of whether it might create a disparity of food safety standards between the WTO's members.</li> <li>Agreed that the scientific justification might cause disparity but assumed that the WTO should be able to facilitate fair trade, in addition, to protect consumer health.</li> </ul>	<ul style="list-style-type: none"> <li>The WTO rules cause inequality, including inequality on the regulation and the implementation of food safety standards.</li> <li>CSO respondents either:               <ol style="list-style-type: none"> <li>Agreed on presumably contradictory nature of Codex's dual roles: protecting consumer health and promoting fair trade; or</li> <li>Assumed that no contradictions in the Codex's roles because of the emphasis on fair trade, instead of free trade.</li> </ol> </li> <li>The food safety disparity is caused by limited capacity and resources to develop adequate standards.</li> </ul>	<ul style="list-style-type: none"> <li>The Codex's roles are aligned with the objectives of the SPS Agreement, although during the implementation, Codex's second role, promoting fair trade, is more prioritized.</li> <li>Many international standards favor the interests of developed countries.</li> <li>Limited capacity and resources hamper the ability of less developed countries like Indonesia to provide a risk assessment on food safety standard development.</li> <li>Adopting higher food safety standard from developed countries without providing scientific justification is not allowed.</li> </ul>	<p>N/A</p>

### 2.2.3. Food Safety and International Food Trade

Table 8 above summarizes respondent comments on food safety and trade. Regarding food safety and international food trade, both the government officials and university-based food safety experts agreed that Indonesia must follow the WTO rules, including the SPS measures, because of the obligation from ratifying the WTO trade agreement. For example, when asked whether Indonesia must comply with the WTO requirements, a government officer responded, “Yes, as WTO member, Indonesia must follow all the provisions agreed internationally. Inevitably, Indonesia must follow it, ...” (PO5, 2018). Wahidin (2018), the food safety expert, commented that in addition to the legal obligation, following the WTO rules are important to gain guaranteed access for export:

So, by complying with the WTO, we, quote-unquote, have been guaranteed access for export. So, no country can reject food export from Indonesia, since we can argue that our food has complied with the international standards, e.g., related to food safety, with the Codex you know, like that. So, there are two things you know, first, due to a legal obligation, and second, export access ....” (Wahidin, D., 2018).

Most CSO respondents have the strong opinion that food should not be regulated in the WTO. They identified several problematic issues with the WTO and associated free trade rules. First, they created inequality between the WTO members due to the nature of free trade that focused on the economic aspect. As reported by Abdullah (2018), “... because WTO rules are all about the market, and second, it is very monopolistic.” Another respondent pointed out the conflicting ideas of free trade and fair trade: “.... but, in fact the WTO is not fair trade eh.. but free trade eh. ....With free trade, what happens all the time, is

unfair---unfairness. What we called free trade is who is strong he will win” (Jatmiko, T.W., 2018). Second, the CSO respondents argued that the WTO rules limit the sovereignty of a country to develop their own food safety system and hinder the realization of the right to food.

.... The WTO, for instance, includes the obligation of importing, and the obligation of exporting, even if the countries don't want to export and don't want to import, they are obliged under trade regulation to export a minimum quota and to import a minimum quota to guarantee a market for the exporters. It poses, you know, puts the exporters at the place that it has more rights than the people who want to eat or to produce the food themselves (Valente, F., 2018).

A similar perspective is presented by Jatmiko (2018):

I think that the WTO indeed has an ambiguity [internal contradiction]. In some cases, it [the WTO], let's say, respects right --- as human rights --- As I said before if it's about development or poverty alleviation. However, if it's not defended by the state, our country, for instance, it'll be defeated by articles--- that emphasize on the world development--- that you must---must be open. Barriers must be eliminated, despite there are articles that talk about the exemption [for developing and least-developed countries].

Hanim (2018) described an example of how the WTO is affecting the right to food primarily for a local farmer in Indonesia. She argued that since Indonesia became a member of WTO and ratified the trade agreement, most barriers to trade are being

eliminated and the local producers cannot compete with the imported products that are heavily subsidized:

So, the implementation of WTO rules might threaten the realization of the right to food in Indonesia. for example, about import measures---Indonesia has been importing a lot of soybeans from the USA and other countries, like Brazil and Argentina. .... The producers, local producers, were eliminated because the price of imported [soybeans] is almost the same [with the local one]. .... Second, imported soybeans from the USA are---the production is heavily subsidized, so the actual price [cost] is high, but with subsidy, it becomes cheaper. Third, the importers of US soybeans are also subsidized. .... So---it's lucrative, and it's hard for local products, such as local producers in Indonesia to survive” (Hanim, L., 2018)

Furthermore, the interviewees responded variously to the question of whether the SPS provision regarding scientific justification creates a disparity of food safety standards between the WTO’s members. Article 2, Paragraph 2 of the SPS Agreement affirms that members shall provide adequate scientific justification when establishing any sanitary or phytosanitary measure, including food safety standards. Both government officials’ respondents who are working or had formerly worked at the central office in Jakarta agreed that although the SPS requirement might cause inequality, it must be fulfilled since Indonesia has ratified the WTO Agreement. However, one of them highlighted that the WTO should be able to facilitate fair trade, in addition, to protect consumer health: "Yes, indeed there are two---sides, that cause inequality, but it has been determined in the WTO that their priorities are to protect consumer health and facilitate fair trade" (PO5, 2018).

Both CSO respondents and university-based food safety experts concurred that the SPS measures create cross-national disparity in the area of food safety, mainly for less developed countries<sup>7</sup>. They believed that many countries, predominantly developed countries, have been utilizing food safety measures as a protectionism tool by establishing stringent food safety standards. They argued that higher food safety standards might hamper the rights of small producers, especially local farmers in the exporting countries. In addition, the food safety expert Wahidin (2018) pointed to the political and economic power imbalance between developed and less developed countries. These inequalities allow the developed countries to direct the development of policies or standards in international organizations, including the WTO, the Codex, and even the UN. He provided an example using the case of aflatoxin standard for nutmeg:

For instance, the case of aflatoxin contamination of nutmeg. It became an issue now, because there is no international standard yet, right? Right now, it [the standard] is on what level yes, the formulation of international [standard] in the Codex. ... Indonesia as an exporting country of nutmeg in the world is at a disadvantage *if for instance*, the international standard was only based on the EU's opinions. Because if [the international standard] was following the rigorous EU standard---the nutmeg farmers in Ambon, in Maluku, in---in Papua, they'll be out of business, because their products would not be able to enter the EU, could not enter any countries, if the international standard was adopting the stringent EU's standard (Wahidin, D., 2018).

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<sup>7</sup> Even though this thesis focuses on imports, the disparity in food safety standards also effects Indonesian exports and disadvantage, in particular, the economic stability and development of small farmers and their exports (Reference: Wahidin & Purnhagen (2018) and interviewees)

Some CSO respondents and university-based food safety experts admitted that limited capacity and resources prevent a country like Indonesia from developing adequate standards. They also argued that the private sector has been lobbying government or international organization and influencing food safety policy-making, including in the case of Codex. Valente (2018) claimed that the establishment of food safety standards in Codex was influenced by biased science or “bought science”; that it is conducted by biased researchers supported by the food industry:

.... [in] the international code of conduct, you know, the Codex, as we’re talking, there is a tiny influence by biased science, I would say, ”bought science”, in a certain way, there is an incredible amount of influence of money in buying scientists to use science in order to exclude or to include specific producers---that ILSI .... [the] International Life Science Institute, was a corporate---kind of front association for the sugar lobby, that did enormous amount of research in order to convince the government that sugar was safe, and to convince them that meat was not safe, or that animal products were not safe. And they managed to bypass an enormous amount to group science that was done, by just dumping the scientific journals with a lot of information that was false .... Nowadays it’s harder to do it, but .... It still exists and a lot of the criteria by the WTO, the Codex were established by those scientists, and many, many, many standards are based on fake [biased] research.

#### **2.2.4 Food safety regulation for imported fresh agriculture products in Indonesia**

Valente (2018) brought up an interesting point based on his experience working with food system actors in New York. According to Valente, most of the stakeholders failed to distinguish food sovereignty, food security, and food safety, which affected how they developed food policies.



We're discussing about the difference between food security, food sovereignty, and food safety. They're all totally confused about it. Food safety for them --- food security is reduced to food safety, they don't have food security, the word food security for them don't make any sense. They use food security as if it was food safety. So, the whole concept of regulation that they have is limited to food safety (Valente, F., 2018).

Meanwhile, in Indonesia's case, respondents have different opinions on assessing the policies of Indonesia's government on food safety. Hanim (2018) commented on how the 2012 Food Law has been emphasizing food safety, in addition to food security, rather than food sovereignty: "The food law is more about food security and food safety, but the food sovereignty is not there. Actually, the Law is a law regarding food supply and food safety". Some, like Sulaeman and Jatwiko, appreciated the stipulation of the Government Regulation Number 28 Year 2004 on Food Safety, Quality, and Nutrition. Although they, with other respondents, argued that during the implementation, food safety had not yet become the main priority for Indonesia's government. Some also criticized the delay in the enforcement of the new Government Regulation on Food Safety, as the derivative of the 2012 Food Law. As stated in the 2012 Food Law, the new Government Regulation supposed to be enforced at least in 2015-2016. For example, as reported by Abdullah (2018): "... Food safety is not yet a priority, as can be seen from the process of preparing the Government Regulation for food safety which is slower than other Government Regulation (for food security). .... If we ranked it based on the policy and budgeting, food security is the highest, food safety in the middle, and food sovereignty is the lowest" (Abdullah, S., 2018).

Table 9. Summary of Interview Findings D: Food Safety Regulations for Imported Products in Indonesia

Government food safety officials (n=5)	CSOs (n=5)	University-based food safety experts (n=2)	Importers (n=2)
<ul style="list-style-type: none"> <li>• Respondents either:               <ol style="list-style-type: none"> <li>1. think Regime 3 (See Chapter 1) is more complicated and confusing than Regime 1 or 2; or</li> <li>2. argued that the latest regulation is the most suitable mechanism because of the risk-based inspection scheme but agreed that risk assessment and adequate monitoring are needed.</li> </ol> </li> <li>• Some prefer Regime 1 as an ideal food control mechanism due to the simplicity of inspection system.</li> <li>• The Government should develop an adequate monitoring system and strengthen the capacity of food safety laboratories.</li> </ul>	<ul style="list-style-type: none"> <li>• Indonesia's government has been negotiating food safety policy to maintain food supply and accommodate political commitment., for example, in the case of meat imports.</li> <li>• To improve food safety control for imported products, Indonesia should reduce the number of designated entry ports.</li> <li>• The Government should strengthen food safety monitoring, especially in the local market place.</li> <li>• To increase consumer awareness and CSO involvement in food safety; related issues can be synergized with local food campaign.</li> </ul>	<ul style="list-style-type: none"> <li>• Indonesia needs to change the paradigm, from end-product inspection to risk-based inspection.</li> <li>• Indonesia with its limited capacities and resources should determine the risk ranking and conduct a risk assessment, in addition to conducting law reform.</li> <li>• Indonesia may follow Malaysia system, using the deferral system while considering the capacity of Indonesia's farmers to be able to follow the regulation.</li> <li>• Indonesia should consider social and economic impacts before adopting a higher standard.</li> </ul>	<ul style="list-style-type: none"> <li>• Importer of fresh food for direct consumption has no complaint and obediently follows any regulation from the government.</li> <li>• Importer from food industry expressed some frustrations about the MoA's food safety regulations and argued that food safety inspection for the industrial raw material is unnecessary and overlapping with other food safety control for processed food (by NFDCA).</li> </ul>

Table 9 above compiles the interviewee's responses concerning the implementation of the regulations of Minister of Agriculture on food safety control on the import of fresh agricultural products (See Chapter 1). Regarding the implementation of the newest regulation, the Regulation of Minister of Agriculture Number 55 of 2016, some field inspectors think that the regulation is more complicated and confusing than previous regulations. That is because the list of registered laboratories or contaminants keeps changing while the information from the head office is not always updated promptly. In contrast, an interviewee in the other quarantine station reported that the document inspection under the Regulation of Minister of Agriculture Number 55 of 2016 was less demanding: “Yes, certainly we feel it's easier, because we only do verification, or analyzing

required document [and are not conducting sampling and laboratory sampling, except for monitoring]” (PO1, 2018).

Compared to the previous regulations in Regime 1 and 2, a government official argued that the latest 2016 regulation is the most suitable mechanisms for Indonesia because it adopted the risk-based inspection scheme. However, he pointed out the need for a better risk assessment and adequate monitoring to support the 2016 regulation: “The point is, the current regulation is better, [because] it gives access to countries without recognition or registered laboratories. ... The [inspection] schemes on previous regulations are different from the current regulation. [The recent regulation] is better, more [towards] risk management” (PO5, 2018). Many government officials, however, prefer the food safety control mechanism under the Regulation of Minister of Agriculture Number 88 of 2011 as an ideal mechanism due to the simplicity during the inspection. For example, as reported by PO1:

The implementation, right now, it's more---actually, it's easier, it is easier because .... when a shipment enters [the port], what's obvious is it's faster, because there's no laboratories testing per item, per shipment. It's only monitoring, so from that side [time], it's faster (PO1, 2018).

He continued: “.... about the protection level, better--- the previous regulation is better because all goods were being tested first. If we talked about the protection level, eh?” (PO1, 2018). He also added that during the Regime 2 (the Regulation of Minister of Agriculture Number 27 of 2009 and the Regulation of Minister of Agriculture Number 88 of 2011), the regular sampling and laboratory testing at the border provided an incentive for the domestic food safety laboratories in Indonesia to improve their capacity on food safety testing.

The importers responded differently when asked about the government regulation of food safety control on fresh agricultural products. An importer of fresh fruits in Soekarno-Hatta airport reported that they have no difficulty complying with food safety requirements from the Minister of Agriculture. However, this importer imports relatively small amounts (several tons) of fresh fruits such as plums, nectarines, persimmons, strawberries, and cherries and then only caters to demands from hotels. In addition, the imports were from countries in which the food safety system has been recognized by Indonesia, i.e., Australia, New Zealand, and the U.S., which means the food safety requirements are comparatively uncomplicated relative to imports from most countries. The interviewee from Indonesia Unilever expressed some frustration following the food safety regulations. For fresh agricultural products, Indonesia Unilever had mainly imported soybeans and tea leaves. They formerly imported tea from African countries like Kenya. However, since there is no food safety laboratory in Kenya that is registered by Indonesia, Indonesia Unilever decided to change their sources to other countries with more developed food safety systems, as she narrates:

And maybe, actually what makes it complicated is the requirement [in Regime 3] that the [foreign] laboratory has to be certified [registered] by the [Indonesian] Minister of Agriculture. So, that's what I think made it a little bit difficult for --- for us, last time. Because in some areas, like when we want to import from Africa. In Africa, there's no laboratory that could meet the requirements (I2, 2018).

Moreover, Unilever also conveyed its concern that the food safety control for industrial raw food materials are being overly and unnecessarily regulated. They argued that a food industry as large as Unilever generally has high internal food safety standards, and the raw food products are further processed in factories that have been approved by the National

Food and Drug Control Agency (NFDC). Therefore, Unilever argued that in its case, prior food safety inspection at the border by the IAQA for industrial raw food materials was unnecessary and a double burden.

### **Summary of Primary Data Findings**

The interview findings show that there is no consensus between respondents on the interpretation of human right to adequate food, food sovereignty, and food security. Government officials from IAQA, especially the field inspectors, have a limited understanding of the concept of right to food and food sovereignty. Most CSOs seems knowledgeable on the concept of food sovereignty but admits that they have not been focusing on the technical aspects of food trade and food safety, particularly for imported fresh products that may be necessary to act on food sovereignty issues. University-based food safety experts presented the different insights on the terminology of right to food and its correlation to food sovereignty and food security. Interestingly, importers from the processed-food industry assumed that the food industry might be able to support the realization of the right to adequate food by providing quality food for people in Indonesia.

Moreover, interviewees from IAQA, CSO, and university-based food safety experts recognized and acknowledged the disparity of food safety standards between WTO national members. They argued that inequalities in available resources and capacity prevent less developed countries from establishing adequate food safety standards at national levels. In regard to the implementation of the regulations of the Minister of Agriculture on food safety control on imported fresh agricultural products in Indonesia, most government field inspectors prefer the Regime 1 (the Regulation of Minister of Agriculture Number 27 of 2009 and the Regulation of Minister of Agriculture Number 88 of 2011) because the Regime 3 (the Regulation of Minister

of Agriculture Number 88 of 2016) is deemed as unfair and more complicated during the document inspection at the border. Nevertheless, Regime 3 can be considered more efficient because laboratory testing requirements at the port have been reduced for monitoring purposes only. Eventually, most interviewees from IAQA (both field and central office officers) agreed a better and more adequate monitoring mechanism is needed at the border, particularly one that includes risk-based inspection. In order to improve food safety system in Indonesia, university-based food safety experts in Indonesia recommended that Indonesia's government strengthen its food safety risk assessment and conduct a law reform on food safety.

## **CHAPTER 3**

### **DISCUSSION**

This thesis attempts to present a case study of inequalities in international food trade vis-à-vis food safety standards and how to tackle the issue by using human rights-based approach (HRBA) to food safety and the concept of self-determination, non-discrimination, and equality in food sovereignty. At field level, this thesis seeks the most suitable food safety control mechanism for imported fresh agri-foods at the border, for Indonesia, that ensure the realization of the right to adequate food while maintaining the balance between international trade and consumer protection. The finding from secondary data analysis shows the probable case of disparity on the national food safety standards between selected WTO members (developed, developing, and least-develop countries) notably in establishing maximum residue limit (MRL) for pesticide residues. Interviews with 14 respondents from the government, CSOs, academics, and private sector (importers) inform the issue around the realization of the right to adequate (safe) food in Indonesia, especially for imported fresh agri-food.

Findings from interviews provide an insight on the realization of the right to adequate food in Indonesia, including the implementation of the main principles of the food system in the 2012 Indonesia Food Law: food sovereignty, food independence/food self-sufficiency, food security, and food safety. Most CSOs believe that the interpretation of food sovereignty has been reduced by Indonesia's government to food security, due to lack of understanding on the concept of the right to food and food sovereignty, which reflected on the food policy established and implemented by the State. In relation to international food trade, most of the respondents acknowledged that the disparity of food safety standards between the WTO's national members is caused by lack of capacities and resources. These disadvantages hinder the state's ability to

develop scientific justification as the basis to establish food safety standards. The interview findings also discover the lack of attention to food safety as an aspect of the human right to adequate food in Indonesia and at the global level. Most CSOs have limited understanding on food safety and trade issues while government officials failed to comprehend, much less implement, the right to adequate food approach to disentangle food safety issues, especially related to global food trade.

Furthermore, from the technical side, government food safety officials and importers have different opinions on the implementation of technical regulations for food safety at the border, i.e., the Regulations of Minister of Agriculture regarding Food Safety Control on Imported Fresh Agri-products. Most field inspectors prefer the food safety control mechanism under the Regime 1 (Regulation of Minister of Agriculture Number 88 of 2011), which opted for a regular inspection scheme, in addition to monitoring (random sampling). Meanwhile, others argued that food safety inspection at the border in Indonesia should be based solely on monitoring, with the aim of implementing a risk-based inspection approach, and while cutting the need for regular sampling and laboratory testing.

This chapter is divided into three parts: fairness/universality of food safety standards; practicality of food system in Indonesia; and challenges to obtain the universality or fairness and practicality for food safety control mechanisms at the border in Indonesia. The first part provides an overview of the findings from secondary data analysis regarding inequality of food safety standards, i.e., Maximum Residue Limits (MRLs) for pesticide residues; the issues surrounding stringency of food safety standards; the food safety trilemma faced by the EU, developed country with rigorous food safety standard; and inequality within international food safety standard: the Codex standards. The second part discusses the policy coherence between free trade and food



policy in Indonesia with a focus on a human rights analysis including: the realization of right to adequate food in Indonesia, the question on whether safe food should be a right or a consumer's choice, and an overview of the right to adequate food, food sovereignty, and food security. The final part explains the challenges in pursuing universal or fairness and practicality for food safety control mechanisms at the border in Indonesia; state sovereignty over food safety standards versus international trade rules that demand scientific justification that all countries cannot provide; and risk-based inspection for imported food.

### **3.1. Fairness/Universality of Food Safety Standards**

#### **3.1.1. Inequality in the establishment of food safety standards**

The findings from secondary data analysis indicate that a disparity in food safety standards, in this case, MRLs for pesticide residues, between the WTO members, indeed exists. All developed countries reviewed (i.e., the EU, the U.S., Canada, Australia, New Zealand/NZ, and Japan) establish their own national MRLs and add an extra layer of protection: default MRL/positive list or zero tolerance policy. The findings are consistent with the statement from the International Food Policy Research Institute (IFPRI) that developed countries have been evolving food safety regulatory systems which are increasingly comprehensive (covering more food safety attributes, such as adding more food safety hazards) and rigorous (establishing higher standards for those hazards (Diao, Diaz-Bonilla, & Robinson, 2003). As predicted by IFPRI, over time food safety standards continue to become increasingly demanding and influence the exports and food markets of developing countries (Diao et al., 2003). Josling, Roberts & Orden (2004) reported that the strictness of regulations tends to increase among wealthier countries and a study by Li, Xiong, & Beghin (2014) also found that countries with larger national income and bigger populations adopt stricter food safety standards. Rigid food safety standards can be

motivated by growing concerns about food safety from consumers and the public or lobbying efforts from domestic agricultural industries (Li et al., 2014)

Many interviewees from CSOs argued that developed countries have been using food safety as a protectionist tool and the stringency of their food safety standards could hamper the right of small local producers. Some studies echo the argument that stringent food safety standards are usually utilized as a disguised trade barrier and protectionism (Carrère, DeMaria, & Droguè, 2018; Curzi, Luarasi, Raimondi, Olper, & Curzi, 2018; Foletti & Shingal, 2014; Li & Beghin, 2012, 2014). Rigorous food safety standards can serve at least two purposes for exporting countries that have stringent MRLs: protecting the health of their people and increasing the competitiveness of their producers while extending their market access to other countries with lower standards (Foletti & Shingal, 2014; Li et al., 2014). On the other hand, limited access to scientific and technical expertise and information that is needed to meet new and higher provisions put developed countries at a disadvantage (Hanak, Boutrif, Fabre, & Pineiro, 2002). In addition, the fixed costs of following international trade standards (such as the Codex) provide more opportunities for established exporters and lead to a decrease of the developing-country export compared to those in developed countries (Unnevehr & Ronchi, 2014).

Li & Beghin (2012) used MRLs data in plant and animal products to examine the impacts of stringency of MRLs above international standards (such as the Codex standards) on trade flows between trading countries, i.e., the U.S. and Canada. Using score indices of MRL stringency (that they developed in their previous research), they measured countries' strictness in MRLs corresponding to the Codex levels for each product (Li & Beghin, 2012). Their study showed that MRL stringency in an average importing country has the tendency to reduce its

imports, albeit weakly and that the MRL stringency in an average exporting country significantly enhances its exports performance (Li & Beghin, 2012). Through implementing stricter and higher MRLs than Codex, Canada seems to increase their producer's competitiveness, at least due to two main reasons: by complying with a higher standard at home, the Canadian exporters (a) can avoid rejections and refusals from the importing country's partner and (b) develop their reputation in international markets, resulting in a higher premium or recurring purchase. A similar study by Foletti & Shingal (2012, 2014, 2015) reported that higher food safety standards provide an incentive for farmers in the exporting countries to improve their agricultural practices which positively increases the export value.

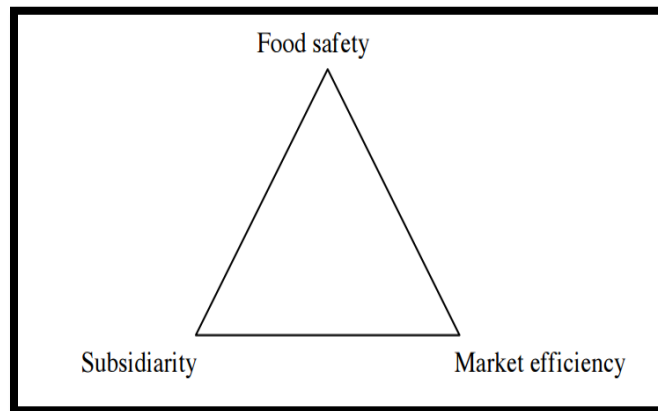
Adopting stricter food safety standards, including MRLs, provides many benefits for the exporting country. However, as discussed before in Chapter 1. Literature Review, alongside its positive influence on the right to health such as providing better protection for the consumers in the importing countries and improving the right to adequate livelihood or work through higher export performances, SPS measures (e.g., food safety standard) create a vastly problematic issue for the exporting countries (Joseph, 2011). Among other things, the uneven stringency of food standards operates as a disguised trade barrier that can threaten the realization of human rights (right to adequate livelihood, right to work, and right to food) for people in the exporting countries with lower food safety standards (Joseph, 2011).

### **3.1.2. Food Safety Trilemma**

Bernauer & Caduff (2003) explain the challenge faced by the European Union in defending their regulatory stringency in food safety and how that stringency creates a food safety trilemma. The trilemma is described as a difficult choice from three options (food safety, subsidiarity, and market efficiency) that the E.U. government must make to manage food safety policies. They

argued that the stringency of food safety standards in the EU has been increasing due to (a) low domestic consumer trust in the current food safety system of the EU and its member countries and (b) the multi-level and decentralized governance structure of food safety system in the EU. Bernauer & Caduff (2003) concluded that trade harmonization could be achieved at any level of stringency depending on how every stakeholder can come to an agreement. They describe the food safety trilemma (Figure 8.) as the result of the escalating stringency of food safety regulations in the E.U.

Figure 8. Food Safety Trilemma (Bernauer & Cauff, 2003)



The food safety trilemma is characterized by trade-offs between subsidiarity (multi-level and decentralized governance), market efficiency, and food safety (Bernauer & Caduff, 2003). The main objective of the principle of subsidiarity is to ensure a degree of independence for a lower authority in relation to a higher body or for a local authority in relation to the central government (Panniza, 2018). The **subsidiarity principle**, as explained in the Treaty on European Union, defines “the circumstances in which it is preferable for action to be taken by the Union, rather than the Member States, in areas in which the European Union does not have exclusive competence” (Panniza, 2018).

Policy-makers can gain optimal results only on two of these three dimensions:

- a. When subsidiarity and food safety are maximized, it might lessen the efficiency in markets, particularly in the form of market protection and market concentration (implemented by EU).
- b. Maximizing subsidiarity and market efficiency (lower market concentration and less protection/restriction) can decrease the level of food safety.
- c. A centralization of food governance, including low subsidiarity, is required to create the desired result: maximizing food safety and reducing market inefficiency (Bernauer & Caduff, 2003).

Bernauer & Caduff (2003) suggested that the EU shift their policy into a higher degree of centralization of food safety governance to reduce market inefficiencies and to increase food safety in the EU. The concept of food safety trilemma can be applied to a more global discourse, where subsidiarity can be seen as the nexus of public policy making (including public and CSO participation) that can affect the balance between food safety policy (public health protection) and market efficiency (ensuring fair trade).

### **3.1.3. Inequality within International Food Safety Standards, the Codex: conflict of interest and inequality on Codex standard-setting**

In an effort to prevent protectionism and minimalize trade barriers, the WTO promotes the harmonization of SPS measures including food safety standards by encouraging State members to adopt food safety measures developed by the international organization, the Codex Alimentarius Commission/CAC (“SPS Agreement,” 1995). This inclusion gives legal and economic authority to Codex to regulate international food safety standards, which is a shift from their previous entirely voluntary nature (Livermore, 2006). With the implementation of the SPS

Agreements, the Codex started to carry legal consequences for WTO members and began to have a more significant role economically in the global trade system (Livermore, 2006; Ni, 2013).

According to Veggeland and Brogen (2005), the “semi-binding legal framework” of the Codex indicates that “there are now some ill-defined legal consequences imposed for the member states that deviate from or do not adhere to Codex standards and principles” (p.689). Ni (2013) explained that adopting Codex into national or regional regulations may provide benefits, for example: (i) for importing countries, it might prevent disputes with their trading partners, and (ii) for exporting countries, if they are implementing the Codex standard, the burden to provide scientific justification of a certain food safety measure will lay on states that adopt stringent standards than Codex. Horton (2001) agreed that the inclusion of Codex as acceptable standards in the SPS agreement provides an incentive for WTO members to adopt the Codex standards because they do not have to justify the standards; they are adopting the international norm. While developed countries can establish their own higher food safety standards, developing countries are left with the choice of adopting Codex or establishing their own standard.

In 2002, FAO/WHO evaluated how well Codex standards were working and summarized the members’ responses on the importance of different types of Codex standard to their countries (Table 10) as reported by Trail et al. (2002<sup>8</sup>). State members at all stages of development (low, middle, and high-income countries) valued all type of Codex standards. Nevertheless, high-income countries put less importance on commodity or product standards, quality descriptors, and processes and procedures which is probably because they already have their own higher standards (Trail et al., 2002). As can be seen from Table 10, most countries view the Codex standard as valuable to facilitate food exports and ensure the safety of food import.

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<sup>8</sup> Newer reference on the evaluation of the Codex standards is not available.

Table 10. In which ways are Codex Standards important to your country? (Trail et al., 2002)

	Income Level	Not Important* (% of respondents)	Medium Importance* (% of respondents)	Very Important* (% of respondents)
Protect Health of Domestic Consumers	All Countries	2.0	22.0	76.0
	Low	2.9	11.1	86.0
	Middle	0	17.3	82.7
	High	5.3	52.7	42.1
Facilitate Domestic Commerce	All Countries	8.6	40.5	51.0
	Low	8.6	20.0	71.5
	Middle	2.2	44.4	53.3
	High	21.1	68.4	10.6
Facilitate Food Exports	All Countries	0	23.0	77.0
	Low	0	8.6	91.4
	Middle	0	29.6	70.5
	High	0	33.3	66.7
Ensure Safety of Food Imports	All Countries	1	16.7	82.3
	Low	0	11.4	88.6
	Middle	0	21.7	78.3
	High	4.8	14.4	80.9

\*On 7-point scale, Not Important = scores of 1 or 2, Medium Importance = 3, 4 or 5 and Very Important = 6 or 7

Based on interviews and literature review in this study, there are several criticisms related to the growing authority of the Codex as the international food safety standard in global trade: (a) the dualism of Codex's main rules; (b) the impartiality of Codex standards; and (c) the inequality on Codex standard-setting process. The Codex has two main objectives as stated in an article in the Statutes: protecting the health of consumers and ensuring fair practices in the food trade (FAO/WHO 2001, 4). These objectives are to be taken into consideration by the Codex when developing and promoting international food standards (Veggeland & Borgen, 2005).

The common critique regarding Codex's dual roles is that "it favors trade liberalization over health, industry concern over consumers' and rich countries over poor ones" (Halabi, 2015, p. 407). According to Halabi (2015), "from its structure to its purpose, Critic" (Post, 2005) and Fortin (2017) also agreed that the intended dualism of Codex objectives forfeits public health protection in place of greater support for trade. An interviewee from a CSO, a human right

expert, Valente (2018) and the food safety expert, Wahidin (2018) raised the same concern regarding the integrity of Codex standards and how the Codex standard making process has been heavily influenced by rich and developed countries.

Valente (2018) argued that transnational corporations have been funding research institutions such as the International Life Science Institute (ILSI) to develop a biased science to accommodate their interest. ILSI has been providing substantial resources for many regulatory bodies including the Joint WHO/FAO Expert Committee on Food Additives and the European Food Safety Authority (Halabi, 2015). Halabi (2015) explained that studies and analyses of Codex decision-making processes often criticized that Codex has been “subordinating its agenda to industry interest.” Those criticisms are mostly proven indirectly by examining the number of industry representatives on Codex meetings or as part of state delegations (Halabi, 2015). However, he argued that the heavy involvement of the food industry in Codex making processes, either as part of national delegation or as observers, is not the main concern, but echoing Valente’s argument, the actual threat to the Codex integrity is “through hidden efforts to influence scientists supplying Codex’s committees and subcommittees with purportedly objective information” (Halabi, 2015). In a parallel observation on the pharmaceutical industry, Bailey (2008), who wrote about conflicts of interest in the pharmaceutical industry, denounced the accusation that the collaboration or association between researchers and this industry can create “conflict of interest that is significantly distorting scientific research, harming consumers and patients, or misleading public policy.” He claimed that “contrary to the claims of conflicts of interest activists, the overwhelming majority of patients and research subjects are not being harmed, public trust in scientists and scientific research remains extremely high, and new drugs not only save lives but money” (Bailey, 2008).



The interview findings (Chapter 2, Table 8) demonstrate that most interviewees from among the Indonesia government officials support the recommendation to fully adopt Codex as national food safety standard because they considered it as a part of the legal obligations of Indonesia from when it ratified the WTO Agreement. Another justification to support Codex as expressed by some CSO respondents is that adopting the Codex can promote exports, which conforms with the result from Table 10 above. Nevertheless, Wahidin (2018) pointed out the unbalanced economic and political power between developed and developing countries creating inequalities in the development of Codex standards. According to Winickoff & Bushey (2010), there are two groups who regularly have limited participation on risk discourse on Codex's standard-setting: “[a] developing countries due to the lack of access to measurement equipment and other technologies of quantification and [b] consumers due to difficulties framing cultural, religious, and other concerns not strictly related to safety and consumers” (p.364).

As reported by FAO/WHO in their “2002 Report of the Codex Alimentarius and other FAO and WHO Food Standards Work”, many developing and poorer countries feel difficulty in raising their involvement and influence in Codex (Trail et al., 2002). Limited financial resources have been highlighted by developing and less developed countries as the overwhelming barrier to higher participation in Codex meetings; ninety percent of low-income countries and eighty-seven percent of middle-income countries had less participation than they would like due to the cost of participation (Trail et al., 2002; Livermore, 2006). Governments from low-income countries usually put less priority on attending Codex meetings. Halabi (2015) mentioned that Codex had been criticized for “undertaking its work with insufficient participation by developing countries or [with] inadequate sensitivity to their resource constraints.” However, he argued that the main concern from developing countries is not the limited participation, but the insistence

from a developed country on imposing higher or stricter standards than Codex adopts or the country's approval of private sector efforts to effectively raise standards higher through supply agreements (Halabi, 2015).

The disparity on political and financial power between developed rich countries and developing and less-developed countries as mentioned by Wahidin (2018), is in line with Halabi's argument:

Codex is managed and funded by wealthy countries that have a significant interest in what it declares to be international standards that both protect consumers and facilitate trade. Whether intentionally or not, the standards promoted by these countries necessarily impose resource barriers to low- and middle-income countries and even participation in Codex processes can cost prohibitive (Halabi, 2015).

In general, several characteristics of the Codex such as distinct inequalities among the participants, limited procedural protections for minority positions and overrepresentation for industry and state interests result in the difficulty on making robust deliberation in the Codex (Trail et al., 2002; Halabi, 2015; Livermore, 2006; Ni et al., 2013).

### **3.2. The practicality of food system in Indonesia: Policy coherence between free trade and food policy in Indonesia.**

#### **3.2.1. The Realization of Right to Adequate Food in Indonesia**

In November 2013, twelve Civil Society Organizations (CSOs) including Indonesia Global Justice (IGJ) and People's Coalition on Food Sovereignty/*Koalisi Rakyat untuk Kedauletan Pangan* (KRKP) filed a lawsuit in the Constitutional Court of Indonesia in an attempt to protest several articles in the 2012 Food Law, which are considered contrary to the Constitution and a deterrent to the fulfillment of the right to food in Indonesia, including the right to safe food (Secretariat General of The Constitution Court, 2013). Several concerns related

to the right to food and food safety were raised, such as the Food Law's Article 3 and Article 36. According to the CSOs, those articles are deterring the realization of the right to food and lead to the inconclusiveness of state's responsibility and accountability to fulfill its obligation to Indonesia people (IGJ, 2014). The twelve CSOs criticized the phrase "to fulfill basic human need" in Article 3 of the 2012 Food Law: "The practical management of food governance (*penyelenggaraan pangan*) is implemented **to fulfill a basic human need** that provides equal, prevalent, and sustainable benefits based on Food Sovereignty, Food Self-Sufficiency, and Food Security" (Indonesia Food Law, 2012), as unconstitutional. They reasoned that the phrase does not elaborate the right to an adequate standard of living as stated in Article 11 the ICESCR: "The States Parties to the present Covenant recognize the right of everyone to an adequate standard of living for himself and his family, **including adequate food**, clothing, and housing, and to the continuous improvement of living conditions"(Secretariat General of The Constitution Court, 2013).

The CSOs contended that despite declaring food as a human right, in the section "In view of", the 2012 Food Law does not mention the Law Number 11 of 2005 on the Ratification of the ICESCR and no definition of the right to food is included in the General Provision (Secretariat General of The Constitution Court, 2013). The CSOs argued that the lack of a reference to Indonesia's ratification of the ICESCR and its foundation for the right to food in the 2012 Food Law could prevent the state from being held accountable for their failure to fulfill their obligation to realize the right to food. However, the Court disagreed and asserted that the phrase "basic human needs" does not need to be interpreted differently because the phrase "basic human needs" includes clothing, food, and shelter (housing). This corresponds, argued the Court, to provisions in Article 11 of the ICESCR, as has been ratified by Law Number 11 of 2005,

which basically states that basic human needs are not only concerning food but also includes clothing and housing (Secretariat General of The Constitution Court, 2013).

The legal requirement for food imports in Indonesia is articulated in the 2012 Food Law, Article 36, as follows:

Paragraph 1. Food import shall only be done if domestic food production is insufficient and/or (the food) cannot be produced domestically.

Paragraph 2. Food import shall only be done if domestic food production and the National Food Reserve is insufficient.

Paragraph 3. The (supply) sufficiency of domestic staple food production and national food reserve is decided by a minister or government institution who is responsible for conducting state tasks in the food sector.

The CSOs argued that Article 36 creates ambiguity in the responsibility or authority of the state (ministry/government institution) as stated in paragraph 3 and requires no participation from the community in deciding to import or not. The IGJ (2014) interpreted the article as if deemed necessary, the state has the right to open import floodgates on the basis of fulfilling the domestic food supply, and they perceived that this would disadvantage small farmers. Interestingly, contrary to the CSO's view, Anderson (2013), in his report for Indonesia Ministry of Trade through the USAID SADI (Support for Economic and Analysis Development in Indonesia) Project, argued that based on the 2012 Food law, restricting food imports and exports has become one of the main policy instruments for the government to achieve the Law's objectives of boosting food production and self-sufficiency over the long term. He asserted that although import restrictions increase the producer price and promote more local production (which

increases the welfare of net sellers), they benefit primarily the larger producers (Anderson, 2013).

The Constitutional Court (2013) responded that the CSOs misunderstood the Article and assessed the Law noncomprehensively (Secretariat General of The Constitution Court, 2013). The court pointed out that there will be a further procedure to establish an independent food institution that includes the regulation of the duties and authority of the food institution as stated in Articles 126-129. Therefore, the CSOs' concern is groundless (Secretariat General of The Constitution Court, 2013). However, as pointed out by several interviewees, the 2012 Food Law mandates that the government institution to handle the food sector was being established through Presidential Decree, within three years from the promulgation of the Law, but until now, that directive has not been fulfilled.

According to Abdullah (2012), the 2012 Food Law articulates many obligations and responsibilities on the part of the state but provides no legal basis or framework to ensure that the State can be held accountable and that people have access to effective remedy whenever their rights are violated. As stated by FAO (2006), "only with enforceable justice, trusted institutions and a legal system oriented towards the human right to food will rights-holders be in a position to hold duty-bearers accountable for guaranteeing food security (p.13)." Moreover, the implementation of the right to food should be directed at food access, the adequacy and sustainability of food availability and access, and rights holders' participation and sovereignty in food-related policy (IGJ, 2014). Abdullah (2012) contended that in general, even though the 2012 Food Law has included the right to food and food sovereignty in its discourse, the State still views food as a "commodity" which should be ensured through a market mechanism. As reported by an interviewee from Indonesia Berseru, Tejo Waluyo (2018), the Indonesia

government has been focusing on the production of food, not the producers (farmers) themselves. Farmers are perceived as the object, and not the subject, of food production. For example, the implementation of 2012 Food Law continues to neglect the dimension of access to food production resources (such as land, water, seed, technology, and financial) (Waluyo, 2018). This approach focuses on maximizing production instead of providing human rights based policy attention to resource access; it thereby ignores equity issues in food production and inevitably disadvantages smaller farmers.

### **3.2.2. Safe food: a right or a choice?**

Hanak et al. (2002) discussed the ethical and practical considerations of “marketing” food safety in developing countries. From an ethical perspective, safe food is a right for everyone, and food safety is considered a public good. Therefore the fulfillment of the right to safe food shall be guaranteed by the state. On the practical side, consumers are seen as individuals who have the responsibility to choose for themselves, i.e., whether they want to buy foods that are more or less safe, and thus, food safety is ensured through a market mechanism (Hanak et al., 2002). This discourse emerged from at least two arguments. First, food safety is a complex issue where (a) “safe” and “unsafe” might not be exclusively distinguishable: for most food contaminants, the acceptable tolerance level might be different depending on the daily intake and type of food preparation, and (b) strengthening food safety incurs additional cost (Hanak et al., 2002).

Following those arguments, some economists reasoned that consumers should have a choice in determining the level of safety they want (and are willing to pay for), which might be lower than the safety level established by the government (Antle, 1995 in Hanak et al., 2002). However, Malayang (nd) in Hanak, et al. (2002) pointed out that in a market that divided food into different safety levels, poor people with lower purchasing power will end up consuming mainly

the unsafe food, which rationally would be the cheapest food. Therefore, in that case, food safety is no longer a matter of individual choice, but merely one of the personal constraints and the state has an obligation to provide a public guarantee of food safety standards (Hanak et al., 2002).

Second, developing countries have a practical constraint to ensure safe food: limited resources and the vulnerable nature of food supply chain hinder the ability of the government to enforce minimum standards effectively (Hanak et al., 2002).

Similar practical constraints were addressed by an interviewee from the Indonesia Global Justice (IGJ), Hanim (2018). She argued that Indonesia's government sometimes negotiates food safety policy to maintain food supply and accommodate political commitment (Hanim, 2018). One example is in the case of livestock (beef) imports, where the government developed a new import policy to ensure the sustainable supply of beef as one of the strategic (important) food commodities in Indonesia. When Indonesia's government tried to reduce the retail price of beef down to Rp 80,000 (US\$ 6) per kilogram, beef consumption became a highly politicized public debate with one of the main issues being that the policy would reduce incentives for local livestock farmers and cattle ranchers to increase their production and productivity (Arifin, Achsani, Martianto, Sari, & Firdaus, 2018).

In 2016, the Government Regulation Number 04 was imposed to support the political-driven policy to achieve meat self-sufficiency in 2017 by altering the animal quarantine regulation on quarantine zone, from country-based to zone-based as an attempt to increase the cattle population in Indonesia (Achmad, Putriana, Nabila, Sari & Bumantara, 2016). Quarantine zones are created to prevent contagious livestock diseases like foot-and-mouth disease (FMD) and an infectious zoonotic disease: *Bovine Spongiform Encephalopathy* (BSE, mad cow disease) from entering into and spreading throughout Indonesia. The country-based policy required the

whole area of an exporting country to be free from FMD and BSE. On the other hand, the zone-based policy relaxes the disease-free requirement to selected zones in the exporting country. Under the zone-based policy, Indonesia will be able to import cows from countries like India and Brazil that have not been free from both diseases, as long as they originate from areas in countries that are free of disease. Presently, Australia has been the main source of cow importation under the country-based policy (Achmad et al., 2016). From a financial perspective, the zone-based policy might provide an additional source of livestock and beef supply for Indonesia which could reduce the beef price in the domestic market (Achmad et al., 2016). However, the risk of FMD and BSE outbreak will be increased. In addition, lower beef prices can disadvantage the local farmers (Achmad et al., 2016).

### **3.2.3. Right to adequate food, food sovereignty and food security in Indonesia**

As shown in the above cases, Indonesia's government and CSOs have different interpretations of the 2012 Food Law, specifically regarding the right to food and food sovereignty. Even though most interviewees from CSOs appreciated the Indonesian government's willingness to include the right to food and food sovereignty in the 2012 Food Law, they argued that the implementation is still far from their expectations. Most respondents from Indonesia's CSOs claimed that the Indonesia government failed to comprehend, much less implement, the right to food and food sovereignty, let alone the right to adequate food. At the same time, CSO respondents admitted their limited understanding of or involvement in food safety issues, especially related global food trade. Meanwhile, the interview findings show that only a few government officials had any familiarity with the right to adequate food and food sovereignty, and no one had profound insight into those issues.



The main criticisms from CSO respondents concern how the government, through their food policies, has been conflating the concept of food sovereignty to the administration of food security during the implementation of the 2012 Food Law. Wahidin (2018) pointed out that the verbatim international definition of the right to food is analogous to the international definition of food security. The CESCR in the General Comment 12, stated that: “The right to adequate food is realized **when every man, woman, and child, alone or in community with others, has the physical and economic access at all times to adequate food or means for its procurement**”, and the definition of food security on the World Food Summit in 1996 is “Food security exists **when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food which meets their dietary needs and food preferences for an active and healthy life**”.

Contrary to the opinion of CSO respondents, another interviewee, a food safety expert, Wahidin (2018) considered the adaption of the right to food in the 2012 Food Law to lean considerably toward food sovereignty. Wahidin (2018) argued that CSOs transfigured the right to food concept into food sovereignty, but with the difficulty and there has not been a consensus on a formal, public, and institutional definition of food sovereignty:

The right of people to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define their own food and agriculture systems. It puts the aspirations and needs of those who produce, distribute, and consume food at the heart of food systems and policies rather than the demands of markets and corporations (Declaration of Nyéléni, 2007).

Meanwhile the 2012 Food Law describes food sovereignty as: “The right of the state and nation to independently establish food policy that guarantees the right to food for the people and to

grant the right to the society to establish a food system that is appropriate to the available local potential resources” (Indonesia’s Food Law, 2012).

According to Gordillo & Jerónimo (2013), the food sovereignty and food security concept are often employed interchangeably in Indonesia, particularly in the new regulation. However, the concept of food sovereignty seems to be used “when referring to the central power of a state (understood as the representative of the people) to be able to define its food policy without external interference” (Gordillo & Jerónimo, 2013, p.6). On the other hand, the food security concept is defined as “a multidimensional concept to support the fight against hunger and the enjoyment of balanced nutrition,” referring to the FAO definition, (Gordillo & Jerónimo, 2013, p.6). The ambiguity of the food sovereignty definition is addressed by Patel (2009): “food sovereignty is, if anything, over defined” since the concept has many versions of meaning. He added that “since food sovereignty is a call for people’s rights to shape and craft food policy, it can hardly be surprising that this right is not used to explore and expand the covering political philosophy.” Gordillo & Jerónimo (2013) suggested that the food sovereignty concept causes semantic and political difficulties for some countries and relate, for example, that a senior Latin American official raised a suspicion that food sovereignty was created to develop policies restricting international trade, investment flows or patent recognition:

If we already have a broad consensus on the concept of food security at an intergovernmental level, what is the goal of those who are proposing a new concept of food sovereignty? In practical terms, what is gained from this? There is a suspicion that behind it there could be policies restricting international trade, investment flows or patent recognition. We should consider that these questions must have clear answers before any debate or adoption of the concept (Gordillo & Jerónimo, 2013, p. 10).

Gordillo & Jerónimo (2013) explained the principal differences between food sovereignty and food security concepts and their implications for national public policies. The similarities of food sovereignty and food security are: (a) both concepts highlight the necessity to boost food production and productivity to ensure the food availability for the future; (b) both concepts emphasize food access as the main issue, and therefore involves redistributive public policies on income and employment; (c) both concepts also consider the important connection between food and nutrition; and (d) both concepts provide for increases to social protection to solve temporary crises or conditional cash transfer programs as part of principal programs to end poverty (Gordillo & Jerónimo, 2013).

Gordillo & Jerónimo (2013) summarized two key differences between food sovereignty and food security. First, they claimed that

the concept of food security --adopted by FAO member states--is somehow neutral since in terms of power relations. It does not prejudge the concentration of economic power in the different links of the food chain and in the international food trade, or the ownership of key means of production such as land, or more contemporarily, access to information (Gordillo & Jerónimo, 2013).

In contrast, Gordillo & Jerónimo (2013) explained that the food sovereignty concept starts precisely by recognizing the power asymmetry in the several markets involved and the different spheres of power involved in food, including in the area of multilateral trade agreements. In addition, under food sovereignty, democratic states are expected to address the inequalities and food is treated as more than just a commodity.

Patel (2009) considered that the food security definition is intentionally avoiding discussing the social control of the food system, which from the state's perspective is good

diplomatically because there is no specification on how to implement food security (p. 665). Patel (2009) argued that food sovereignty was identified as a precondition to genuine food security by La Via Campesina in 1996. The second main difference between both concepts is regarding food production, *how* food is produced (Gordillo & Jerónimo, 2013). According to Gordillo & Jerónimo (2013) Food security has been focusing on three main technological patterns in food production: (a) industrial agriculture with intensive use of fossil fuels (b) biological agriculture, using biomass and biotechnology (Genetic Modified Organism/GMO), and (c) organic agriculture, which includes certification processes. On the other side, food sovereignty is obviously focused mainly on non-industrial, small-scale agriculture, preferably organic, with the agro-ecology concept (Gordillo & Jerónimo, 2013). Gordillo & Jerónimo (2013) proposed integration of food sovereignty in two ways:

- (a) as the capacity of states to define their own food policies autonomously, and
- (b) as a policy option biased in favor of small-scale agriculture — with the right to food and the human rights discourse, with FAO's concept of food security playing the role of a discursive anchor or holdfast (Gordillo & Jerónimo, 2013, p.11).

Furthermore, they suggested linking food security with development and human rights which can only be accomplished by assuming the freedom of governments to define their own food policies (Gordillo & Jerónimo, 2013). FAO (2006) in the Right to Food in Practice: Implementation at the National Level explained that “a human rights-based approach relies on a dual strategy of strengthening the capacity of duty-bearers to carry out their obligations while equally focusing on assisting communities and rights-holders to empower themselves and demand accountability” (FAO, 2006, p.6). Increasing awareness and education on the right to food for both the state as

duty-bearer and the communities is important for the realization of the right to food ((FAO, 2006, p.6).

According to Grace (2017), there are potential trade-offs between food safety and availability (Grace, 2017), or food security. In most developing countries, most nourishing foods such as eggs, green leafy vegetables and fish but also presumably high-risk fresh foods are sold at the traditional markets (Grace, 2017). Measures intended to improve the safety of food may have the unintended consequence of reducing its availability or the access of people to nutritious food, for example, in Kenya, pasteurized milk costs twice than raw milk, limiting the access for many poor families (Grace, 2017). Therefore, as above, addressing food safety as a subset or a condition of the right to food must balance the obligations of duty-bearers to meet public health obligations while not disempowering individuals' and communities' capacities to feed themselves adequately and sustainably.

In order to develop a more inclusive and comprehensive food safety policy, it is important to balance the level of awareness and knowledge between government and CSOs. The FAO (2006) pointed out the need to leverage awareness of, and increase education on, the right to food for both the state as duty-bearer and the communities. In addition, CSOs need to improve their knowledge and involvement in the area of food safety and global trade issues; this is critical to promote rights holders' participation in food-related policy.

### **3.3. Challenges in obtaining the universality or fairness and practicality for food safety control mechanism at the border in Indonesia.**

Inequality of food safety standards can be considered as an inequality of the protection level for public health. Therefore a fair and practical universal minimum standard should be established and implemented. However, the main question is which standard should be used? The harmonized standard from Codex, the standards from the prominent developed countries (such as Japan, the

E.U., the U.S, etc.) or the transnational private standard? Or, should a universal standard exist at all? The first part of this chapter showed how the developed countries gain social, economic, and trade advantages through their ability to set higher and stricter standards without the struggle of providing scientific justification. The question on Codex's integrity as the international food safety standard recognized by WTO was also explored. Codex standards are allegedly impartial (neutral). They fail, however, to minimize the unequal capacity between developed and developing (and less-developed) countries to set standards. Imbalanced national power is complicated by the ability of large-scale corporate interests to influence standard-setting in Codex. If developing and less-developed countries cannot rely on the international standard, Codex, while on the other hand, they do not have the capacity to develop scientific justification to establish their own national standard, should they be allowed to adopt the higher standard from developed countries?

Several points need to be addressed if developing and less developed countries want to adopt the stringent standards implemented by developed countries. First, can developing and least-developed countries adopting food safety standards from developed countries without providing their own risk analysis as scientific justification. Second, is it really necessary to adopt higher standards? As shown in Chapter 2. Findings Part 1, several developing countries with middle or low income such as Malaysia, South Africa, and Thailand have been adopting the deferral path and default Maximum Residue Limit (MRL) system for their national food safety standard. South Africa is aiming higher and developed a deferral policy by adopting three layers of measures: the EU MRLs, the Codex MRLs, and default MRL. South Africa's deferral policy, as can be seen from Figure 6, provides an outnumbered quantity of MRLs which sometimes exceed the number of MRLs established by the EU. However, the rationale as to how those countries are able to adopt other countries' standards without providing their own scientific justification is still unclear and

left unanswered, since the author was not able to find any WTO dispute settlement cases regarding this issue.

Some developing countries such as China, Brazil, Paraguay, and India had protested Japan's policy to adopt default MRL system. China had been actively questioning Japan's plan to implement a positive list system since 2005 (WTO, 2006). On 29 May 2006, even though China challenged the policy, Japan decided to apply the default MRL (WTO, 2006). Japan responded that the default MRL of 0.001 ppm had been set, based on the patterns of the food consumption of the Japanese population and established through a globally accepted approach that is consistent with WTO requirements (WTO, 2006). During the Meeting of the Committee on Sanitary and Phytosanitary Measures (WTO) on 23-24 June 2009, Brazil and China raised their concern that "Japan's uniform standard of 0.01 ppm (default MRL) for several pesticides was arbitrary and without scientific justification" (WTO, 2009). China also requested that Japan harmonize its standard with the relevant international standards and ensure that the rule is applied equally for imported and domestic products (WTO, 2009). Japan argued that they had met the SPS requirement since the default MRL was based on scientific assessment, considered Codex, and other international standards, and applied for both imported and domestic products (WTO, 2009).

In 2010, China repeated their effort to challenge the default MRL policy but which was deflected by Japan with a compelling argument: "The representative of Japan responded that its Positive List system (default MRL) had been established in 2006 after consulting existing MRLs from Codex, Australia, Canada, New Zealand, the European Union and the United States (developed countries that have been adopting the same standard), based on a scientific evaluation." Paraguay, in the 2011 SPS Committee Meeting, also expressed their concern that Japan's default MRL was affecting their export of sesame (WTO, 2011). Another intriguing argument by Japan is

about how they argued that the EU has been using the same standard: “The European Union also imposed the same uniform limit (Default MRL of 0.01 ppm)” (WTO, 2011). Japan likewise reiterated its justification that the limit of 0.01 ppm is the level at which it is unlikely to cause harm to human health, based on the concept of acceptable exposure established by Joint FAO/WHO Expert Committee on Food Additives/JECFA (WTO, 2011).

When asked whether it is permissible for Indonesia to adopt other country’s MRLs standard, including default MRL, Wahidin (2018) pointed out that Article 5 Paragraph 7 in the SPS Agreement might be the answer:

In cases where relevant scientific evidence is insufficient, **a Member may provisionally adopt sanitary or phytosanitary measures** on the basis of available pertinent information, including that from the relevant international organizations as well as from sanitary or phytosanitary measures **applied by other Members**. In such circumstances, Members shall seek to obtain the additional information necessary for a more objective assessment of risk and review the sanitary or phytosanitary measure **accordingly within a reasonable period of time** (The SPS Agreement, Art. 5, para. 7; highlight applied by author).

However, he explained that several constraints prevent Indonesia from using the provision quoted above. First, the adoption of other WTO members’ SPS standards, on the argument of safeguarding public health, will more likely be supported if there is clear evidence of a country’s legal obligation to do so. Wahidin (2018) recommends that Indonesia must adopt the precautionary principle in its Food Law so that Indonesia has the legal basis to apply the precautionary principles (See Literature Review) as scientific justification to adopt default MRL.



Second, the measure can only be implemented temporarily, until additional evidence for better risk assessment (risk analysis) is found.

### **3.3.1. State sovereignty, right to food, and international rules on food safety standards**

In addition to international trade, another fundamental force in the international governance of the global food system, is human rights, particularly the right to adequate food (Allain, 2018). In the past, the right to adequate food was traditionally utilized to tackle issues of hunger and lack of access to quantity of food, however, lately, there is a shifting of the discourse to quality issues of food supply, including food safety (Allain, 2018). According to Downes (2014) in *The Impact of WTO SPS Law on EU Food Regulations*, “the (SPS) Agreement establishes fundamental tension between, on the one hand, the national regulator’s freedom to choose the measures deemed appropriate, and on the other, a notable scientific evidentiary burden” (p. 10). Aaronson & Zimmerman (2008) in *Trade Imbalance: the Struggle to Weight Human Rights Concern in Trade Policy Making* explained that “WTO rules do limit how and when policymakers can use trade policy tools to protect human rights” (Aaronson & Zimmerman, 2008, p. 191). Although, contrary to the common allegation that “the WTO directly undermines human right,” the WTO rules do not discuss or make explicit reference of human rights, and neither does the WTO in any way purport to address human rights issues (Aaaronson & Zimmerman, 2008, p. 191). Moreover, the authors found that WTO membership may have surprising outcomes in raising the recognition of certain human rights since all members must develop regulation in “a transparent, accountable manner,” which in turn, opens the opportunity for public participation to citizens and traders (Aaronson & Zimmerman, 2008, p. 193). Aaronson & Zimmerman (2008) proposed avenues that can be used by WTO members to address human rights issues at home or abroad, as can be seen in Table 10 below.

Table 10. The WTO system and where human rights may enter the discussion  
(Aaronson & Zimmerman 2008, p. 40)

Accession	Nations have not introduced human rights concerns, per se, in accessions but some members have become increasingly concerned about human rights and, in particular, the rule of law in acceding countries. In the China accession, China was asked to enforce all of its laws in all of its territories, including export processing zones.
Nonapplications	When nation accedes, WTO members may choose not to extend trade rights and privileges. The United State uses nonapplication to deny trading rights to Romania when it was communist and undemocratic.
General Exceptions	Article XX includes language allowing nations to restrict trade when necessary to protect life, protect public morals, secure compliance or converse natural resources. Article XXI allow member states to restrict trade for reasons of national security.
Waivers	The Kimberley waiver for conflict diamonds was the first waiver approved for a human rights purpose. Stimulated by UN Security Council Resolution and broad member interest and support. Preference programs were originally put in place under a waiver. Some preference programs have human rights conditionality.
Dispute Settlement	There have been no disputes that centered directly on human rights questions. First dispute on public morals (internet gambling) was in 2005 — food safety disputes to some degrees center on the right to health (but not explicitly defended as human right concerns, e.g., the beef hormones case).
Trade Policy Reviews (TPR)	The WTO Secretariat and member states jointly review trade policies and practices of member states. Larger trading nations are reviewed more frequently. Officials increasingly bring up human right concerns, particularly labor rights, in these discussions.
Amendments to existing agreements or clarifications	WTO members recognize there are times when they need to provide greater guidance to member states. In the amendment, members agree to alter existing agreements to stipulate what member states can or cannot do, as in intellectual property rights (IPR) and the right to health (access to affordable medicines). In addition, members have agreed to further discussions to clarify the relationship between IPR and traditional knowledge. Such actions are rare.
Negotiations	Some members sought to include labor rights in negotiation, but they failed. Members have discussed nontrade issues such as access to affordable food and food security in agricultural negotiations.

Government policies that can disturb trade, including policies that are implemented to promote human rights abroad or domestically, sometimes can be effectively limited by the WTO principles (Aaronson & Zimmerman, 2008). Some might believe, therefore, that the WTO system reduces available state policy options to fulfil their obligation to promote and protect human rights (Aaronson & Zimmerman, 2008). Table 10 provides evidence otherwise, providing eight paths wherein human rights can be promoted in the WTO system, for example, dispute settlement, trade policy reviews, and negotiation. Interestingly, in the case of dispute settlement, Aaronson & Zimmerman (2008) showed that no disputes directly focusing on human rights

questions had been ever brought up. The reason for this is, at least to some extent, that it is unlikely for a WTO member who violates human rights to challenge trade restriction sanctions impeded upon them. For example, it is unlikely for Burma to challenge the US for trade sanctions that are applied by the US to pressure Burma to alter its human rights practice (Aaronson & Zimmerman, 2008). The example on Table 10 shows that the cases of dispute settlement related to food safety, are implicitly leaned toward the right to health, and not directly to the right to adequate food (Aaronson & Zimmerman, 2008). It is reasonable, because discourse on the right to safe food, and as well its link to the international food trade, is still limited. Presumably, no countries have used the right to safe food approach during a WTO dispute settlement. As stated by Allain (2018), until now, “the right to adequate food remains focused – and rightly so – on hunger and providing access to food to all of the world’s population” (p. 363).

Although rare, when necessary, WTO members can also make amendments or clarifications in particular WTO agreements (Aaronson & Zimmerman, 2008). Generally, the amendments and clarifications do not address human rights issues, but lately, WTO members have found it necessary to clarify WTO rules related to human rights, such as the right to health, by including public health exceptions to the Agreement on Trade-Related Aspects of Intellectual Property Rights/*TRIPS* (Aaronson & Zimmerman, 2008). Aaronson & Zimmerman (2008) proposed that trade negotiations offer the most direct paths to help address human rights in trade talks, including in instances of the right to food.

Soetoto (2018) argued that Indonesia’s membership in WTO creates certain difficulties for Indonesia as a sovereign state. On the one hand, Indonesia participates as a member of the WTO, so it is not excluded internationally, “on the other hand [Indonesia has] to defend the

sovereignty of the nation and the welfare of the whole society, including traditional [small] farmer” (Soetoto, 2018). Arguably, along with improving public health protection, food safety standards have also been used by wealthier countries as a protectionist tool that creates uneven barriers to trade. The stringent food safety standard might limit the capacity of small farmers to enter the market with higher food safety standards and hamper the rights (such as the right to work and right to adequate living) of small local producers.

Indonesia must respect, protect and fulfill the right of their people to adequate food, including safe and nutritious food. The obligation to *fulfill (facilitate)* means Indonesia must proactively engage in activities intended to strengthen people’s access to safe food. Adopting a positive list system as a food safety standard in Indonesia may offer a simplified solution to provide better protection for public health, especially from hazardous imported foods. The policymakers have the responsibility to balance the economic benefits (right to work, especially for small local farmers and other producers, and the right to adequate standard of living) and public health protection (right to adequate food, including safe food) to ensure a comprehensive regulation. Aaronson and Zimmerman (2008) advise that, to make more inclusive policies, policymakers should develop a regular channel for human right concerns to enter into the policy-making process and policy-makers should consult with human right advocates and human right officials before they make trade policy decisions. Within the province of its national sovereignty, Indonesia’s government should have the right to choose the levels of protection considered adequate and proper for its people. Furthermore, Indonesia’s government, if necessary, should be able to adopt and implement the same level of food safety standards as developed countries, including default MRLs, without the heavy burden of providing scientific justification.

### **3.3.2. Risk-based inspection for imported food**

Regarding the implementation of food safety control for imported products at the borders, respondents (public officials and importers) generally divided into two opinion groups: (a) those who think that Regime 3 (See Chapter 1) is more complicated and confusing than Regime 1 or 2; or (b) those who argue that the latest regulation is the most suitable mechanism because of the risk-based inspection scheme, but agree that risk assessment and adequate monitoring are needed. Respondents who prefer Regime 1 as an ideal food control mechanism preferred the simplicity of the inspection system and promoted the development of a monitoring system with a strengthened capacity of the food safety laboratories. Along these lines, interviewee Wahidin (2018) argued that Indonesia needs to change the paradigm from end-product inspection to risk-based inspection. He proposed that with its limited capacities and resources, Indonesia should conduct law reform to support adopting the risk analysis approach to determine a ranking on food safety risk.

The FAO (n.d) recommends that developing countries use a specific food safety risk-analysis approach because it can help them determine priority needs to protect public health and to choose where to invest resources to get the best benefits. Risk analysis can be applied to help develop strong program policy based on the local context, both for standard setting and for choosing which surveillance programmes should be prioritized (FAO, n.d.). Wahidin (2018) agreed that Indonesia might follow Malaysia and other developing countries by adapting the deferral system into its national regulation. As shown by the findings from secondary data analysis, a multi-step deferral policy may be a strategy for lower-income countries to improve their food safety control on pesticide residues. However, Wahidin (2018) also pointed out that Indonesia should consider the social and economic impacts of setting a stringent standard by

conducting an adequate risk analysis before adopting that standard. Among other things, the risk analysis should include an analysis of the capacity of Indonesia's farmers to be able to follow the stricter standard or regulation.

## CONCLUSION

“Food sovereignty in Indonesia will never be achieved until the “mouth” of Indonesia’s people is set free,” said Professor Ahmad Sulaeman (2018), a well-known food safety expert from Bogor Agricultural University when asked about the government policy on imported food. His sentiment is understandable, discourse on the right to food and food sovereignty is always entangled with the autonomy of a person to make a sensible personal choice (right to food choice). When food – its access, quality, quantity, and availability – is left to the market, poor people with lower purchasing power will end up consuming the cheapest and less safe domestic food. When food safety is no longer a matter of individual choice, but simply one of the personal constraints, then the government must provide a public guarantee of food safety standards (Hanak et al., 2002). However, what happens when the state that supposedly fulfills its obligation to the right to safe food has practical constraints such as limited resources and insufficient knowledge to establish an adequate food safety standard? The lack of resources and capacities can hamper that state’s capacity to develop a proper scientific justification as mandated by the World Trade Organization (WTO) and thus can create inequality in public health protection between developed and developing countries.

This thesis has described structural conditions in international trade rules that, in the case of Indonesia, prevent the realization of the human right to food and food sovereignty for its people. Several recommendations have been discussed, as follows:

1. Evolve the human right to food safety at the international level by addressing discrimination and lack of equity in international trade rules concerning food safety, for example by addressing food safety as a condition of the right to food, thereby encouraging states to balance their obligations as duty-bearers to meet public health obligations while not

disempowering individuals' and communities' capacities to feed themselves adequately and sustainably;

2. Democratize local and national food governance through increased civil society participation including by traditional food producers;
3. Centralize food safety governance at the national level to maximize food safety and (ideally) also improve trade efficiency (Bernauer & Caduff, 2003).
4. Conduct law reform in Indonesia, for example by adopting the precautionary principle in its Food Law and establish a risk-analysis center, so that Indonesia can provide scientific justification to develop a better food safety standard.

Some interviewees suggested that the United Nation needs to promote a more progressive right to food approach. Aaronson & Zimmerman (2008) recommended some options to assist policymakers in balancing the human right to food and international trade when developing food policy such as:

1. Make a policy determination that trade and human rights should be coordinated, for example by encouraging trade and human rights policymakers to work together to coordinate their efforts to address the human rights issue;
2. Reform national trade policy-making process, so human right advocates and policymakers are involved with trade policy-making;
3. Develop an advisory structure and task advisors, to ask the right question when making public policy decision at the intersection of trade and human rights;
4. Create a coalition of “the willing” at the WTO to bring greater attention to human rights and trade;
5. Encourage business to make human rights a business priority;



6. Clarify the relationship between voluntary corporate social responsibility (CSR) strategies that promote human rights and WTO rules;
7. Encourage and disseminate further research on how trade and trade agreements might affect certain human rights; and
8. Explore a human rights impact assessment mechanism (p. 199-206).

For further research, it is important to investigate and experiment with venues for civil society participation in the making of food policy in Indonesia. Examples in this direction might include the adoption of a food policy council model adapted for the Indonesian national context, or the institutionalized inclusion of civil society and CSO representatives in public hearings that address food, agriculture, and health policy with an emphasis on food safety. Food safety challenges must use “multidisciplinary and multisector partnerships and collaborations on continuous, permanent basis” since the world cannot reach global food security and better nutrition without safe food (Crean & Ayalew, 2016). After all, as stated by Crean & Ayalew (2016), “If it’s not safe, it’s not food.”

## APPENDICES

### Appendix 1. Full Expedited Institutional Review Board (IRB) protocol from the Syracuse University IRB

**SYRACUSE UNIVERSITY**



#### INSTITUTIONAL REVIEW BOARD MEMORANDUM

TO: Anne Bellows  
DATE: April 3, 2018  
SUBJECT: Expedited Protocol Review - Approval of Human Participants  
IRB #: 17-409  
TITLE: *Indonesia's Food Safety Regulations on the Import of Fresh Agri-Foods: Balancing Public Health Protection and Trade Facilitation*

The above referenced protocol was reviewed by the Syracuse University Institutional Review Board for the Protection of Human Subjects (IRB) and has been given **expedited approval**. The protocol has been determined to be of no more than minimal risk and has been evaluated for the following:

1. the rights and welfare of the individual(s) under investigation;
2. appropriate methods to secure informed consent; and
3. risks and potential benefits of the investigation.

The approval period is April 3, 2018 through April 2, 2019. A continuing review of this protocol must be conducted before the end of this approval period. Although you will receive a request for a continuing renewal approximately 60 days before that date, it is your responsibility to submit the information in sufficient time to allow for review before the approval period ends.

Enclosed are the IRB approved date stamped consent and/or assent document/s related to this study that expire on April 2, 2019. The IRB approved date stamped copy must be duplicated and used when enrolling new participants during the approval period (may not be applicable for electronic consent or research projects conducted solely for data analysis). Federal regulations require that each participant indicate their willingness to participate through the informed consent process and be provided with a copy of the consent form. Regulations also require that you keep a copy of this document for a minimum of three years after your study is closed.

Any changes to the protocol during the approval period cannot be initiated prior to IRB review and approval, except when such changes are essential to eliminate apparent immediate harm to the participants. In this instance, changes must be reported to the IRB within five days. Protocol changes must be submitted on an amendment request form available on the IRB web site. Any unanticipated problems involving risks to subjects or others must be reported to the IRB within 10 working days of occurrence.

Thank you for your cooperation in our shared efforts to assure that the rights and welfare of people participating in research are protected.

Katherine McDonald  
IRB Chair

DEPT: FALK Public Health, Food Studies & Nutrition, 545 White Hall

STUDENT: Imma Nurliawati

**Appendix 2.** First IRB amendment request to add more public sector officials as participants

**SYRACUSE UNIVERSITY**



**INSTITUTIONAL REVIEW BOARD  
MEMORANDUM**

**TO:** Anne Bellows  
**DATE:** May 10, 2018  
**SUBJECT:** Amendment Approval - Use of Human Participants  
**IRB#:** 17-409  
**AMENDMENT#:** 1 – A) Consent Form Changes (Revised);  
B) Change in Total Number of Subjects (4 to 10);  
C) Change in Recruitment Materials/Methods (New)  
**TITLE:** *Indonesia's Food Safety Regulations on the Import of Fresh Agri-Foods:  
Balancing Public Health Protection and Trade Facilitation*

The amendment(s) submitted to the above referenced human participants protocol for review by the Institutional Review Board (IRB) is approved.

This protocol must still be renewed based on the expiration date of **April 2, 2019**. If applicable, attached is the protocol's approved, amended informed consent document, date-stamped with the expiration date. This amended document replaces the original approved document and is to be used in your informed consent process. If you are using written consent, Federal regulations require that each participant indicate their willingness to participate by signing the informed consent document and be provided with a copy of the signed consent form. Regulations also require that you keep a copy of this document for a minimum of three years.

**CHANGES TO APPROVED PROTOCOL:** Any additional proposed changes to this protocol during the period for which IRB approval has already been given, cannot be initiated without IRB review and approval, except when such changes are essential to eliminate apparent immediate harm to the participants. Changes in approved research initiated without IRB review and approval to eliminate apparent immediate hazards to the participant must be reported to the IRB within five days. Protocol changes are requested on an amendment application available on the IRB web site; please reference your IRB number and attach any documents that are being amended.

**CONTINUATION BEYOND APPROVAL PERIOD:** To continue this research project beyond **April 2, 2019**, you must submit a renewal application for review and approval. A renewal reminder will be sent to you approximately 60 days prior to the expiration date. *(If the researcher will be traveling out of the country when the protocol is due to be renewed, please renew the protocol before leaving the country.)*

**UNANTICIPATED PROBLEMS INVOLVING RISKS:** You must report any unanticipated problems involving risks to subjects or others within 10 working days of occurrence to the IRB at 315.443.3013 or [orip@syr.edu](mailto:orip@syr.edu).

**SYRACUSE UNIVERSITY**



Thank you for your cooperation in our shared efforts to assure that the rights and welfare of people participating in research are protected.

A handwritten signature in black ink, appearing to read "K McDonald".

Katherine McDonald  
IRB Chair

DEPT: FALK Public Health, Food Studies & Nutrition, 545 White Hall

STUDENT: Irma Nurlawati

### Appendix 3. Second IRB amendment to add an oral consent form

**SYRACUSE UNIVERSITY**



**INSTITUTIONAL REVIEW BOARD  
MEMORANDUM**

**TO:** Anne Bellows  
**DATE:** May 30, 2018  
**SUBJECT:** Amendment Approval - Use of Human Participants  
**IRB#:** 17-409  
**AMENDMENT#:** 2 – Consent Form Changes (New)  
**TITLE:** *Indonesia's Food Safety Regulations on the Import of Fresh Agri-Foods:  
Balancing Public Health Protection and Trade Facilitation*

The amendment(s) submitted to the above referenced human participants protocol for review by the Institutional Review Board (IRB) is approved.

This protocol must still be renewed based on the expiration date of **April 2, 2019**. If applicable, attached is the protocol's approved, amended informed consent document, date-stamped with the expiration date. This amended document replaces the original approved document and is to be used in your informed consent process. If you are using written consent, Federal regulations require that each participant indicate their willingness to participate by signing the informed consent document and be provided with a copy of the signed consent form. Regulations also require that you keep a copy of this document for a minimum of three years.

**CHANGES TO APPROVED PROTOCOL:** Any additional proposed changes to this protocol during the period for which IRB approval has already been given, cannot be initiated without IRB review and approval, except when such changes are essential to eliminate apparent immediate harm to the participants. Changes in approved research initiated without IRB review and approval to eliminate apparent immediate hazards to the participant must be reported to the IRB within five days. Protocol changes are requested on an amendment application available on the IRB web site; please reference your IRB number and attach any documents that are being amended.

**CONTINUATION BEYOND APPROVAL PERIOD:** To continue this research project beyond **April 2, 2019**, you must submit a renewal application for review and approval. A renewal reminder will be sent to you approximately 60 days prior to the expiration date. *(If the researcher will be traveling out of the country when the protocol is due to be renewed, please renew the protocol before leaving the country.)*

**UNANTICIPATED PROBLEMS INVOLVING RISKS:** You must report any unanticipated problems involving risks to subjects or others within 10 working days of occurrence to the IRB at 315.443.3013 or [orip@syr.edu](mailto:orip@syr.edu).

**SYRACUSE UNIVERSITY**



Thank you for your cooperation in our shared efforts to assure that the rights and welfare of people participating in research are protected.

A handwritten signature in black ink, appearing to read "K McDonald".

Katherine McDonald  
IRB Chair

DEPT: FALK Public Health, Food Studies & Nutrition, 545 White Hall

STUDENT: Irma Nuriawati

## Appendix 4. Interview Questions

### SAMPLE: INTERVIEW QUESTIONS

**Interview Question will generally be divided into several main themes as follows:**

A. Related to Food sovereignty and human right to food:

- How do you (or your organization) perceive food sovereignty, food security, and food safety?
- How does Indonesia's government (or government in general) translate food policy, particularly food safety policy?
- What do you think about the correlation between food sovereignty and food safety?
- What is your opinion to the concept of food sovereignty in Indonesian Food Law Number 18/2012? What do you think about the implementation of this Law?
- What is your opinion on human right to food in general? How about human right to safe food?
- In relation to human right to food, what do you think the significance of food sovereignty, food security and food safety policy?
- What do you think about WTO and human right to food?

B. Related to food safety and international trade:

- How does you or your organization translate food safety policy for imported agri-products?
- What do you think of the role of international bodies such as WTO on food safety trade?
- Do you think international agreements such as SPS agreement or Codex standards affect the government (Indonesia's government) approach in designing their food safety policy?
- Every country, as the member of the WTO, has the obligation to comply with the Agreement on the Application of SPS Measures (the "SPS Agreement") and additionally expected to follow the Codex Alimentarius guidelines. How important do you think to abide to the International rules on food trade?
- What do you think about the WTO fairness on their roles in international food trade?
- Codex has two primary purposes: protecting the health of consumers and ensuring fair practices in food trade. What your opinion regarding those roles, particularly the second role?
- Do you think there is a disparity on food safety standards between WTO members?

## Appendix 5. List of Interviewees and Interview Methods

Interviewee	Title	Status	Source	Saturation	Format	Length	Recording
<b>CATEGORY 1: GOVERNMENT FOOD SAFETY OFFICIALS</b>				<b>Yes</b>			
PO 01	Head of Plant Quarantine Division in BBKP Tj. Priok	Conducted in person	Sample Frame		Semi-structured	59 minutes	Audio-recording
PO 02	Food Safety Analyst in Lab at BBKP Tj. Priok	Conducted in person	Sample Frame		Semi-structured	20 minutes	Audio-recording
PO 03	Quarantine Officer	Conducted in person	Sample Frame		Semi-structured	~30 minutes	Concurrent notes
PO 04	Quarantine Officer	Conducted in person	Sample Frame		Semi-structured	~30 minutes	Concurrent notes
PO 05	Policy officer at Central Office of IAQA	Interviewed via Google Hang Out	Sample Frame		Semi-structured	28 minutes	Audio-recording
<b>CATEGORY 2: CSO</b>				<b>Yes</b>			
CSO 01	Secretary General FIAN	Conducted in person	Sample Frame		Semi-structured	1 hour 6 minutes	Audio-recording
CSO 02	KPKR	Skype Interview	Sample Frame		Semi-structured	47 minutes	Audio-recording
CSO 03	Oxfam Indonesia	Skype Interview	Substitute in sample frame		Semi-structured	34 minutes	Audio-recording
CSO 04	Indonesia Berseru	Skype Interview	Referred by Sample Frame		Semi-structured	1 hour 16 minutes	Audio-recording
CSO 05	IGJ	Skype Interview	Substitute in sample frame		Semi-structured	1 hour 23 minutes	Audio-recording
<b>CATEGORY 3: RESEARCHERS</b>				<b>No</b>			
R 01	IPB	Conducted in person	Sample Frame		Semi-structured	1 hour 6 minutes	Concurrent notes
R 01	WUR/ NFDCA	Skype Interview	Sample Frame		Semi-structured	1 hour 48 minutes	Audio-recording
<b>CATEGORY 4: IMPORTERS</b>				<b>No</b>			
I 01	Importer at Soekarno-Hatta airport	Conducted in person	Convenience sampling		Semi-structured	10 minutes	Concurrent notes
I 02	Unilever	Skype Interview	Sample Frame		Semi-structured	36 minutes	Audio-recording



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## VITA

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#### WORK EXPERIENCE

December 2009 - Now **Policy Officer, Biosafety Division**  
Center for Plant Quarantine and Biosafety  
Indonesian Agricultural Quarantine Agency (IAQA)  
Minsitry of Agriculture - Republic of Indonesia

INTEREST: Food Safety, Food Trade, Food Studies, Food Justice,  
Right to adequate food, Plant Protection, Agricultural Quarantine,

#### EDUCATION

2002 – 2007 **Chemistry Department, Faculty of Mathematics and Natural  
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Thesis:

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Liquid Chromatography Method for Analysis of Aflatoxins in  
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August 2016 c 2018 **Food Studies Master Program, Department of Public Health, Food  
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#### AWARD

2016 - 2018 USAID PRESTASI (Program to Extend Scholarship and Training to  
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2016 The Roseane Do Socorro Gonçalves Viana Human Rights Award - David  
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#### INTERNSHIP

2017 Internship at the Agricultural Affairs Division, The Embassy of the  
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