

CHAPTER I

INTRODUCTION

1.1 Background

As human beings, like any other biological creatures, we need basic necessities to ensure our survival and well-being, one of which is food. Being able to eat appropriately each day is not a privilege, but a right that each individual should be able to have. Hence, the notion of food security is crucial, in that everyone can have adequate, proper, and reliable access to nutritious food. But despite the remarkable development and advancement of industries and technology leading to the growth of food production, it is recorded that there are still roughly one in three that have no regular access to basic nutrition in 2020.¹ Additionally, according to data from the United Nations (UN), in 2020, around 720 to 811 million experienced hunger, 2.37 billion people (1/3 of the population of the world) lacked sufficient food accessibility, with 660 million people facing the potential threat to be still faced with hunger in 2030.²

This is a massive contrast from what the UN Sustainable Development Goals (SDGs) 2 of Zero Hunger aim to achieve, which is to put an end to hunger and malnutrition by 2030. The 25th article of The Universal Declaration of Human Rights (UDHR) declares that each individual without exception is entitled to a way of life that meets the living standard that encompasses adequacy — one of which

¹ United Nations, “Goal 2 | Department of Economic and Social Affairs,” United Nations, accessed June 3, 2023, <https://sdgs.un.org/goals/goal2>.

² United Nations, “Food,” United Nations, January 4, 2021, <https://www.un.org/en/global-issues/food>.

includes the right to food — toward health and welfare.³ Moreover, food security is described by the World Food Summit of 1996 as a state where human beings possess “physical and economic access to sufficient, safe, and nutritious food that meets their dietary needs and food preferences for an active and healthy life”.⁴

A total of seven categories are included in human security, spanning from food, personal, economic, health, political, and community, to environmental security, as in accordance with the 1994 Human Development Report. An intricate connection can be found between human security and food security, as a threat of food insecurity is a threat to the freedom and rights of an individual. Correspondingly, the threat of environmental insecurity is manifested through what is known as climate change resulting in rising droughts, environmental degradation, resource depletion such as water and grazing land, as well as the rise in natural disasters, impacting loss of livestock, rising competition of water and pasture, to conflicts emerging over land and water.⁵ Hence, the knowledge and practices of environmental change and security are combined in the concept of environmental security, underlining issues of risks due to environmental change that threatens peace, and maintaining peace and prosperity through the Anthropocene.⁶ The 12th SDG in guaranteeing patterns of sustainable production and consumption, is also addressing this global issue.

³ United Nations General Assembly, “The Universal Declaration of Human Rights (UDHR),” United Nations, 1948, <https://www.un.org/sites/un2.un.org/files/2021/03/udhr.pdf>.

⁴ Food and Agriculture Organization, “An Introduction to the Basic Concepts of Food Security,” Food and Agriculture Organization of the United Nations, 2008, <https://www.fao.org/3/al936e/al936e00.pdf>.

⁵ Ibid.

⁶ Lorraine Elliott, “Human Security/Environmental Security,” *Contemporary Politics* 21, no. 1 (2015): 11–24, <https://doi.org/10.1080/13569775.2014.993905>.

As states and the global community try to achieve food security and minimize the number of hunger and malnutrition, an emerging issue is becoming more and more prominent that needs to be addressed alongside food insecurity, namely the environmental insecurity or environmental problem surrounding food. While it contributes to food security, the food sector also plays a role in soil pollution, air pollution, water pollution, biodiversity loss, soil erosion, climate change, food waste, and overconsumption of elements of nature (e.g. energy and water).⁷ On that account, we can see how as states and the global community try to fulfill food security, the problem of environmental insecurity, if not addressed, can be an even bigger problem and threat.

An unsustainable food system has many implications for human rights, in that it is responsible for many health risks, malnutrition, and diseases. Firstly, the consumption of foods that are poor in nutrients and are highly processed contributes to non-communicable diseases, in which unhealthy diets are causing annual deaths of 10 million. Secondly, the depletion of land due to environmental changes opens up challenges for communities to produce food independently and causes extensive substantial pollution. Thirdly, pesticides, herbicides, synthetic fertilizers, and drugs of industrial agriculture are contaminating toxic substances in the air, water, soil, and the food chain.⁸

⁷ European Food Safety Authority, “Environmental Impacts of Food Systems,” European Food Safety Authority, 2023, <https://www.efsa.europa.eu/en/funding-calls/environmental-impacts-food-systems>.

⁸ David Boyd, “Human Rights Depend on Healthy and Sustainable Food Systems,” Office of the United Nations High Commissioner for Human Rights, May 2022, <https://www.ohchr.org/sites/default/files/2022-05/Food-Summary-Final.pdf>.

Fourthly, the massive amount of freshwater being used for agriculture made up to 70% of global freshwater, such as for raising livestock, and causing water pollution, with 80% of water pollution causing eutrophication being from agriculture runoff.⁹ Additionally, according to the 2021 Food Waste Index of the United Nations Environmental Programme (UNEP), 17% of food produced globally in 2019 — measured at 931 million tons — was classified as part of food waste production (ranging from 13% retail, 26% food services, and 61% households). The Food and Agriculture Organization (FAO) estimates how the food that is produced for human use is wasted or lost in one-third of cases.¹⁰

Now, the key question here is, how can we ensure that food security can still be fulfilled whilst addressing the threat of environmental insecurity and fulfilling environmental security simultaneously? To achieve food security, it was underlined by the 1996 World Food Summit that a total of three dimensions of food security ought to be achieved, namely: physical availability, physical and financial accessibility, and the utilization of food. But now, more and more discussions are also emphasizing the significance of the sustainability of food that can be an addition to these dimensions, in which one of the essential components of a healthy environment is access to healthy and sustainable food.

It is believed that without incorporating food sustainability as a dimension in facing food insecurity, the threat of food insecurity may be even more

⁹ Ibid.

¹⁰ European Commission, “Food Waste,” Food Safety, accessed June 24, 2023, https://food.ec.europa.eu/safety/food-waste_en.

imminent.¹¹ This is because when sustainability is integrated into combating food insecurity, the assessment of sustainability to ensure future food security can be carried through the preservation of the environment, natural resources, and agroecosystems while preserving adequate nutritional balance and health. The cycle and complementary acts of food sustainability as part of food security as a prolonged time dimension, and vice versa, need to be acknowledged.

Food sustainability plays a crucial part in minimizing food insecurity and ensuring food security. Without food sustainability, everyone, not limited to those along the poverty line, including citizens and producers, is in danger of hunger. The FAO defines food sustainability as a food system that can guarantee the security of food and nutrition for everyone without jeopardizing the economic, social, and environmental pillars required to ensure future generations' access to food and nutrition — or what we can call a Sustainable Food System (SFS). In other words, food sustainability should encompass social sustainability (benefits for society as a whole), economic sustainability (profitable all around), and environmental sustainability (affecting the environment positively and neutrally).¹²

Therefore, the pertinent question can be raised: how can we be more efficient, inclusive, environmentally sustainable, resilient, and capable of providing everyone with healthy and nutritious foods globally? To answer this question, the FAO emphasizes taking action by changing the global food system. We need to

¹¹ Elliot M Berry et al., “Food Security and Sustainability: Can One Exist without the Other?,” *Public Health Nutrition* 18, no. 13 (2015): 2293–2302, <https://doi.org/10.1017/s136898001500021x>.

¹² Food and Agriculture Organization, “Sustainable Food Systems,” Food and Agriculture Organization of the United Nations, 2018, <https://www.fao.org/3/ca2079en/CA2079EN.pdf>.

acknowledge that what we are currently facing are complex and systemic problems in which coordinating efforts throughout the local, national, and international levels are required for an effective solution that can be executed successfully. The assessment and change in the way we approach and implement the food sustainability system is one of them.

Consequently, each state has three obligations regarding food that it must fulfill, in which the right to food should be fulfilled, respected, and protected, by the state.¹³ Regionally, as for the European Union (EU), EU countries are taking the lead in the ranks of the Global Food Security Index (GFSI) list.¹⁴ With this, there is an apparent fact that the matter of food security is important and serious for the EU which can be seen by how they are ahead in their system, and it is now advancing even more in the focus on food sustainability. In the EU, there are legislative acts labeled as directives and regulations, in which directives are goals that must be met by all EU member countries, while regulations are binding and must be applied and followed by member states throughout the EU.¹⁵

The EU has explicitly stated and made its commitment clear to attaining the SDG Goal Target 12.3 by accomplishing certain objectives by 2030, including minimizing food waste along the chains of food supply and production, as well as reducing retail and consumer level global per capita food waste by half.

¹³ Office of the United Nations High Commissioner for Human Rights and Food and Agriculture Organization, “The Right to Adequate Food - UN Human Rights Office,” United Nations Human Rights, 2010, <https://www.ohchr.org/sites/default/files/Documents/Publications/FactSheet34en.pdf>.

¹⁴ Economist Impact, “Global Food Security Index (GFSI),” Economist Impact, 2022, <https://impact.economist.com/sustainability/project/food-security-index/> (accessed June 10, 2023).

¹⁵ European Union, “Types of Legislation,” European Union, 2023, https://european-union.europa.eu/institutions-law-budget/law/types-legislation_en.

Unfortunately, there are still issues to be addressed regarding sustainability, considering that an estimated 10% of the food provided to consumers (households, food services, retail) may go to waste; the EU produces close to 59 million tons of food waste each year; and 32.6 million people still lacks the mean to a nutritious meal. Additionally, as of the year 2023, food waste contributed to around 16% of the EU's overall food system's greenhouse gas emissions, causing the EU's environment to suffer significantly.¹⁶

Hence, it is a paramount focus of the EU to address these issues while simultaneously striving to improve environmental security through its food sustainability initiatives, one of which is the Farm to Fork Strategy. In an effort to establish a fair, healthy, and environmentally friendly food system, the Farm to Fork Strategy believes that we should not have to choose between providing enough affordable and nutritional food for everyone and preserving the planet's future. The Farm to Fork Strategy intends to generate new possibilities for consumers, farmers, and the food industry by investing billions of euros in research and technologies, changing how we produce, distribute, and consume food.¹⁷ Therefore, this research wishes to explore and analyze the Farm to Fork Strategy of the EU in enhancing environmental security.

¹⁶ European Commission, "Food Waste," Food Safety, accessed June 24, 2023, https://food.ec.europa.eu/safety/food-waste_en.

¹⁷ European Commission, "Farm to Fork Strategy," Food Safety, accessed June 24, 2023, https://food.ec.europa.eu/horizontal-topics/farm-fork-strategy_en.

1.2 Research Question

Acknowledging the EU's committed efforts to improving and achieving food sustainability through its policies, this research focuses on exploring and analyzing the EU Farm to Fork Strategy and its connection to environmental security. Through exploring, compiling, and analyzing relevant data and policies, this research identifies the Farm to Fork Strategy's role in its fight against environmental insecurity alongside the improvement of environmental security. This research focuses its exploration and analysis of policies on a specific timeframe since the launching of the strategy, starting from the year 2020 until the present year of 2023. Hence, this research seeks to provide an answer to the following research question:

How does the EU Farm to Fork Strategy play a role in enhancing environmental security?

1.3 Research Objective

Following the earlier stated research question, this research has the following research objective:

To analyze and identify the EU Farm to Fork Strategy's role in enhancing environmental security.

Through the exploration, analysis, and identification of the EU Farm to Fork Strategy and timeline above, this research produces an examination of its role in enhancing environmental security.

1.4 Research Significance

Despite the general recognition of the global prevailing issue of hunger and food insecurity, this knowledge, most of the time, is only limited to the high numbers and the endless questioning as to why this ironic phenomenon is still happening, regardless of the multitude of advancements the world is going through. Plenty of aspects, elements, and facets of food insecurity are infrequently discussed and understood, such as food sustainability as a concept and the detrimental effects of food on environmental security. Hence, this research can provide an extensive understanding of the food sustainability policies by the EU, specifically through the Farm to Fork Strategy which could enhance environmental security.

Furthermore, this research addresses the current global issue of environmental insecurity produced by food and encourages government, policymakers, Non-Governmental Organizations (NGOs), International Non-Governmental Organizations (INGOs), experts, researchers, students, and individuals to learn and discuss further regarding food sustainability, environmental insecurity produced by food, and the role that the EU Farm to Fork Strategy plays for environmental security. In the end, this research aims to give knowledge and insights to its readers and to be a proper reference for future studies with corresponding topics.

1.5 Structure of Writing

This research is divided into five main chapters, all intrinsically connected and dependent on one another. In the first chapter, in order to provide a

comprehensive understanding for the readers regarding what this research is about, a comprehensive background of the topic for context is provided, followed by this research's research question, research objective, and research significance.

In the second chapter, readers are provided three literature reviews on themes surrounding the topic that will help answer the research questions as well as help them understand the research further. Additionally, an International Relations theory and three concepts are provided to give context and understanding towards answering the research question.

In the third chapter, in order to outline the 'how' in this research's process, a comprehensive explanation of the research's approach, method, data collection technique, and data analysis technique is provided.

In the fourth chapter, as the heart of the research, a comprehensive and structured breakdown, explanation, and analysis of the findings is provided, connecting the relevant data with the theories and concepts in the second chapter.

Lastly, in the fifth chapter, an in-depth conclusion that highlights all the key findings is provided, alongside a comprehensive recommendation towards the challenges as well as for relevant future studies.