

From: Chaska Kentish
To: *Redacted*
Date: March 22, 2023
Re: Final Policy Memo, Addressing Food Insecurity on a Global Scale

Executive Summary

- Food insecurity through the lack of proper access or quality food (i.e. properly satisfying an individual's nutritional needs¹) has resulted in approximately one-eighth of the world population experiencing insufficient food consumption.²
- Globally, fighting food insecurity primarily relies on soft law: the WHO Global Strategy for Food Safety and Sustainable Development Goal 2, among many others that create guidelines for keeping food safe and accessible. A select few nations such as the United States have developed hard-law policies such as the Global Food Security Act of 2016 to support these soft-law objectives.
- Food insecurity continues to rise in prevalence due to environmental (climate change has resulted in the loss of many agricultural products, pollution reducing safe water availability, increase in disease) and political (conflict, economic negotiations for affordability of some foods, general trade agreements, cultural differences in acceptable food items) factors.
- While many of the soft-law regulations and guidelines have led to the development of many programs such as the World Food Programme (WFP) which have successfully promoted food security worldwide, many of these implementations have high funding requirements that are often met through donations that are not expected to meet the rise in demand and costs of these programs. However, over time as food and fuel prices increase, the WFP has predicted it alone will not have proper funding to meet the increase of demand with increased costs.³ Thus, a combination of formal policy addressing environmental needs (i.e. climate change and sustainability), food waste/loss, and inequality have been explored to promote food security.

A. Description of the Issue:

Food insecurity has been a predominant issue in developing countries worldwide, with approximately 720 to 811 million people worldwide going hungry as of 2020.⁴ Food insecurity is an umbrella term that refers to the general inadequacy of food being made available to the general public. According to the World Health Organization, food insecurity indicates a lack of complete access (physical, social, and/or economic) to a sufficient amount of safe (i.e. not contaminated or otherwise harmful to consume) and nutritious food.⁵ While food insecurity is prevalent worldwide, it predominantly affects people in Western and Eastern Africa, South Asia, and Southeast Asia.⁶ Across these regions, the conditions leading to the rise in food insecurity include: (1) climate change through exponential

¹U.N.H.R. (n.d.). *The Right to Adequate Food*.

<https://www.ohchr.org/sites/default/files/Documents/Publications/FactSheet34en.pdf>

² U.N. (n.d.). *Global Issues: Food*. <https://www.un.org/en/global-issues/food>

³ World Food Programme. (n.d.).

<https://www.wfp.org/global-hunger-crisis#:~:text=WFP%20is%20facing%20multiple%20challenges,risk%20of%20hunger%20and%20malnutrition>

⁴ <https://www.un.org/en/global-issues/food>

⁵ Room, A. (2022, October 18). *Food Security and Nutrition: Essential Ingredients to Build Back Better*.

<https://www.who.int/news-room/events/detail/2022/10/18/default-calendar/food-security-nutrition-essential-ingredients-to-build-back-better>

⁶ World Food Programme. (2023). *HungerMap LIVE* <https://hungermap.wfp.org/>

population growth, water scarcity⁷, and growing temperatures⁸ affecting general agricultural productivity; (2) major increases in food pricing in contrast to stagnant income levels (i.e. high poverty rates)^{9 10}; (3) unsustainable methods of food production; and (4) generally high levels of food waste (through personal behaviors and improper maintenance) worldwide. Food insecurity is directly associated with increased rates of birth defects, cognitive problems, and general behavioral problems such as depression, aggression, and suicide ideation.¹¹

B. Current Policy/Law/Regulation

The current legal mechanisms implemented to address all aspects of food insecurity are international soft laws through regulation and recommendations and national-level hard law including: (a) the Global Food Security Act in the United States [addressing #2], (b) the World Food Programme “Zero Hunger” Solutions [addressing #1-3], (c) the WHO Global Strategy for Food Safety [addressing #2-3]; and (d) Sustainable Development Goal number two [addressing #2]. It should be noted that a majority of food security policy and guidelines do not properly address the issue of food waste in any regard, even though it is associated with worsened food insecurity alongside its negative environmental impact.¹² Many countries and non-governmental organizations follow general guidelines through the WHO, WFP, and SDG #2, which results in an emphasis on economic development through reforms targeting poverty reduction and improved sustainability in levels of food production in developing countries. The most common output of these guidelines is the development and support of somewhat-independent humanitarian organizations to provide food and economic resources to underserved regions to better access adequate, nutritious foods. While these are key contributors to food insecurity, there is not an incentive or focus on reformation of already existing systems that contribute to issues of food access and availability. There are some efforts in individual countries such as South Korea through its Waste Controls Act to minimize food waste, however on a global scale there is a focus on the issue in the context of developing and/or affected regions known as “hunger hotspots.”¹³

C. Proposed Policy Making/Policy Solution

1. Integration of Food-Waste Strategies: A series of economic policies and mechanisms should be implemented in a two-part system to address food waste in a variety of contexts that is currently not being addressed on an international level. To address issues of higher-income nations and/or households purchasing and wasting high quantities of food, policymakers should implement similar legislation to the Waste Controls Act in South Korea. This law requires South Korean citizens to dispose of food waste in a specific bin that charges them per the amount of weight of food waste,

⁷ Asian Development Bank. (n.d.). *Food Security in Asia*.

<https://www.oecd.org/derec/adb/Food-security-asia.pdf>

⁸ Food and Agricultural Organization. (n.d.). *The Underlying Causes of Food Insecurity*.

<https://www.fao.org/3/x8406e/X8406e01.htm#:~:text=The%20underlying%20causes%20of%20food,difficult%20environment%20of%20fragile%20ecosystems>

⁹ Akshaya Patra/ (n.d.). *The State of Hunger in India*.

<https://www.akshayapatrausa.org/the-state-of-hunger-in-india/#:~:text=One%20of%20the%20primary%20causes,the%20nutritious%20food%20they%20need>

¹⁰ Asian Development Bank (n.d.).

¹¹ Gunderson, C. and Ziliak, J. (2015, November). *Food Insecurity and Health Outcomes*.

<https://www.healthaffairs.org/doi/10.1377/hlthaff.2015.0645>

¹² U.N.E.P. (2020, September 19). *Food Loss and Waste...*

<https://www.unep.org/news-and-stories/press-release/food-loss-and-waste-must-be-reduced-greater-food-security-and>

¹³ WorldVision. (n.d.). *5 Worst Spots for Hunger*.

<https://www.worldvision.org/hunger-news-stories/5-worst-spots-hunger>

and has resulted in 95% of the nation's food waste being reduced and recycled.¹⁴ A key issue that remains unresolved however is general food overproduction. In many developed countries such as the United States, there is a high amount of food waste resulting from producers (both agricultural and retail/restaurant-based) due to food liability laws that can hold the producer accountable for the instance a consumer faces harm from the food product.¹⁵ Hence, under the condition that food under overproduction is in a healthy state to consume, a program should be implemented to push out this food to consumers with the removal of liability for the original producer. Depending on the item, this could be implemented with local school food programs which would also assist in improving food availability and accessibility for students under national food-assistance programs. As for food waste in developing countries and/or poorer regions, there needs to be government-based assistance programs implemented to help smaller agricultural producers to get access to proper storage such as silos and airtight containers as well as methods to counteract issues of extreme temperature. The European Union's Common Agricultural Practice policy provides incentives and assistance in medium to small agricultural producers to achieve better means of production to have less of a negative impact on the environment,¹⁶ and amending this type of policy with means of better food storage would also assist in lesser environmental impact as well.

2. Amend Soft Law to Address The Whole Issue: With a lack of hard law implementation, there should be an amendment to present food security regulations to better address all aspects of the problem. Most regulations focus on malnutrition and basic economic indicators, but these lie within the context of poor populations and not holding the whole world responsible in the context of the issue. These amendments would include addressing food waste, connecting climate change to food loss, and encouraging the implementation of scientific methods such as genetic modification of food-crops to improve sustainability, nutrition, and general food availability.

D. POSSIBLE RESEARCH TO ADDRESS THE PROBLEM

Food security has a high level of interdisciplinary factors, that there is a lot of forms of research that is or could be done to better address the problem. There has been a rise in research and experimental efforts with genetically-modified organisms (GMOs), which has been proven to improve food security through improved sustainability and survival rates than its non-modified counterparts in the face of traditional threats as well as those being catalyzed by climate change.¹⁷ Furthermore, this could assist in improving nutritional output of otherwise nutritionally low foods. However, more research and development in removing stigmas surrounding this technology needs to be conducted to improve its reach and implementation. Another potential area of research is examining the economic conditions leading to significant increases in food pricing to either (a) better address the problematic variables or (b) implement policy to set price ceilings on certain (or all) foods. The Philippines implemented price ceilings due to major inflation of pricing across all meats due to a shortage of pork, even though there was an oversupply of other meat types.¹⁸ The impact and implementation of further scientific research and development alongside economic policies are yet to be determined as there has not been any significant proposal for global implementation across either field.

¹⁴ Marshall, S. (2022, July 19). *South Korea's Food Waste System...*

<https://keia.org/the-peninsula/south-koreas-food-waste-system-is-a-model-for-developed-nations/#:~:text=In%202013%2C%20it%20was%20rolled,that%20opens%20by%20RFID%20chip.>

¹⁵ USDA. (n.d.) *Product Liability as it Applies to Foodborne Illness.*

https://www.ers.usda.gov/webdocs/publications/41289/19024_aer799ap.pdf?v=0

¹⁶ EU. (2023, January 1). *New Common Agricultural Policy.*

https://ec.europa.eu/commission/presscorner/detail/en/ip_22_7639

¹⁷ Sims, T. (2020, December 11). *GMO Crops: Safety, Regulation and Sustainability Insights.*

<https://foodinsight.org/gmo-crops-safety-regulation-and-sustainability-insights/>

¹⁸ Reuters. (2021, February 1). *Philippines sets price ceiling for pork, chicken...*

<https://www.reuters.com/article/philippines-economy-pork-prices/philippines-sets-price-ceiling-for-pork-chicken-as-food-inflation-soars-idUSL4N2K72TN>