



Understanding Food Security & Scarcity

As Exemplified by the Middle East

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Introduction

As a global issue, food security has risen in prevalence in recent years. Food security concerns are particularly acute in scattered areas across the Middle East. What caused this problem? Why are some regions, such as the Middle East, more prone to food insecurity? What institutions are responsible for the dwindling food stocks that leave many unsure as to where their next meal will come from? This paper will examine the food security issue, allowing readers to better understand its relevance to the international community. It will also analyze the laws and policies surrounding the issue. Lastly, it will propose a feasible and sustainable solution to this mounting global problem.

Importance of Food Security

Food Security Introduction

According to the World Food Programme, to be food secure is to, “have availability and adequate access at all times to sufficient, safe, nutritious food to maintain a healthy and active life (wfp.org).” Thus to be deemed food insecure is to lack all of the basic qualities previously listed. Food security is a global issue that also affects countries that have been deemed “food secure,” such as the United States and most of Europe. Food insecurity is often indicative of much more serious problems that could greatly impact the international community. In this section, I will discuss the underlying causes and effects of the Middle East’s food crisis.

Causes and Effects of Food Insecurity

The first cause of food insecurity is regional conflict. “Food prices are the precipitating condition for social unrest (Lagi, Bertrand & Bar-Yam, 2011).” Regions that experience heavy conflict are more likely to have higher food prices, thus depleting the number of people able to buy and consume food regularly. Social unrest is “associated with dictatorial regimes and [is] often considered to be motivated by the failings of the political systems in the human rights arena (Lagi, Bertrand & Bar-Yam, 2011).” From this we can deduce that states with a dictatorial regime, or a heavily oppressed population, are more likely to experience food insecurity. An example of this is Syria, which is currently ruled by President Bashar al-Assad. A study by the World Health Organization revealed that babies born in certain provinces in Syria had lower overall recorded birth weights due to premature birth, which is mainly caused by poor maternal nutrition (Wannous & Arous, 1970).

Malnutrition can also lead to disease. When the immune system is lowered, illness is better able to infect the host. Thus, countries struggling with food insecurity have higher rates of disease (Hove-Musekwa et al., 2011). Yemen is currently battling what has been referred to as, “the world’s worst cholera outbreak (npr.org).” Yemen also faces a food shortage, as war between the forces of President Abdrabbuh Mansour Hadi and those allied with the Houthi rebel movement has disrupted the food distribution network and limited food availability. As a result, the majority of the country has resorted to consuming unsanitary food. Thus contributing to the breakout of a major cholera epidemic. As of early July 2017, over 300,000 cases have been reported (npr.org). Conflict has also deteriorated the state’s health infrastructure, leaving many infected without proper treatment. Spread through contaminated water, cholera is highly infectious. Thus, the Yemen outbreak poses a threat to the outside world has now become a global issue.

Environmentally, food insecurity is promoted through climate change. As temperatures increase, harvests suffer – thus generating fewer food stuffs (Natalini, Bravo & Jones, 2017). “Climate risks expose existing weaknesses in food systems, and add further complexity and uncertainty to decision-making (weadapt.org).” The Middle East is the only region outside of Sub-Saharan Africa where malnourishment of local populations continues to increase despite modern agricultural innovations (weadapt.org). According to an article from the American Association for the Advancement of Science, aptly titled: *Food Security: The Challenge of Feeding 9 Billion People*, there are three main issues that contribute to the environmental food security factor. The first issue is the growing global population, and the consequential wealth increase. One effect of global prosperity is an increase in the demand for processed foods, such as meats and dairy. These foods exhaust more land, water, and manpower than unprocessed consumables. The second issue is land competition and excessive food production. Despite rising global hunger needs, retailers overproduce for wealthy populations. Although producers are generating enough food to sufficiently feed the hungry, the majority of the food stuffs produced are sold to wealthier countries where the product is either consumed or thrown away – the latter option being the most likely. This overproduction has put a strain on land resources, and has led to deforestation and the depletion of natural resources. These two factors lead to the third issue, climate change. The effects of climate change are becoming apparent to food producers. The challenge now is adapting to this changed environment in a way that does not hinder production – leaving retailers to wonder how “mitigation and adaptation measures may affect the food system (Godfray et al., 2010).” All of these factors put environmentalists at the center of the food security crisis, not only in the Middle East, but around the world – making this a global issue that warrants discussion between all states.

Actors Involved

The actors involved in food security are political by nature, as policy change appears to be the main avenue for relief (or misery). All political figures are involved in this discussion, whether aware or not, as the topic of world hunger is directly linked to food security issues (Riches, 1997). NGOs of all shapes and sizes, including environmentalists and humanitarian organizations, are prominent actors in this discussion. While political figures have the power to enact proposals into law, the environmental and humanitarian firms are the driving forces behind these decisions – as the majority of the research fueling these proposals are completed through these organizations.

Relevant Laws and Policies

Food security policy is a slow business with moderate affectivity. Laws tend to approach the pressing issues, and ignore those building in the background. That said, progress is a positive factor, and many of these small, incremental policy changes have made a difference. In Iran, the Council of Ministers approved guidelines in 2016 to reduce air pollution in eight metropolises. Rather than having a centralized agency oversee the policy, the Council agreed to assign tasks and responsibilities for implementing the initiative to various organizations (fao.org). In time, this decision should reduce the amount of air pollution, lessen the burden on the Earth's atmosphere, and thus slow the steady march of climate change. While this policy does not blatantly state its connection to food security efforts, small legal changes such as this are key to opening discussions on sustainability.

Another example can be seen in Egypt. In 2016, Cairo unveiled a food policy act to directly address the issue. As the price of food began to rise due in part to conflict in the area, the Ministry of Supply and Internal Trade increased the value of individual rations cards by 20%,

essentially, “increasing the allotted (food) money... for each individual (fao.org).” Another supplemental policy was added during the same time frame “to mitigate the impact of the rising inflation due to the devaluation of the Egyptian Pound (fao.org).” This policy follows the same rationale as previously mentioned, that many governmental policies answer frontline issues.

While a noble effort, increasing ration cards is a temporary fix. The food security crisis can only be stemmed when the root cause of the insecurity is adequately dealt with. The cause in this case is social unrest and conflict, as a rather turbulent transition of power took place within Egypt just two years prior. Both factors ultimately lead to inflation and rising food prices, which have put a strain on the average consumer.

Sustainable Solutions

My feasible solution proposal is to reduce the amount of processed foods consumed globally. By reducing the demand for these products, more sustainable foods can be grown in their place. Red meat is an unsustainable consumable, and a study by the FASEB Journal suggests that reducing red meat consumption in the Middle East and North Africa and replacing it with nutritionally rounded and sustainable food options such as vegetables will, “reduce their virtual water footprint by more than 70 billion m³/year (Hwalla, Bahn & Labban, 2016).” Possible effective policy changes could include changing nationally recognized dietary recommendations to reflect a more accurate and nutritionally sound model. Possible modifications to this model could include promoting a plant-heavy diet, which is more sustainable and healthier for the average consumer (Pimentel & Pimentel, 2003). By implementing these suggestions, food security in the Middle East, and internationally, stands a chance to improve in a system that is witnessing rising malnutrition rates despite modernization.

Conclusion

Food security is of global significance, and permeates most human rights discussions – either blatantly or behind thinly-veiled predicaments with higher feasibility. Conflict and environmental degradation have caused regional and global food prices to increase within the past decade – leaving many families unable to meet dietary requirements. It is only once we address the causes of food insecurity, as opposed to food insecurity itself, that the issue will truly begin to find attainable solutions.

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