Local and Global Implications of Food Security:

An Issue of Sustainability

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Abstract

Various negative effects have been brought by the conventional notion of development with its excessive and rapid trends of consumption supported by an uncontrolled capitalistic system. Problems with food security and food access are demonstrated through societal, economic and environmental factors. Thus, important aspects need to be highlighted and some of its consequences. Food sovereignty is proposed as a method to adapt or resist to the changes imposed by hegemonic neoliberal agendas that have not fully managed to contribute to the Millennium Development Goals. Ideas that entail collaboration, diversity and self-determination for sustainable livelihoods are further recommended as local actions that can positively make global contributions.

Keywords: development; food security, sovereignty; sustainable livelihoods.

Sustainability Issues: Food Security & Food Access

Global food security is understood as “when all people, at all times, have physical and economic access to sufficient, safe, and nutritious food to meet their dietary needs and food preferences for an active and healthy life” (as cited by Ingram et al, 2012). However, the practiced notion of food security has fostered territorial state-based policies and the mass-production of food commodities that create dependency on an industrial agricultural system. This dependency has undermined the livelihoods of small scale farmers and it has promoted new inequities and disconnections between producers and consumers, as well as in between food and people (Trauger, 2014).

The UN World Food Programme (2014) reports that about 842 million people in the world suffer from chronic hunger, meaning that one in every eight people on Earth goes to bed hungry each night. Moreover, the International Trade Union Confederation (ITUC) claims that
about 30 percent of the food price increases are due to agrofuel production. Reports show that once food prices go up by a percentage point 16 million people are condemned to hunger (as cited in Lawrence & Wallington 2010, pg. 6). This data suggests that food is not prioritized for human consumption as a basic need, but it is channeled towards the highest bidder. The market value precedes the user value. Price increases on available food make it difficult for people with meager wages to have purchasing power. This is a problem on food accessibility through market pricing and distribution inequity.

The actual availability of food does not proof to be beneficial. Price increases on food have turn consumers to choose cheaper and less nutritious products. Economic global concerns guide consumers to avoid higher priced organic goods with the aim to maintain a budget. Consumers in both the global north and south have the tendency to a diet based on meats, oils and sugars contrary to a healthier nutrition based on whole foods (Lawrence, Lyons & Wallington, 2010). The authors point out that people with higher incomes have been moving to healthier diets, while the rest of the population focuses on a convenient food path that provides fast-immediate energy intake; an inheritance of the global north modern lifestyle (pg. 8).

Lawrence & Wallington point out to the industrialized food production and mass exportation in the global north, as it counters sustainable standards for agricultural diversity, environmental integrity, biodiversity, and nurture of regional prosperity (2010, pg. 7). The wasteful practices of the global north compromise the food security for future generations. Furthermore, a capitalistic system of expansion and exploitation is found to be environmentally damaging as well as polarizing for the social and economic realms of the global south.
Modern food production systems affect the environment through the use of agrochemicals that cause downstream and river pollution. The use of genetically modified organisms causes genetic pollution and biodiversity loses. Green House Gases (GHG), particularly methane, have increased due to the spiked ‘meatification’ of global diets. Lawrence & Wallington explore the negative environmental effects regarding the food miles exacerbated by super markets which import from distant regions as energy reserves are depleted (2010, pg. 7).

Studies suggest that the directional approach in which we address food insecurity entails severe ramifications in respect to the environment, economic growth, health and family planning and political order (DeRose, Messer, & Millman, 1998). The following sections will explore specific problems with food security, or lack thereof, as well as some consequences.

**Intersection of Societal Factors and its Global Implications**

Food Security is an important issue to address within the next decade because of its relationship with human development. The sustainability of future generations may be compromised from the biological effects of hunger that causes behavioral and cognitive alterations which condition social, economic and political processes (DeRose, Messer, & Millman, 1998).

DeRose et al (1998) explain that short term strategies to allocate food may affect food availability in the long term. Lack of food access may contribute to mass migrations which can disrupt the development of localities and regions while it can foster political disorder and conflict. Hunger and the threat of hunger create powerful social polarizations. Coping mechanism to avoid hunger have the potential to alter social classes and ethnic relations among communities and regions.
Intersection of Economic Factors and its Global Implications

Food security in the context of globalization is led by economic dynamisms. Ingram et al (2012) explains that markets are what dictate the levels of food production and consumption for food and non-food crops, as well as livestock and fish. Furthermore, “Access to food depends on food prices, trade, stock, and employment” (Ingram et al, 2012).

The commodification of food has resulted in the vertical integration and concentration of power in the few hands of very large firms while governments tailor food regulations according to the demands of agribusiness (Trauger, 2014). International governmental organizations, such as the World Trade Organization (WTO), the World Bank (WB) and the International Monetary Fund (IMF) have followed a neo-liberal market system that has failed to address a just global food system. The Millennium Development Goals (MDG) for 2015 included hunger as one of its dimensions to address extreme poverty, yet one in every nine people remain hungry.

In the U.S., food security emerged as a response to the over production of commodities and wide spread poverty during the Great Depression. The idea of food security was used to develop ‘philanthrocapitalistic’ exercises which supported market mechanisms aligned with neoliberal agendas. Technological advances promoted by the green revolution justified the mitigation of food insecurity. This model was later taken by other states, particularly during the Cold War era. Research has shown that food aid provides short-term aid during emergencies; however, it is known to create a long-term pattern for dependence (Amy Trauger, 2014).

Intersection of Environmental Factors and its Global Implications

Global environmental changes entail local to global spatial variations in respect to food security. Climate change and weather fluctuations affect food security all around the world. Food
quality and production depend on the water, the soil, the presence of pests and diseases, amongst other physical and biological processes. Furthermore, the implication of current trends which align with food security causes the degradation of water, fisheries, air quality and land cover. According to Ingram et al, the environmental context of food security involves “large scale changes in land use, biogeochemical cycles, climate and biodiversity” (2012).

These factors together are part of the ongoing global environmental change that gives rise to the Anthropocene planetary epoch, known as the increased human activity that has caused significant impacts on the Earth’s ecosystems. Rapid increases in cultivated land for industrialized agriculture have triggered a trend for the loss of coral reefs and mangroves, incremental water withdrawals, doubling of nitrogen and phosphorous use, the decline on the biodiversity of ecosystems as well as climate change (Ingram et. al, 2012). Moreover, Rockstroem et al (2009), explains climate change represents one of the most pressing earth system processes in which humanity has transgressed the planetary boundary, or the threshold where human kind should be wary of and remain from reaching in order to ensure our survival.

**Local Efforts towards Sustainable Food and Its Global Implications**

Rural livelihood strategies of adaptation have begun to take place as a result of the global environmental changes and the prevalent food insecurity. Some adaptation is about reducing current risks, while others have focused on managing future and uncertain changes. Food sovereignty is presented as an adaptation strategy taking place at the local and global level. This concept and movement provides an alternative to food insecurity, which represents a threat to marginalized communities, unsecured households, and small farmers, and it can potentially
affect all consumers. Furthermore, industrial agriculture and monocrops have propagated disturbances in the natural ecosystems as well as in the public health.

The following definition of food sovereignty was crafted by 500 delegates from different civil society organizations, and 80 governments. It is known as the Nyéléni declaration, which followed several world summits to eradicate world hunger. The Nyéléni declaration proposes to give priority to local communities over the rights and interests of food. It demands autonomy and self-determination as well as environmental conservation:

Food sovereignty is the right of peoples 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 aspiration and needs of those who produce, distribute and consume food at the heart of food systems and policies rather than the demand of markets and corporations.

(As cited by Trauger, 2014).

Conceptual developments by the movement have placed food sovereignty as a prerequisite to food security. It involves the union of peasants, landless farmers, rural workers, women, youth, indigenous people, and food sovereignty activists. These different groups challenge the failures of the neoliberal economic system guided by organizations such as the WTO, the World Bank and the IMF. Schanbacher (2010) argues that the food security model by these intergovernmental organizations denigrate human relationships to an economic value. Alternatively, the model on food sovereignty promotes human interdependence with respect to the environment as well as cultural diversity.

One of the most essential aspects ingrained in the idea of food sovereignty is the process of shifting powers in decision making. Food access is to be at the hand of local communities, tribes and cities to collaborate and generate a diversity of visions that can contribute to true food
security. Food sovereignty asserts that there are possibilities for transforming conventional ways of thinking to alternative views about the territory, economy, and power.

Trauger explains that “food sovereignty seeks to redefine relationships regarding markets, trade and the exchange of food” (as cited in 2014). Community gardens and food cooperatives are exemplary of transformational changes which promote food sovereignty by providing food security. They are an attempt to respect the autonomy of local markets, as well as identify local production and processing. This level of, what Trauger calls, solidarity economies become mechanisms that facilitate collaboration towards sustainable livelihoods. Moreover, these types of initiatives become critical for the production of social relationships around alternative modes of access to land.

Food sovereignty respects self-determination and encourages democracy as it empowers individual regions, nations, and communities to determine their own understanding of food sovereignty according to their needs (as cited by Hopma & Woods, 2014). The conceptualization of food sovereignty came to rise within the Latin American context and its practice has been adopted by different regions and with varied implications.

In 2008, Ecuador was one of the first countries to codify food sovereignty in their constitution. Legislative changes provide bans on transgenic seeds and the resource extraction from protected natural areas, as well as a variety of disincentives to monoculture agriculture. In addition, the changes recognize the “rights of nature” as a strategy to protect and defend indigenous communities “from environmental harm caused by the appropriation of resources in the interest of capital” (Trauger, 2014). Countries such as Nepal, Bolivia, Senegal and Venezuela have too taken steps to include food sovereignty into their constitutions and laws.
Conclusion

Current adaptation systems may be jeopardized by the current structure of the globalized food system, which exacerbates environmental degradation and the possibilities for future maladaptation (Ingram et al, 2012). Most researchers agree that “the high capacity of actors and individual units to adapt will not lead to pro-active adaptation strategies alone, as higher level institutional and policy reforms are also needed” (Ingram et al, 2012).

Adaptation requires a multi-sectored and multileveled approach that does not only deal with methods for agricultural production. The management of food systems involve conceptual and governance issues that deal with both social and ecological aspects of adaptive capacity (DeRose, Messer, & Millman, 1998). Political leaders ought to devote resources to avoid vulnerability to hunger and promote an even social distribution of food.

Overall, studies agree on the importance of a highly inclusive and consultative regional approach that maintains an explicit view on specific development goals (Ingram et al 2012). Research and governmental strategies should take into account key stake holders for an effective development of agendas and policy. The prospective for global environmental change and the food security research agenda must consider regional integration and collaboration which may, in turn, contribute to better results towards long-term sustainable solutions.

The food sovereignty movement looks elsewhere for alternative solutions. It essentially wants to transform our mainstream understanding of territory, economy, and decision making authority. The movement advocates for people’s rights to production and consumption decisions, as well as for small-scale farmers to have the right to a particular kind of life. The conceptualization of food sovereignty represents an opportunity to food security. Moreover, it
promotes a basic right to know what is in our food, as well as social inclusivity and decision-making rights over some one of the most fundamental aspects of our life.
References


