"Food security" and "food sovereignty": What frameworks are best suited for social equity in food systems?

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Abstract

This paper contextualizes the discourses of "food security" and "food sovereignty" within the history of the global industrial food system and aims to increase understanding of these different discourses among food activists, and food justice activists in particular. The paper highlights some of the epistemological, methodological, and ethical challenges of defining, measuring, and alleviating food insecurity, using the U.S. as a case study. As suggested in the conclusion, social scientists must continue to engage with activists and through campus-community partnerships to help decipher the trade-offs and implications of employing different discursive frameworks.

Keywords

campus-community partnerships, engaged research, food security, food sovereignty, right to food

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Introduction

During the recent years of alternative agrifood activism, there has been an increasing conflation of discursive frameworks terms in use. The goal of this paper is to increase awareness among users of the agrifood activist toolkit — the repertoire of discursive, political, and communicative strategies among activists — by delineating the concepts that often frame our work. In the pages that follow, I demonstrate how the evolving and pluralistic discourses of "food security" and "food sovereignty" parallel the development of a global industrial food system characterized by privatization, deregulation (or neoregulation), trade liberalization, and increased food insecurity and hunger. It is common practice among some scholars and activists alike to pivot the interests of multilateral organizations, transnational corporations, and governmental agencies against nongovernmental organizations (NGOs), Third World farmers, peasants, indigenous peoples, and community-based groups. This paper does not continue with this trend since, as I will demonstrate, alliances and divisions are much

more fluid when we delve into the underpinnings of global–local food relationships.

"Food security" and "food sovereignty" as theoretical bodies and operational approaches are worthy of rigorous comparison and contrast because both have played a significant role in responding to "food insecurity." Food insecurity is defined as prolonged lack of access to enough food to meet basic needs (Food and Agriculture Organization (FAO), 2009). The Food and Agriculture Organization of the United Nations (FAO) estimated that in 2010, 925 million people in the world experienced chronic hunger (FAO, 2010), a small decrease from 2009 when it estimated 1.02 billion (FAO, 2009). Despite popular misconceptions, food insecurity and hunger are real domestic problems in the United States; the United States Department of Agriculture² (USDA) found that in 2009, 14.7% of U.S. households (17 million) were food insecure (Nord, Coleman-Jensen, Andrews, & Carlson, 2010), meaning that at some time during the year, these households had difficulty providing enough food for all their members. Additionally, 5.7% of U.S. households experienced "very low food security," meaning that food intake among members was substantially disrupted at some point during the year (Nord et al., 2010). Only a year prior, Nord et al. (2009) observed that the prevalence of food insecurity had increased from 11.1% (13 million households) in 2007 to 14.6% in 2008 and was highest since nationally representative food security surveys were initiated in 1995.

From the perspective of the international peasant organization Via Campesina (regarded as the global leader in the food sovereignty movement), along with others mobilizing for alternative food movements, food security begins and ends with food sovereignty (Patel, 2009). While food sovereignty represents a form of resistance to neoliberal economic development, industrial agriculture, and unbalanced trade relationships, and although some

ambiguity surrounds the term, at its most basic form food sovereignty is the people's right to determine their own agricultural and food policies (McMichael, 2008; Pimbert, 2007; Rosset & Martinez-Torres, 2010). One reason that food sovereignty advocates deem as ineffective past and ongoing "food security" approaches to food insecurity and hunger is because these approaches have not elicited participation by marginalized food communities in every stage of the planning process, from defining and measuring to designing policies (Patel, 2009; Pimbert, 2007; Schiavoni, 2009; Windfuhr & Jonsén, 2005).

Alternative food movements are becoming increasingly popular in the U.S. (Allen, 2004; Wekerle, 2004), some emerging from marginalized communities that have adopted the rhetoric of "food sovereignty" as it has been used by Via Campesina (Rosset & Martinez-Torres, 2010). The U.S. Food Sovereignty Alliance, formed in 2010, is also championing the causes of broader adoption and implementation of food sovereignty principles throughout the country. These U.S.-based alternative food efforts tread against the needsbased programs and policies dominated by the rhetoric of "food security" that have performed inadequately in responding to rising food insecurity (de Schutter, 2009; Mittal, 2009; Pimbert, 2007). Interestingly, however, some of these efforts also replicate structural inequalities reminiscent of the global industrial food system (Freidberg, 2004).

Another goal of this paper is to examine how food sovereignty advocates propose to shift away from food security approaches. I unpack critiques of food security to uncover a series of shifts necessary for yielding to a food sovereignty approach, and these are suggested throughout: needs-based to rights-based rhetoric; top-down to bottom-up streams of power; technocratic to participatory planning contexts; and compartmentalized to integrated food and agricultural policies.

¹ The FAO considers 1600 calories as the daily requirement for individuals.

 $^{^2}$ The USDA considers 2100 calories as the daily requirement for individuals.

Food Security

Understanding "Food Security": History and Revision of the Definition

The concept of "food security" was formally launched at the first World Food Conference in 1974 (Pottier, 1999). Agricultural policies typified by the Green Revolution³ were among different strategies proposed to alleviate food insecurity. One of the key assumptions of these policies was that increased productivity, or enhanced supply of crops, would lead to improvements in economic livelihoods. In delivering agricultural inputs to resource-poor farmers in the Third World, promoters of the Green Revolution predicted increased agricultural productivity.

Higher yields abated concerns about insufficient food supplies for a rising population, and the Green Revolution was deemed a "success." These yields were assumed to provide income to poor farmers, helping them to "climb out of poverty" and to provide more food, translating into less hunger. The increases in yields among larger, wealthier farmers and enhanced supply of grains available to a growing population led many to believe that the Green Revolution had brought benefits to the Third World (Simmonds and Smartt, 1999). Skeptics of the Green Revolution, however, claim that these benefits were "distributed unevenly" (Simmonds & Smartt, 1999, p. 353). They blame similar agricultural policies for actually exacerbating the world food problem. These skeptics note that many small farmers were displaced due to labor-saving techniques and the expansion of big agriculture. Moreover, economic purchasing power became further concentrated among elites, causing an increase in the number of food-insecure and hungry people globally (Simmonds & Smartt, 1999).

It was not until the early 1980s that a parallel discourse, this time focused on demand, joined the supply-side concerns. In 1983 the FAO redefined "food security," emphasizing increased access to rather than increased production of food, having been particularly influenced by the work of Amartya Sen (1981), who argued that free-market processes actually caused — rather than remedied — famines (Pottier, 1999). World leaders and food experts revised the definition of food security at the 1996 World Food Summit in Rome and produced an "ambitious" (Katz, 2008) global commitment to halve the number of hungry and malnourished people by 2015 (FAO, 2003). Katz (2008) observes that the delegates in Rome never would have anticipated the surge in food prices and food shortages of the new millennium. The consensus among attendees at this summit was that understanding the nutritional status of vulnerable groups and individuals was much more complex than had been previously assumed (Pottier, 1999).

Maxwell (1996) contends that delegates were moving toward the "postmodern" in that the experience of food insecurity could not be tied to a single set of empirical conditions. Delegates argued that hunger and food insecurity were complex conditions experienced differently and resulting from dissimilar social, political, economic, and environmental forces. Subsequent definitions even accounted for culturally specific food preferences and socially acceptable food practices, yet "expert opinion" still overshadows the lived experiences of vulnerable groups when these definitions are operationalized (Pottier, 1999). The latest FAO definition describes food security as "a situation that exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life" (FAO, 2002).

How food security has been approached in a global context is very similar, if not shaped by, how this

³ In response to widespread hunger and malnutrition during the 1960s, the Rockefeller and Ford foundations funded agricultural research and the transfer of technological approaches to agriculture, particularly for rice and wheat production to developing countries. New technologies in agriculture transferred to Asia and Latin America included improved varieties, chemical inputs and fertilizers, and irrigation (International Food Policy Research Institute, 2002).

concept is defined and approached by the U.S. government. Many agricultural and food development programs are historically rooted in the diplomatic relations of the United States with other countries. Despite the United States being a major player in most international programs to curtail world hunger, hunger and food insecurity are also significant domestic problems. Popular discourse in the United States has tended to focus on food insecurity and hunger as "external" problems. The idea that hunger is something happening "over there" — perhaps reinforced by U.S. leadership in foreign "food aid" programs and media portravals of malnutrition and hunger in impoverished areas of the world, particularly Africa — has been confounded by scholarly attention to the paradoxical phenomenon of "hunger in the land of plenty" (Poppendieck, 1997).

Although the importance of hunger as a U.S. policy concern can be traced back to the time of the Great Depression and when the Food Stamp Program (FSP) was first established (Biggerstaff, Morris, & Nichols-Casebolt, 2002), it was not until the presidency of John F. Kennedy in the 1960s that hunger gained the attention of a broader national public. (For an extensive history of U.S. responses to domestic poverty and hunger, see Berg, 2008, and Himmelgreen and Romero-Daza, 2010.) The television documentary "Hunger in America" and a report by a Citizen's Board of Inquiry titled "Hunger U.S.A." (Radimer, 2002) shocked audiences who were previously skeptical that hunger could exist in the "land of plenty." In the 1970s President Nixon called a White House Conference on Food, Nutrition and Health to begin conceptualizing the causes of and approaches to the issue of hunger in the U.S. (Radimer, 2002).

The United States promoted strategies for addressing the issues of domestic food insecurity and hunger as it also addressed these issues abroad. U.S.-based donors funded many of the development projects typified by the Green Revolution in the 1970s, and in the 1980s President Reagan founded the President's Task Force on Food Assistance (Wunderlich & Norwood, 2006). The

task force developed more concise terms for differentiating and describing the fractured modes of access to food, consequences for nutritional status, and the physical sensation of hunger (Himmelgreen & Romero-Daza, 2010). "Food security," "food insecurity," and "hunger" emerged as conceptual and operational terms for use in formal policy. The idea behind this parsing of different frameworks was that food insecurity could exist without the physical sensation of hunger (Himmelgreen & Romero-Daza, 2010). During the 1990s an instrument for measuring household food security was established and administered for the first time, and a U.S. definition for food security was introduced (Wunderlich & Norwood, 2006):

Access by all people, at all times, to enough food for an active, healthy life and includes at a minimum: a) the ready availability of nutritionally adequate and safe foods and b) the assured ability to acquire acceptable food in socially acceptable ways (e.g., without resorting to emergency food supplies, scavenging, stealing, and other coping strategies). (Anderson, 1990, p. 1598).

Participants at the First National Conference on Food Security Measurement and Research in January 1994 established a conceptual basis for defining and measuring hunger in the United States, and developed a sample questionnaire to be administered to the population (Wunderlich & Norwood, 2006). Within a month of the conference, the USDA, along with the Census Bureau, created the Food Security Supplement (FSS) to be included with the Current Population Survey (CPS) (Wunderlich & Norwood, 2006). In 1995 the USDA established recommended daily allowances (RDAs) through the food pyramid, around which looms much controversy in both popular and expert opinion (Nestle, 2007).

The FSS includes more than 70 questions regarding expenditures for food, various aspects of food spending behavior and experiences during the 30 days and 12 months prior to the interview, use of federal and community food programs, food suffi-

ciency and food security, and coping strategies (Wunderlich & Norwood, 2006). Contained within the FSS is the Household Food Security Scale Module (HFSSM), a set of 10 questions for households without children and 18 questions for households with children. The HFSSM has been included in the CPS every year since 1995, allowing the USDA to monitor the prevalence of household food insecurity (Wunderlich & Norwood, 2006). Wunderlich and Norwood (2006) note that, "prior to the development of the current standardized measure of the prevalence of household food insecurity in 1995, estimates of the prevalence of lack of access to food varied widely and there was little consensus over which measure was most accurate" (p. 23). The HFSSM has since been used in other surveys, including many statewide efforts to understand regional differences in the food security of households (Wunderlich & Norwood, 2006). The California Health Interview Survey (CHIS) serves as one such example, having employed the short six-item food security module, adapted from the HFSSM, since 2001.4

The USDA conceptualizes and measures food insecurity at the household level and defines *food insecurity* as, "uncertain, insufficient, or unacceptable availability, access, or utilization of food" (Wunderlich & Norwood, 2006, p. 4). Wunderlich and Norwood (2006) explain that households are classified as food secure, low food secure, or very low food secure. Questions probing at "frequency and duration" are given much weight, as "more frequent or longer duration of periods of food insecurity indicate a more serious problem" (Wunderlich & Norwood, 2006, p. 4).

In 2006, the USDA revised its terminology in an attempt to reflect more objective diagnoses of food insecurity. More specifically, the term "hunger" was eradicated from the terminology, explained by Haering and Syed (2009, p. 13):

The purpose of the elimination of the word hunger from the classification

schemes was to reflect both the evolution of the understanding of hunger as a phenomenon distinct from, though closely related to, food insecurity as well as to recognize the limitations of extant measurement instruments for accurately gauging hunger.

Some responded to this change by accusing the USDA of "depoliticizing" the experience of food insecurity and hunger by "swaddling" the issue in "the cloak of science" (Allen, 2007). Himmelgreen and Daza (2010) reference studies by Nord and Radimer that demonstrate how current terminology as implemented by the USDA does not correspond to the lived experience of hunger, and raise concerns about potential consequences for food assistance, specifically that such discursive changes will translate to an obstruction of resources (e.g., financial capital, food) for those occupying this empirical reality. The USDA revised its terminology again in regard to the food stamp program, which since 2008 has been referred to as the Supplemental Nutrition Assistance Program (SNAP) and invited states to further rebrand the program (e.g., CalFresh since 2010 in California). Social scientists have called for more research that examines how such discursive changes to policy shape public perceptions of social and economic conditions and garner or diminish support among voting constituencies (see for example Himmelgreen and Romero-Daza, 2010, among others).

Understanding "Food Security": Application and Praxis

On an international scale, lack of coordination among different groups and sectors, lack of monitoring of programs, and lack of program evaluation are behind most impediments to success or causes for failure of "food security" programs (de Schutter, 2009). Olivier de Schutter (2009), the UN Special Rapporteur on the Right to Food, calls attention to perhaps the greatest impediment to "food security" approaches, which is the political unwillingness to address the structural causes underlying hunger and barriers to access, namely

⁴ See more about the California Health Interview Survey at http://www.chis.ucla.edu/

how state policies, multilateral organizations, transnational corporations, and other nonstate actors cause or allow for the persistence of hunger.

Multilateral financial aid and lending institutions such as the World Bank and the International Monetary Fund, and international trade agreements promoted through the General Agreement on Tariffs and Trade and the World Trade Organization, have significantly shaped agricultural production and policies (de Schutter, 2009). In this way, food has been governed "within and beyond nation-states" (Phillips, 2006, p. 42), and rarely have policies dealing with trade and deregulation been integrated with policies to address food insecurity and the human right to food (Pottier, 1999; Spieldoch, 2007). Pottier (1999) discusses how this is problematic: "Acknowledgement of how food domains interconnect is vital if policy-makers are ever going to write integrated food policies, as opposed to agricultural policies" (p. 193) and that policymakers need to "end the practice of compartmentalizing the food question into what they deem to be manageable sectors" (p. 194).

Food sovereignty advocates view governments as unfairly obliged to multilateral donors of whom there is minimal oversight. Many of these donors in fact are supporting the "Green Gene Revolution" for Africa, funded by the U.K. Department for International Development, the Rockefeller Foundation, and the Bill & Melinda Gates Foundation, with buy-in from multiple governments. To date, the Gates Foundation has awarded over US\$160 million through its Agricultural Development program, which includes developing nutritionally enhanced crop varieties for this impending "green" revolution (Doughton, 2011). Several critics have noted that such a narrow focus on single crops treads against the advice of expert panels on world hunger whose argument around the difficulties in transferring technologies to resource-poor farmers resonates with critiques of the Green Revolution of the 1960s and '70s (Doughton, 2011). In recent years, governments have increasingly prioritized these technocratic solutions to food insecurity, working closely with private donors to manufacture drought-tolerant,

disease-tolerant, and biofortified crops as a primary way to alleviate famines. In the realm of corporate and cultural politics, governments have yielded to transnational corporations whose activities obfuscate liberal understandings of "sovereignty" and citizenship (Ong, 2006), often proving detrimental for "food citizenship" (Phillips, 2006). Multilateral and bilateral agreements also threaten the decision-making of sovereign groups through structural adjustment programs and misdirected lending activities that are frequently culturally inappropriate, underestimate local knowledge, and exacerbate existing food insecurities (Holt-Giménez, 2009).

U.S. Programs for Food Security

In the United States, food insecurity currently affects about 50.2 million people, or close to one-fifth of the civilian population (Nord et al., 2010). This national epidemic is estimated to cost about US\$90 billion per year in increased medical care costs, lost educational attainment and worker productivity, and investment burden into the emergency food system (Brown, Shepard, Martin, & Orwat, 2007).

The USDA spends 48.4%, or US\$45.39 billion the largest share of its total annual budget — on food stamps and nutrition programs (Imhoff, 2007). Since the recession that began in 2008, enrollment in food assistance programs has soared (DeParle & Gebeloff, 2009), growing by nearly 40%, or 10 million recipients, from 2007 to 2009 alone (DeParle & Gebeloff, 2009), for a current total of 43 million (Food and Nutrition Service (FNS), 2010). SNAP feeds one in eight Americans and one in four children (DeParle & Gebeloff, 2009) and is expanding at about 20,000 people a day (DeParle & Gebeloff, 2009). However, SNAP, along with other forms of federal food assistance — school lunch program, school breakfast program, and the Women, Infants, and Children (WIC) program, etc. — have been criticized for a number of shortcomings and inadequacies in fulfilling the parameters of household food security. Data on food-insecure households from specific geographic regions of the United States reveal severe underutilization of federal programs (Berg, 2008). In California, for instance, over 50% of households that are eligible for food assistance do not apply (DeParle & Gebeloff, 2009). Many U.S. households may prefer instead to obtain assistance from private programs such as food banks, food pantries, and other charitable nonprofits that distribute food.

Poppendieck offers explanations for the underutilization of federal food assistance programs: "People [are] unaware of their eligibility, [do] not believe that they need the stamps, or [feel] that the costs of participation in terms of stigma, travel to the program office or the rigors of the certification process outweigh the benefits" (1997, p. 155). The idea of formal "food assistance" in place of other social services or community economic development may also dissuade eligible individuals, in part because "resolving problems of hunger and food insecurity requires more complex solutions than simply providing food to the needy" (Pothukuchi, 2004, p. 360). Moreover, energy-dense but nutrient-poor foods characterize many of the items being subsidized through federal food assistance and may actually contribute to malnutrition among populations dependent on these programs (Townsend, Aaron, Monsivais, Keim, & Drewnowski, 2009).

Conversely, some have argued that an anti-hunger approach, which promotes use of federal food assistance programs and healthy eating habits, may best address the "structural issues" around food insecurity because it reduces the need for food banks as "welfare agencies" (Husbands, 1999, p. 108). In theory, an antihunger approach also focuses on mitigating food insecurity through policy by conveying the needs of food-insecure households to legislators, and recognizes that underserved food-insecure individuals desire self-sufficiency, have preferences in regards to what they eat, and want a more active role in improving their own food security (California Food Policy Advocates (CFPA), 2010; Husbands, 1999).

Despite contributions by the USDA to welfare assistance, and prior commitments to the Healthy

People 2010 initiative with the priority of reducing national food insecurity by half (to 6%), the U.S. has made no advances in this direction, according to Chilton and Rose (2009). Conversely, recent results of the HFSSM demonstrate that the prevalence of household food insecurity is at its highest since the establishment of the survey in 1995 (Nord et al., 2009). Causes for this increase are linked to the absence of a board or agency that "takes the lead in reducing food insecurity, not just measuring it" (Chilton & Rose, 2009, p. 1205). Pothukuchi argues for structural changes such as "living wages, better jobs, education, and health and child care," that should be at the forefront of policy reform for improving food security (2004, p. 360). Needs-based, federal food assistance programs as response to national food insecurity at best mitigate the experience of food insecurity but do not undermine the structural causes of hunger, which continue to disproportionately affect certain households more than others. For instance, rates of food insecurity are substantially higher than the national average for households with incomes below the official poverty line (43%), households with children headed by single women (36.6%) almost 3 times the national average — or single men (27.8%), Black households (24.9%), and Hispanic households (26.9%) (Nord et al., 2010). And "very low food security" is higher than the national average (5.7%) for households with children headed by single women (12.9%), women living alone (7.4%), men living alone (7.1%), Black and Hispanic households (both at 9.3%), households with incomes below the poverty line (18.5%), and households located in principal cities of metropolitan areas (6.8 %)⁵ (Nord et al. 2010).

Food Sovereignty

Understanding "Food Sovereignty":
Origins of the Concept

On the difficulty of recounting the historical and conceptual foundations of food sovereignty, Patel (2009) observes, "The term has changed over time,

⁵ Food insecurity rates increased from 2007 to 2008 but remained more or less unchanged in 2009 for all groups mentioned.

just like 'food security,' but while it is possible to write an account of the evolution of 'food security' with reference to changing international politics, it is much harder to make coherent the changes with 'food sovereignty" (p. 666). The origins of food sovereignty in scholarly discussion are relatively recent. This rather short history is characterized by the concept emerging primarily from the agrarian reform movement and responses of small farmers and peasants to the global industrial food system (Rosset & Martinez-Torres, 2010). However, the human right to food and rights-based approaches to food security that predate food sovereignty provide a global and national context to better comprehend the circumstances under which food sovereignty proponents encounter opposition. Resistance to rights-based food systems also reveals why food-security approaches continue to dominate the status quo.

The Human Right to Food

A human rights framework repositions our understanding of food insecurity to acknowledge and actively address its social and economic determinants. It provides a venue for public participation in the food and nutrition discourse from people most affected by food insecurity. Perhaps most importantly, it provides a mechanism through which the general public can hold the U.S. government accountable for making progress in ending food insecurity. (Chilton & Rose, 2009, p. 1203)

Food has appeared in the official language of human rights since the first signing of the Universal Declaration of Human Rights (UDHR) under the auspices of the United Nations in 1948. Article 25 of the UDHR stated that everyone had "a right to a standard of living," including the right to food and the right to be free from hunger (Chilton & Rose, 2009, p. 1206). The International Covenant on Economic, Social, and Cultural Rights (1966) later included "freedom from hunger" as a fundamental human right and as an obligation of states to improve food production and distribution systems for equitable access. When faced with the question of whether to adopt

the notion of food as a basic human right at the Rome Declaration on World Food Security in 1996, the U.S., along with Australia, stood in opposition to all other countries that were in support of the measure. Terms were again ratified in 1999 to explicate the right to food and to oblige states in respecting, protecting, and fulfilling this right. The 1999 document defined the right to food as, "when every man, woman and child, alone or in community with others, has physical and economic access at all times to adequate food or means for its procurement" (Committee on Economic, Social, and Cultural Rights, 1999).

Right to food discourse and rights-based food system approaches remain controversial in the U.S.; while the government officially embraces the UDHR, the Department of State insists that the Constitution does not protect or recognize economic, social, and cultural rights, including the right to food (Messer & Cohen, 2007). In fact, the U.S. has repeatedly "opposed formal right-to-food legislation as overly burdensome and inconsistent with constitutional law" (Messer & Cohen, 2007, p. 1) and votes against the annual Right to Food Resolution in the U.N. General Assembly, "usually as the sole dissenter" (Messer & Cohen, 2007, p. 16). While the U.S. has signed the International Covenant of Economic, Social and Cultural Rights — indicating that it agrees with the tenets — it has not ratified the covenant (meaning that they are not willing to hold themselves legally accountable for implementation) (Chilton & Rose, 2009).

Reasons for voting against the Right to Food Resolution include fears that the right to food is "associated with un-American socialist political systems" (Messer & Cohen, 2007, p. 2), that fulfilling such legislation would be too expensive, and that rights-based approaches do not culturally resonate with the American model of self-reliance (p. 2). Advocates reject each of these claims, arguing against dissenters that the right to food *is* protected by the U.S. constitution, fits into President Franklin D. Roosevelt's concept of "freedom from want," and thus exemplifies an American political value. In addition, right-to-food advocates claim that programs would increase cost

effectiveness and reduce expenditures, and that "the right to feed oneself" resonates with American ideas of self-reliance (Messer & Cohen, 2007).

Aside from a formal right to food, rights-based frameworks are also absent from how the U.S. government defines and measures food security (Chilton & Rose, 2009; Kent, 2005). Chilton and Rose explain:

Although the terminology used in [the HFSSM] report should be easily understood by all concerned, the report is often misunderstood by the American public and by the media. Of greater concern are changes to the definition of food insecurity (e.g., eliminating the word *hunger* from the most severe form of food insecurity) made by the US Government in 2006 without public participation. (2009, p. 1205)

Messer and Cohen argue that continued opposition by the U.S. toward rights-based food system approaches undermines all other commitment to the UNDR, upsetting the "basis for world civil and political order" (2007, p. 3), reinforcing cultural relativist interpretations of human rights, and allowing for continued support of neoliberal economic policies as the path to global food security. In contrast, proponents of the right to food argue against needs-based approaches that do not consider issues of land reform, health, and education in the formation of food security policies (Kent, 2005). Within a needs-based approach, citizens instead become passive beneficiaries of nutritional handouts rather than "claims-holders who mobilize around human right to food demands and hold governments accountable" (Messer & Cohen, 2007, p. 18). Proponents of rights-based approaches also argue that opposition by the U.S. to right-to-food legislation confounds notions of citizenship and the rights that go with it (Anderson, 2008; Holt-Giménez, 2009; Schiavoni, 2009; Via Campesina, 2009).

Right to Food and Food Sovereignty

First defined in 1996 by Via Campesina, food sovereignty is the "people's right to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define their own food and agriculture systems" (Via Campesina, 1996). Food sovereignty may delve deeper than food security into the driving forces of food insecurity, in that "it proposes not just guaranteed access to food, but democratic control over the food system — from production and processing, to distribution, marketing, and consumption" (Holt-Giménez, 2009, p. 146). Right-to-food rhetoric articulates closely the principles of food sovereignty in that "local small-farm agriculture should receive priority in national policies and that global trade agreements and aid policies must not undermine sustainable rural livelihoods in either the North or the South" (Messer & Cohen, 2007, p. 15). Support by the U.S. of organizations such as the WTO and others that are liberalizing trade and promoting neoliberal policies has been interpreted as a violation of food sovereignty and an affront to the human right to food (Rosset & Martinez-Torres, 2010). An important lesson from recent trends in the global industrial food system is perhaps that food sovereignty, and the right to food, as powerful ideologies and palpable movements exist whether or not governments choose to recognize them.

Food Sovereignty vs. Food Security

While the rhetoric of "food security" dominates international aid and U.S. agrifood policies, many NGOs, human rights organizations, and small farmers strongly favor replacing the dominant rhetoric with "food sovereignty" (First Nations Development Institute, 2004; Phillips, 2006; Pimbert, 2007, 2009; Rosset & Martinez-Torres, 2010; Spieldoch, 2007). As the right to autonomous food systems, food sovereignty is about radically restructuring the streams of power that control and distribute resources, a stance rarely adopted by food-security advocates.

Consistent with the philosophy put forth by Freire's 1970 *Pedagogy of the Oppressed*, Meares argues

"the only valid transformation in a community is one in which people are not just liberated from hunger but made free, or enabled, to create, construct, and produce" (1999, p. 92). In practice, food security approaches have rarely cultivated self-reliance. Instead, organizations operating within this approach have often reinforced trickle-down schemes for distributing resources to vulnerable populations (Anderson, 2008). Such practices negate human right aspects of food and replicate paternalistic relations by food-secure groups toward food-insecure groups. Anderson summarizes, "The right to food cannot be met long-term through external donations. It requires local control over practices and policies to reinforce the ability to grow or buy stable amounts of nutritious food for one's household and community" (2008, p. 602). Advocates argue that food sovereignty cannot be accomplished without recognizing the human right to food, and this implies a tremendous shift in power, from centralized to community-based decision-making, and reorganization of the relationship of multilateral organizations and national governments to vulnerable groups (Patel, 2009).

Food sovereignty is a thread in the larger political debate on sovereignty and parallels indigenous peoples' movements as well as claims for group sovereignty in other contexts (Pimbert, 2007). A food-sovereignty approach contests the traditional position of authority assumed by Western researchers to instead include "plural forms of knowledge within a more comprehensive, power equalizing dynamic of participatory learning and action" (Pimbert, 2007, p. 10). Community food assessments (CFAs) and associated planning activities provide an example of the democratization of research and opportunities for autonomous learning and action (First Nation's Development Institute, 2004; Pothukuchi, 2004). CFAs attempt to provide more dynamic measurements of household and community food security than those provided through national and statewide surveys (Allen, 2007; Community Food Security Coalition (CFSC), 2002; Pothukuchi, 2004; Pothukuchi, Joseph et al., 2002). Moreover, CFAs capture nuanced accounts of the experience of food

insecurity as they manifest at the level of communities and households (Pothukuchi, 2004; Pothukuchi, Joseph et al., 2002). Food-sovereignty assessments provide another example of community-driven research and policy (First Nation's Development Institute, 2004).

In theory, food-sovereignty approaches tread against the centralized, technocratic methods and solutions administered by international and national forms of "aid," yet without any prescribed method for doing so. As anthropologists and other social scientists have campaigned for more "open" definitions of food security and criteria for evaluating food insecurity (Pottier, 1999), the concept of food sovereignty prioritizes open participation by food-insecure groups and individuals in the formation of food policies.

Interpretations of Food Sovereignty Some scholars have attempted to bring together different manifestations of the transnational

different manifestations of the transnational movement, perhaps to instill it with more coherence and legitimacy, especially for the sake of gaining attention by multilateral groups and other decision-making bodies. These authors (e.g., Michel Pimbert, Eric Holt-Giménez, Raj Patel) seem concerned with conveying a sense of solidarity within the food-sovereignty movement, despite concerns about it being monolithic, recognizing the movement's diversity but also arguing for some degree of cohesion.

Pimbert for instance examines the activities of community-based organizations composed of farmers and peasants abroad, arguing that these groups sustain "ecologies, livelihoods, and the flexible governance of food systems" (2009, p. 7), yet must be able to do so while responding to the ecological and social characteristics of a given environment. He argues that farmers and peasants contest "liberal understandings in which citizenship is viewed as a set of rights and responsibilities granted by the state. Instead, citizenship in the context of locally-determined food systems is claimed, and rights are realized, through the agency and actions of people themselves" (Pimbert, 2009, p. 48). Pimbert (2009) concludes that communities

striving for food sovereignty must realize and practice "emergent" rather than conventional forms of citizenship.

Others perceive the transnational social movement as more fragmented. Holt-Giménez (2009) identifies local organizations of peasants and farmers as representing one "current" of food sovereignty, while another current is witnessed in the activities of NGOs. He argues that adversarial relationships between these two currents stem from the different "political and institutional origins" (Holt-Giménez, 2009, p. 147) that inform group goals. He explains that while peasant organizations and federations are agrarian-focused (with the goal of maintaining rural livelihoods and traditional farming practices), smallholders working with NGOs are focused on promoting sustainable agriculture (ecologically sound and socially equitable farming practices). However, Holt-Giménez speculates that the recent world food crisis may be necessitating more collaboration between these currents. Similar trends have been observed in the U.S. between sustainable agrifood movements that had been led by predominantly Anglo, middle- to upper-class constituencies, and food and/or environmental justice movements that have founded by lowincome groups and minorities (Guthman, 2008). Practicing food democracy as expressed through the formation of food policy councils and areas of civic agriculture is how certain groups propose to bridge racial, ethnic, cultural, and socioeconomic divides, promoting collaboration through community-based food policy-making, and revitalizing relationships based on reciprocal exchange (Harper, Shattuck, Holt-Giménez, Alkon, & Lambrick, 2009; Pothukuchi, 2004, 2007).

The discourse of food sovereignty has not been as widely applied to efforts in the U.S. as it has in other parts of the world, although many U.S.-based organizations are engaged in the fight for food sovereignty abroad (e.g., the U.S. Food Sovereignty Alliance). Instead, many of the movements for social, ecological, and economic justice around food have emphasized the discourse of food justice and community food security.

The concept of community food security "emerged from the North American context in the late 1980s and early 1990s to expand international food security theory beyond the medical model developed by international health organizations and to include more subjective dimensions of hunger" (Johnston & Baker, 2005, p. 314). Lobbying efforts for funding community food security within the 1995 U.S. Farm Bill provided an opportunity for "defining a common position among a diverse group of activists, community-based organizers, and academic researchers and practitioners" (Hamm & Bellows, 2003, p. 38). As a result of these efforts, the 1996 Farm Bill included the Community Food Security Act with a pool of annual funds (US\$5 million) to support community food security projects through the Community Food Projects (CFP) Competitive Grants Program (Tauber & Fisher, 2004). Although the granting program has been important to community food security efforts, it makes up a negligible proportion of the total USDA budget (US\$87 billion) and thus is only a minor area of national concern and litigation.6 The Community Food Security Coalition (CFSC) is a nonprofit organization based in the U.S. whose mission is "building strong, sustainable, local and regional food systems that ensure access to affordable, nutritious and culturally appropriate food for all people at all times" (Tauber & Fisher, 2004, p. 16). The CFSC encourages self-reliance and change initiated by the grassroots through training, networking, and advocacy (Tauber & Fisher, 2004). At the 2009 annual meeting in Des Moines, Iowa, the CFSC awarded the first-ever Food Sovereignty Prize to Via Campesina, not coincidentally the same week that the World Food Prize, honoring achievements in plant breeding and increased crop productivity, was bestowed on scientist Gebisa Ejeta at the city's capital building. The CFSC also featured the launch of the U.S. Food Sovereignty Alliance at its 2010 annual meeting in New Orleans.

⁶ Between 1996 and 2003, more than US\$22 million in grants was distributed to 166 awardees (Tauber& Fisher, 2004).

Challenges to Food Sovereignty; Opportunities for Social Scientists and Practitioners

Challenges to and tensions within the food sovereignty movement occur across multiple geopolitical scales and speak to the unwillingness of some groups to relinquish power and other groups to organize. Challenges may be witnessed through industry-government partnerships, transnational corporations, and multilateral groups promoting neoliberal policies that threaten food democracy and participation by vulnerable groups in the food system. Tensions arise from discontinuity among transnational social networks, community-based groups, organizations, and socially constructed markers of difference (i.e., race, ethnicity, class, gender, occupation, and citizenship). However, the host of limitations to food sovereignty movements also represent areas ripe for collaborative applied research (i.e., campus-community partnerships), a process that may also placate certain tensions through the strategies of broad citizen engagement, co-production of knowledge, and shared research benefits. The autonomous nature of food sovereignty, both in its approach and by definition, has served dually as a major strength and weakness of the movement. Different groups have adopted the term in different ways. At the Forum for Food Sovereignty (also known as Nyéléni 2007), a global gathering of small farmers and food producers held in Selingue, Mali, a declaration with guiding principles for food sovereignty was established. Schiavoni notes how:

These guiding principles, along with the declaration and other outputs of Nyéléni, provided necessary cohesion for the food sovereignty movement, while *leaving ample room for interpretation and local adaptation*. One point that was reinforced throughout the forum is that while it is critical to have a common framework, there is no single path or prescription for achieving food sovereignty. It is the task of individual regions, nations, and communities *to determine what food sovereignty means to them based on their own unique set of circumstances* (emphasis added). (2009, p. 685)

Yet this opportunity for interpretation of the concept may hinder the food sovereignty movement from ever developing any traction or holding up to the current world food regime as a viable alternative for addressing food insecurity (McMichael, 2008, 2009). Furthermore, the basic guidelines for food sovereignty are so general that everyone is included in the movement. In referring to the definition by Via Campesina, Patel writes, "The phrase 'those who produce, distribute and consume food' refers, unfortunately, to everyone, including the transnational corporations rejected in [a latter portion of the declaration]" (2009, p. 666). Patel also notes a "glossing-over" in the definition, "of one of the key distinctions in agrarian capitalism — that between farm owner and farm worker" (p. 667) whose relative social positions are drastically different.

Anthropologists and social scientists can contribute to theory on food citizenship more generally, and collaborative applied research more specifically:

Because as anthropologists, we understand food as a marker of difference, we can make important contributions to policy by demonstrating how, in different ethnographic contexts, notions of gender, ethnicity, race, age, class, and nation are drawn into service for new border-making projects that systematically exclude some people, and not others, from healthy food. (Phillips, 2006, p. 47)

Phillips (2006) continues to say that anthropologists should engage with the process of forming alternative and inclusive spaces of food governance. Herein lies another contradiction of the concept of food sovereignty. Patel claims:

To demand a space of food sovereignty is to demand specific arrangements to govern territory and space. At the end of the day, the power of rights-talk is that rights imply a particular burden on a specified entity—the state. In blowing apart the notion that the state has a paramount authority, by pointing to the multivalent hierarchies of

power and control that exist within the world food system, food sovereignty paradoxically displaces one sovereign, but remains silent about the others. To talk of a right to anything, after all, summons up a number of preconditions which food sovereignty, because of its radical character, undermines (emphasis added). (2009, p. 668)

In other words, rights as discussed in the liberal sense are recognized by and actualized within the context of states. To dismantle the authority of the state, a prospect favored by many food-sovereignty advocates, is also to dismantle a state-centric framework of rights in favor of universal human rights.

Accordingly, social scientists may have a role to play in the formation of policies and programs that honor the principles of food sovereignty. The model provided by community food assessments presents one avenue for conducting more participatory, ground-level research. Yet this model could only be improved with input from social scientists who are well acquainted with cultural nuances and the pragmatics of learning local discourse. The results of CFAs have paved the way for more participatory planning and coordination at the community level (McCullum, Pelletier, Barr, & Wilkins, 2002; Sloane et al., 2003). As researchers are called on to engage in more interdisciplinary work, particularly policy-oriented work, getting involved in CFAs and community-based food planning could become an applied area of utmost importance, especially in the context of perpetual world food crises.

Conclusion

As stated at the beginning of this paper, food security and food sovereignty may be framed through a common dialectic. I aimed to demonstrate how the emergence of "food security" and "food sovereignty" as discourses also parallel the development of a global industrial food system that has rendered food insecurity and hunger more prevalent. However, a major question that emerges from this comparison and contrast is whether these terms are

irreconcilable or complementary. According to Via Campesina, food sovereignty is declared a *precondition* for food security:

Long-term food security depends on those who produce food and care for the natural environment. As the stewards of food producing resources we hold the following principles as the necessary foundation for achieving food security. . . . Food is a basic human right. This right can only be realized in a system where food sovereignty is guaranteed. Food sovereignty is the right of each nation to maintain and develop its own capacity to produce its basic foods respecting cultural and productive diversity. We have the right to produce our own food in our own territory. Food sovereignty is a precondition to genuine food security (emphasis added). (Via Campesina, 1996, quoted in Patel, 2009, p. 665)

Food security, as discussed by Via Campesina, begins and ends with food sovereignty. While the current world food regime discusses food security in terms of consumption, i.e., access to nutritionally adequate and culturally appropriate foods, there is no indication of monitoring production or distribution practices. In theory, food sovereignty focuses on the governance of all stages of human interaction with food, from production to consumption, and guarantees a human right to food, which as discussed previously, would imply civic participation in the formation of a definition for food security. In a food sovereignty framework, the postconsumption stage of the human interaction with food also would be accounted for by resource recycling, i.e., maintaining a closed loop food system.

It seems that there is minimal opportunity for reconciliation as these concepts currently stand. Insofar that "food security" resides within a political-economic framework of global capitalism, "food sovereignty" may continue to be relegated to the margins. Thus, it is important for actors within the alternative food movement to think carefully when employing these different discursive frameworks in order to ensure that rhetoric aligns with practice. In other words, an entity employing the discourse of "food security" is theoretically setting different objectives and desired outcomes than one operating within a discourse of "food sovereignty," as these terms are couched in particular histories and represent different value-based assumptions about the human relationship to food. While there is considerably much at stake when deciding which discursive framework is best suited to the needs of a particular community or organization, it is arguably more problematic to continue in the practice of using these terms interchangeably.

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References

- Allen, P. (2004). Together at the table: Sustainability and sustenance in the American agrifood system. University Park, Pennsylvania: Penn State University Press.
- Allen, P. (2007, Summer). The disappearance of hunger in America. *Gastronomica*, 7(3), 19–23. http://dx.doi.org/10.1525/gfc.2007.7.3.19
- Anderson, M. (2008). Rights-based food systems and the goals of food systems reform. *Agriculture and Human Values*, 25(4), 593–608.
 - http://dx.doi.org/10.1007/s10460-008-9151-z
- Anderson, S.A. (1990). The 1990 Life Sciences Research Office (LSRO) Report on Nutritional Assessment defined terms associated with food access. Core indicators of nutritional state for difficult to sample populations. *Journal of Nutrition*, 102, 1559–1660
- Berg, J. (2008). All you can eat: How hungry is America? New York, New York: Seven Stories Press.
- Biggerstaff, M. A., Morris, P. M., & Nichols-Casebolt, A. (2002). Living on the edge: Examination of people attending food pantries and soup kitchens. *Social Work*, 47(3), 267–277.
 - http://dx.doi.org/10.1093/sw/47.3.267

- Brown, J., Shepard, D., Martin, T., & Orwat, J. (2007).

 The economic cost of domestic hunger: Estimated annual burden to the United States. Sodexho Foundation.

 Retrieved from http://www.sodexofoundation.org/hunger-us/Images/Cost%20of%20Domestic%20Hunger%20Report%20-tcm150-155150.pdf
- California Food Policy Advocates (CFPA). (2010). California Food Policy Advocates. Retrieved from http://www.cfpa.net/
- Chilton, M., & Rose, D. (2009, July). A rights-based approach to food insecurity in the United States. American Journal of Public Health, 99(7), 1203–1211. http://dx.doi.org/10.2105/AJPH.2007.130229
- Committee on Economic, Social, and Cultural Rights. (1999, May 12). The right to adequate food (Art. 11), general comment 12. Geneva, Switzerland: United Nations. Retrieved from http://www.unhchr.ch/tbs/doc.nsf/0/3d02758c707031d58025677f003b73b9
- Community Food Security Coalition (CFSC). (2002). Weaving the food web: Community Food Security in California. Retrieved from http://www.foodsecurity.org/CFSCguide-foodweb.pdf
- de Schutter, O. (2009). Governing world food security: A new role for the Committee on World Food Security. Right to Food Quarterly, 4(1), 2–3. Available at http://www.fian.org/resources/documents/categoria-3/right-to-food-quarterly-vol-4-no.1
- DeParle, J., & Gebeloff, R. (2009, November 28). Food stamp use soars, and stigma fades. *The New York Times.* Retrieved from http://www.nytimes.com
- Doughton, S. (2011, August 7). Could more-nutritious crops help fight hunger? *The Seattle Times.* Retrieved from http://seattletimes.nwsource.com/html/localnews/2015848523 harvestplus08m.html
- First Nations Development Institute. (2004). Food

 Sovereignty Assessment Tool. Retrieved from

 http://www.firstnations.org/KnowledgeCenter/NativeAmericanFoodsAndHealth/Resources
- Food and Agriculture Organization of the United Nations (FAO). (2002). The state of food insecurity in the world 2001. Rome: Author. Retrieved from http://www.fao.org/docrep/003/y1500e/y1500e00.htm
- FAO. (2003) Trade reforms and food security: Conceptualizing the linkages. Rome: Author. Retrieved from http://www.fao.org/docrep/005/y4671e/y4671e00.htm

- FAO. (2009). The state of food security in the world 2009.

 Rome: Author. Retrieved from ftp://ftp.fao.org/docrep/fao/012/i0876e/i0876e.pdf
- FAO. (2010). The state of food security in the world 2011. Rome: Author. Retrieved from http://www.fao.org/publications/sofi/en/
- Food and Nutrition Service (FNS), USDA. (2010).

 Supplemental Nutrition Assistance Program: What's New.
 Retrieved on 12/21/10 at

 http://www.fns.usda.gov/snap/whats_new.htm
- Freidberg, S. (2004). French beans and food scares: Culture and commerce in an anxious age. New York, NY: Oxford University Press.
- Freire, P. (1970). *Pedagogy of the oppressed*. New York, New York: Herder and Herder.
- Guthman, J. (2008). Bringing good food to others: Investigating the subjects of alternative food practice. *Cultural Geographies*, 15(4), 431–447. http://dx.doi.org/10.1177/1474474008094315
- Haering, S., & Syed, S. (2009). Community food security in United States cities: A survey of the relevant scientific literature. Center for a Liveable Future. Baltimore, Maryland: John Hopkins University, Bloomberg School of Public Health.
- Hamm, M., & Bellows, A. (2003). Community food security and nutrition educators. *Journal of Nutrition Education and Behavior*, *35*(1), 37–43. http://dx.doi.org/10.1016/S1499-4046(06)60325-4
- Harper, A., Shattuck, A., Holt-Giménez, E., Alkon, A., & Lambrick, F. (2009). Food Policy Councils: Lessons learned (Development Report No. 21). Minneapolis, Minnesota: Food First/Institute for Food and Development Policy.
- Himmelgreen, D., & Romero-Daza, N. (2010).

 Eliminating "hunger" in the U.S.: Changes in policy regarding the measurement of food security. *Food and Foodways*, 18(1), 96–113.

 http://dx.doi.org/10.1080/07409711003708611
- Holt-Giménez, E. (2009, July-August). From food crisis to food sovereignty: The challenge of social movements. *Monthly Review*, 61(3), 142–156. Retrieved from Monthly Review website, http://monthlyreview.org/2009/07/01/from-food-crisis-to-food-sovereignty-the-challenge-of-social-movements

- Husbands, W. (1999). Food banks as antihunger organizations. In M. Koc, R. MacRae, L. Mougeot,
 & J. Walsh (Eds.), For hunger-proof cities: Sustainable urban food systems (pp. 103–109). Ottawa, Ontario: International Development Research Centre.
- Imhoff, D. (2007). Food fight: The citizen's guide to a food and farm bill. Berkeley, California: University of California Press.
- International Food Policy Research Institute. (2002).

 Green Revolution: Curse or blessing? Washington, D.C.:

 Author. Retrieved from http://www.ifpri.org/sites/default/files/pubs/pubs/ib/ib11.pdf
- Johnston, J., & Baker, L. (2005). Eating outside the box: FoodShare's good food box and the challenge of scale. *Agriculture and Human Values, 22*(3), 313–325. http://dx.doi.org/10.1007/s10460-005-6048-y
- Katz, S. (2008, February). Food to fuel and the world food crisis. *Anthropology Today, 24*(1), 1–3. http://dx.doi.org/10.1111/j.1467-8322. 2008.00556.x
- Kent, G. (2005). Freedom from want: The human right to adequate food. Washington, D.C.: Georgetown University Press.
- Life Sciences Research Office. (1990). Core indicators of nutritional state for difficult-to-sample populations. *Journal of Nutrition*, *120* (Suppl.), 1555–1600.
- Maxwell, S. (1996, May). Food security: A post-modern perspective. *Food Policy*, *21*(2), 155–170. http://dx.doi.org/10.1016/0306-9192(95)00074-7
- McCullum, C., Pelletier, D., Barr, D., &Wilkins, J. (2002). Use of a participatory planning process as a way to build community food security. *Journal of the American Dietetic Association*, 102(7), 962–967. http://dx.doi.org/10.1016/S0002-8223(02)90220-8
- McMichael, P. (2008). Food sovereignty, social reproduction, and the agrarian question. In A. Haroon Akram-Lodhi & C. Kay (Eds.), *Peasants and globalization: political economy, rural transformation and the agrarian question* (pp. 288–311). London: Routledge.
- McMichael, P. (2009). A food regime genealogy. *Journal of Peasant Studies*, *36*(1), 139–169. http://dx.doi.org/10.1080/03066150902820354
- Meares, A. (1999). People at the centre of urban livestock projects. In M. Koc, R. MacRae, L. Mougeot, & J. Walsh (Eds.), For hunger-proof cities: Sustainable urban food systems (pp. 90–94). Ottawa, Ontario: International Development Research Centre.

- Messer, E., & Cohen, M. J. (2007). The human right to food as a U.S. nutrition concern, 1976–2006 (IFPRI Discussion Paper No. 731). Washington, D.C.: International Food Policy Research Institute.

 Available from http://www.ifpri.org/publication/human-right-food-us-nutrition-concern-1976-2006
- Mittal, A. (2009, June). The 2008 food price crisis: Rethinking food security policies (G-24 Discussion Paper Series No. 56). Geneva, Switzerland: United Nations.
- Nestle, M. (2007). *Food politics*. Berkeley, California: University of California Press.
- Nord, M., Andrews, M., & Carlson, S. (2009, November). *Household food security in the United States,* 2008 (Economic Research Report No. ERR-83). Washington, D.C.: United States Department of Agriculture, Economic Research Service. Available at http://www.ers.usda.gov/publications/err83/
- Nord, M., Coleman-Jensen, A., Andrews, M., & Carlson, S. (2010, November). *Household food security in the United States, 2009* (Economic Research Report No. ERR-108). Washington, D.C.: United States Department of Agriculture, Economic Research Service. Available at http://www.ers.usda.gov/publications/err108/
- Ong, A. (2006). Neoliberalism and exception: Mutations in citizenship and sovereignty. Durham, North Carolina: Duke University Press.
- Patel, R. (2009). What does food sovereignty look like? *Journal of Peasant Studies, 36*(3), 663–706. http://dx.doi.org/10.1080/03066150903143079
- Phillips, L. (2006). Food and globalization. *Annual Review of Anthropology, 35,* 37–57. http://dx.doi.org/10.1146/annurev.anthro.35.081705.123214
- Pimbert, M. (2007). Transforming knowledge and ways of knowing for food sovereignty. International Institute for Environment and Development. Retrieved on June 15, 2011, from html?c=agric/food
- Pimbert, M. (2009). *Towards food sovereignty: Reclaiming autonomous food systems*. London: International Institute for Environment and Development. Retrieved from http://pubs.iied.org/14585IIED. httml?c=agric/food
- Poppendieck, J. (1997). The USA: Hunger in the land of plenty. In G. Riches (Ed.), *First world hunger* (pp. 134–164). New York, New York: St. Martin's Press.
- Pothukuchi, K. (2004). Community food assessment: A first step in planning for community food

- security. *Journal of Planning Education and Research*, 23(4), 356–377.
- http://dx.doi.org/10.1177/0739456X04264908
- Pothukuchi, K. (2007). Building community food security: Lessons from community food projects, 1999–2003. Los Angeles, California: Community Food Security Coalition. Retrieved from
 - http://www.foodsecurity.org/pubs.html#building
- Pothukuchi, K., Joseph, H., Fisher, A., & Burton, H. (2002). What's cooking in your food system: A guide to community food assessment. Los Angeles, California: Community Food Security Coalition.
- Pottier, J. (1999). Anthropology of food: The social dynamics of food security. Cambridge, U.K.: Polity Press.
- Radimer, K. (2002). Measurement of household food security in the USA and other industrialised countries. *Public Health Nutrition*, *5*(6A), 859–864. http://dx.doi.org/10.1079/PHN2002385
- Rosset, P., & Martinez-Torres, M. (2010). La Via Campesina: The birth and evolution of a transnational social movement. *Journal of Peasant Studies*, *37*(1), 149–175. http://dx.doi.org/10.1080/03066150903498804
- Schiavoni, C. (2009). The global struggle for food sovereignty: From Nyéléni to New York. *Journal of Peasant Studies*, *36*(3), 682–689.
- Sen, A. (1981). *Poverty and famines*. Oxford, U.K.: Clarendon Press.
- Simmonds, N., & Smartt, J. (1999). *Principles of crop* improvement (Second edition). Oxford, U.K.: Wiley-Blackwell.
- Sloane, D., Diamant, A., Lewis, L., Yancey, A., Flynn, G., Nascimento, L.,...Reach Coalition of the African American Building a Legacy of Health Project. (2003). Improving the nutritional resource environment for healthy living through community-based participatory research. *Journal of General Internal Medicine*, 18(7), 568–575. http://dx.doi.org/10.1046/j.1525-1497.2003.21022.x
- Spieldoch, S. (2007). A row to hoe: The gender impact of trade liberalization on our food system, agricultural markets and women's human rights. Bonn, Germany: Friedrich-Ebert-Stiftung.
- Tauber, M., & Fisher, A. (2004). A guide to community food projects. Venice, California: Community Food Security Coalition. Retrieved from http://www.foodsecurity.org/pubs.html

- Townsend, M. S., Aaron, G. J., Monsivais, P., Keim, N. L., & Drewnowski, A. (2009). Less-energy-dense diets of low-income women in California are associated with higher energy-adjusted diet costs. *American Journal of Clinical Nutrition*, 89(4), 1220–1226. http://dx.doi.org/10.3945/ajcn.2008.26916
- Via Campesina. (1996). The right to produce and access to land (Statement on food sovereignty). Retrieved from http://www.voiceoftheturtle.org/library/1996%20
 Declaration%20of%20Food%20Sovereignty.pdf
- Via Campesina. (2009, May 18). Food sovereignty: A new model for a human right (Statement by La Vía Campesina and Friends of the Earth International). Retrieved from http://viacampesina.org/

- Wekerle, G. (2004). Food justice movements: Policy, planning, and networks. *Journal of Planning Education and Research*, 23(4), 378–386. http://dx.doi.org/10.1177/0739456X04264886
- Windfuhr, M., & Jonsén, J. (2005). Food sovereignty: Towards democracy in localized food systems. Rugby, Warwickshire, U.K.: ITDG Publishing.
- Wunderlich, G. S., & Norwood, J. L. (Eds.). (2006). Food insecurity and hunger in the United States: An assessment of the measure. Washington, D.C.: National Academies Press.