

Social Issues in Current U.S. Agriculture

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Introduction: Social Issues in Current U.S. Agriculture

UNIT OVERVIEW

This unit introduces some of the significant social issues and social consequences of the development of U.S. agriculture. The unit's overarching goal is to convey to students how agricultural decisions and development impact people and social structures. This section examines the impact of consolidation and concentration of ownership on farmers and beyond, the impact to workers in the food system, and the effects on the rest of the population (food insecurity and health issues).

Lecture 1 examines social issues in the current food system in greater detail, starting with labor. The status of a majority of food workers, including farmworkers, food processors, and those in the food service industry are reviewed and the reasons for their current situation are explored.

Lecture 2 examines the social consequences of the current food system by focusing on the effects of concentration of ownership and consolidation, and the impact of the current food system on human health (e.g., food insecurity, obesity, antibiotic resistance) and other areas. The effects of recent food system changes on farmers and consumers are explored, along with problems associated with an increasing concentration of power.

MODE OF INSTRUCTION

> LECTURES (2 LECTURES, 50 MINUTES EACH)

The lecture outlines cover the social issues associated with the evolution and current organization of the U.S. food system. References given in the outlines are described in the References and Resources section.

LEARNING OBJECTIVES

CONCEPTS

- The U.S. food system, as it has been developed and as it is now, has many impacts on people
- The extent to which the current system put the risks and burdens of agricultural production on those with the fewest choices and least resources
- The impacts of consolidation in the food system
- The basic information about how hunger continues, even in a system of agricultural overproduction
- How the current food system impacts human health

Lecture 1: Social Issues in U.S. Agriculture—Labor

A. Overview

1. The current food and agriculture system produces certain “externalities”—the social and ecological consequences (“hidden costs” of production) that have resulted from changes in the food system and for which no individuals or institutions are held legally or financially accountable
2. The externalized social costs of production are, among others: Increases in the concentration of ownership over the means of food production; the associated declines in small-farm viability and the life quality indicators of rural agricultural communities; declines in the working conditions and life quality of agricultural laborers; continued consumer and farmworker exposure to unsafe levels of pesticides; and the persistence of hunger in the context of the overproduction of food

B. Issues with Labor in the Food System

(Main sources: Allen and Melcarek 2013; Jayaraman 2013; Thompson and Wiggins 2002; VanDeCruze and Wiggins 2008)

1. The food system workforce
 - a) People working in the food system include those who grow, process, distribute, and sell food. They also include unions, investors, input suppliers, researchers, government employees, and non-governmental organizations (NGOs). Workers in these groups range from owners of business to hourly hired labor.
 - b) According to a National Commission on Agricultural Trade and Export Policy report (1986), around 23% of the workforce is involved in production agriculture and jobs that make up the food system as a whole
 - c) The Bureau of Labor Statistics (BLS) 2012 survey estimates that the hired workers in the food chain— farmworkers, food processing workers, food preparation and serving workers—comprise 10.4% of the total US workforce. However, their agricultural labor numbers are far below that of the USDA's count, and front line supervisors are not included. Thus, the true percentage is likely higher than reported here.
 - d) A BLS survey estimates that food preparation and serving workers comprise approximately 8.9% of the workforce, with 11.5 million workers. They also estimated that there were 720,970 food processing workers, and 372,060 meat processing workers.
 - e) As of 2006, there were an average of just over a million hired farmworkers—which is a third of the people working directly in agriculture. The other 2 million were self-employed farmers and family members (unpaid); (Kandel 2008).
 - f) According to a National Agricultural Workers survey, 83% of farmworkers identify themselves as part of an Hispanic or Latino group; 8% identified as indigenous, American Indian or Alaskan native; 4% identified themselves as Black/African-American (U.S. Department of Labor, No Date: a)
 - g) Many of these jobs are required to produce our food. Farmworkers are necessary for the production of fresh fruits and vegetables, which mostly cannot be harvested by machines. Meat consumption requires human labor despite the machinery available for meat processing.

2. Underpaid and unrepresented

- a) A large portion of jobs in the food chain, what we will refer to as food system jobs, pay very low wages. These include food service, processing, and farmworkers.
 - i. Farmworkers have the highest poverty rates among other workers in the U.S. Their income ranges from \$10,000–\$18,000 per year, but has also been reported at a median of \$7,500.
 - ii. Of all the lowest paying occupations in the U.S., 7 of the 10 jobs are in restaurant positions
 - iii. The average salary for those in the food processing industry (which includes bakers, butchers, meat packers, etc.) was less than half of the salary average for what all occupations earned
 - iv. Few in these jobs have paid sick days or health benefits
- b) Most of these jobs are also unrepresented, meaning that they don't have collective bargaining as a source to help balance the power and interests with very large organizations
 - i. Only 16% of food processors were reported by the U.S. Department of Labor to have union contracts
 - ii. As of the early 2000s, fewer than 10% of workers in strawberry fields were unionized with the United Farm Workers (Schlosser 2003)
- c) These jobs are often low wage due to special labor laws
 - i. Federal law only requires a minimum cash wage for tipped employees of \$2.13 per hour. Most states mandate a higher wage, but many don't (United States Department of Labor 2014). In fact, half of the states allow the wage to be between \$2.13 and \$3.00. (Jayaraman 2013).
 - ii. Farmworkers were excluded from national labor protection laws until 1978, when those on larger farms were finally included in the Fair Labor Standards Act. However, they are still not included in overtime pay requirements. Farmworkers on small farms are excluded from a minimum wage as well (United States Department of Labor N.D.).
- d) It is not uncommon for food system workers to report that their wages have been shorted (they were not paid what they earned) or that overtime was withheld
- e) People of color often make less than whites. This holds true across the production, processing, distribution, and service sectors. People of color are also over-represented in the low paying food system jobs (Yen Liu and Apollon 2011).
- f) Similarly, women have earned less than men in food system jobs, such as farming, food processing and food services

3. Health impacts

These low-wage jobs have a number of health impacts associated with them

- a) Food insecurity
 - i. According to California Institute for Rural Studies research, 45% of Fresno County farmworkers, and 66% of Salinas Valley farmworkers are food insecure, despite living in two of the most agriculturally productive regions in the U.S. (Wadsworth 2014)
 - ii. For those farmworkers who live in rural areas and unincorporated regions, there is little public transportation or access to healthy foods. Given that farmworkers have low rates of car ownership (39%), it makes access to food even more difficult. Being able to afford food is also difficult, considering the low wages they earn (Wadsworth 2014).
 - iii. See Lecture 2 in this unit for more information on food security

b) Pesticides

- i. 4080 cases of sickness from pesticide residues were reported in California between 1982–2007. Research shows that cases of pesticide exposure often go unreported. Oxfam American estimates that 300,000 U.S. farmworkers are sickened each year from pesticides.
- ii. Much exposure happens when workers are doing routine tasks that don't include applying pesticides. Farmworkers contact pesticides by breathing them, having them spilled or sprayed accidentally, or by coming in contact with plants with residues.
- iii. A North Carolina study found that being sprayed with pesticides or being aware of strong chemical smells while working were reported by half of the respondents
- iv. Children of farmworkers are often exposed to pesticides from working alongside their parents, living close to fields that are sprayed, and from residue that parents bring home on clothes, etc. Prenatal exposure has been associated with neurodevelopment problems, such as lowering of IQ, brain function, reflexes, and ability to connect (autism and Asperger-type conditions; Frienkel 2014).
- v. Pesticides can affect people in acute ways, causing headaches, nausea, vomiting, dizziness, rashes, and burns. They can also cause problems over time, leading to cancer or sterility. Birth defects and other reproductive risks are also problems.

c) Injuries

- i. Reported Injuries and illness are much higher for food system workers. The average rate for all private industry in 2006 was 4.4 injuries per 100 full time workers. For crop production the rate was 5.8, poultry processing was 6.6, and animal slaughtering (except poultry) was 12.5. The disability rate for farmworkers is three times that of the general population.
- ii. Farmworkers are subject to heat exhaustion, musculoskeletal issues (back problems are common), and accidents with ladders and machinery. Cuts, scrapes, and rashes are also issues.
- iii. Food processing involves using heavy machinery and cutting implements, and doing repetitive work. Food processing workers have high rates of carpal tunnel syndrome, which can be disabling. Animal slaughtering (excluding chickens) has lacerations as the most common injury—as most people on the quick-moving disassembly line are using a knife. Those processing animals are also exposed to viruses, bacteria, and other substances that contribute to respiratory diseases.

d) Access to health care

- i. Once injured, most food system workers have barriers to receiving health care—with few having health insurance or paid sick leave (the Affordable Care Act may provide or increase benefits to some [Farmworker Justice 2012]). They often lack needed money to pay for treatment and fear losing wages by taking time off to seek treatment.
- ii. Some are discouraged from seeking outside medical care to keep injury rate statistics and costs down (see Schlosser 2001, Chapter 8 for meat packers stories)
- iii. For farmworkers, workers compensation does not necessarily cover them in all states. Additionally, getting access to medical care is less likely due to lack of transportation and being unaware of available sources.

4. Food system workers' experience

(see Rothenburg, Chapter 1, for individual farmworker stories, Jayaraman 2013 for food service industry workers, and Schlosser 2001, Chapter 3 for fast food worker and Chapter 8 for meat packing worker stories)

a) Living situations

- i. For farmworkers, overcrowding in dwellings is a common issue. Two different surveys (one from 1980 and one from the late 1990s) show that 85% and 60% of units are filled beyond capacity. This means that farmworkers were often sleeping in living rooms or on kitchen floors.
- ii. Research also reports significant structural damage to dwellings. One third showed sagging features (walls, ceilings, floors) or holes in the roof or both.
- iii. Given that one study showed that their average salary was around \$850 per month, paying the average \$200 per month for rent is a large portion of one's income. The average rent on a mobile home or duplex was at or just above \$425. This situation doesn't allow people to have much money left for food, clothing, and other necessities.

b) Working conditions

- i. Farmworkers do repetitive tasks for long periods of time, either bending over harvesting or reaching on ladders. This work is often done in extreme temperatures, including summer heat and autumn cold.
 - ii. Food processing workers—particularly slaughterhouse workers—are subject to a variety of difficult working conditions. Many work at 40 degrees to keep the meat cool, while making many cuts per minute with knives. When people get injured they are encouraged not to go to the doctor, and treated better if they don't. Injuries are frequently under reported.
 - iii. For restaurant workers, being overlooked for advancement in pay or position rank based on ethnicity or gender, is commonly reported
 - iv. Reports of sexist comments and harassment are common from female food system workers across the types of work
 - v. Forced overtime and failing to pay overtime rates are also reported
 - vi. Meat packers in Colorado who have a major disability from an injury, such as loss of a body part, can only receive very limited compensation. They can get a maximum of \$36,000 for the loss of an arm, or up to \$4,500 for the loss of a finger. For unskilled and uneducated workers, these physical issues create a profound limitation on their future earning ability, which is not covered by these awards (Schlosser 2001).
- c) Despite the modest gains made during the 1960s–1970s with Cesar Chavez, agricultural labor remains poorly compensated, difficult, and dangerous work for millions of people

C. Factors That Contribute to Current Food Worker Situations

1. Long history of exploitation (VanDeCruze and Wiggins 2008; see also Unit 3.1, Lecture 1, History of U.S. Agricultural Development)
 - a) The growth of large-scale agriculture in the Southern states relied on the enslavement of Native Americans and Africans
 - b) Post-slavery, the sharecropping system was used widely in the South. Farmers would do the work in exchange for a small percentage of the crop, which usually went back to the land owner to cover debts, keeping people impoverished.
 - c) Farm laborers were often from dispossessed groups with few options, such as immigrants to the U.S. Having little political power and limited economic choices, they could not contest working conditions or pay.

2. Immigration policy, consolidation, and free trade agreements have helped to keep wages low
 - a) Significance of U.S. labor and immigration policies
 - i. Carey McWilliams' thesis on the ethnic succession of agricultural labor: That the U.S. government has designed immigration policies that introduce new (ethnic-based) group of workers who are willing to work for low wages and live in sub-standard conditions
 - Organizing efforts of immigrants are undermined through the repeated introduction of new groups of workers (of a different ethnicity) to replace "recalcitrant" workers who protest working conditions (see McWilliams 1935, Introduction)
 - Examples of this cycle: Chinese, Japanese, Punjabi Indians, Dust-Bowl migrants, Filipino, and Mexican immigrant labor throughout the 20th century
 - ii. Farmworkers from other countries who get documentation as part of the H-2A program are not protected by the federal legislation that oversees farmworker labor. They do not have the right to bargain collectively or unionize (Ahn et al 2004).
 - iii. It is estimated that half of all hired farmworkers have an unauthorized immigration status (Kandel 2008). It is also estimated that 40% of food service workers in New York City are undocumented (Jayaraman 2013).
 - b) The role of consolidation
 - i. Consolidation of retail puts the larger corporations in the driver's seat, where they can set prices, particularly before the crop is even planted. This puts the risk of farming on the growers, pressuring them to cut costs—of which labor forms a significant part, particularly for fruits and vegetables (Ahn et al 2004).
 - ii. Meat slaughtering and packing plants used to be unionized and offer decent-paying jobs. After one large company, IBP, mechanized the slaughtering process and moved out of the urban areas (where union support was strong), and into rural anti-union states, they were able to cut worker pay. Being a large company, IBP then undercut other companies enough to drive them to do the same thing—go rural and depend on immigrant labor (Schlosser, 2001).
 - IBP, a slaughtering/meatpacking business, has an office in Mexico City advertising jobs in the U.S. and offering transportation to get there (Schlosser 2001)
 - c) The role of free trade—increasing immigration
 - i. Free trade agreements (North American Free Trade Agreement, NAFTA, and the General Agreement on Tariffs and Trade, GATT), World Bank requirements, and policies favoring big business cut much of Mexico's agricultural support to farmers, which dropped 90% in the first 7 years after the signing of the NAFTA agreement. Many subsistence farmers were forced to look for work elsewhere, including the factories and food work in the U.S. Additionally, since U.S. corn is still greatly subsidized, it can undercut the price of Mexican corn, further driving small subsistence farmers out of business and forcing them to look for wage jobs in the U.S. (Ahn et al 2004).
3. Low wages and seasonality of agricultural work together to further impact farmworkers' economic situation
 - a) Even though farmworkers might receive an hourly amount above minimum wage, much farm work is only needed seasonally, such as at planting and harvests times. They also are not paid for workdays cancelled due to rain or other weather issues. This leaves many farmworkers under- or unemployed for periods of time. They bear the costs of agriculture's intermittent and unpredictable nature (Rothenberg 1998).

Lecture 2: Social Issues in U.S. Agriculture— Concentration & Health

A. Impacts of Food System Concentration

1. Concentration across all sectors of the food system has increased greatly in the latter half of the 20th century (see Unit 3.1, Lectures 1 and 2). There are fewer and larger farms and many fewer farmers. Seed production, food processing, retail, and other sectors of the food system are often dominated by a handful of large companies.
2. Implications of concentration
 - a) Concentration of power: Production consolidation means consolidation of power and decision making. Such corporations “have considerable power in dictating how and where agricultural production takes place” (see Lyson and Raymer 2000, p. 200) as well as what is available in the marketplace. For example:
 - i. Walmart, being the largest retailer of food, exerts significant power. It has shifted the burden of risk to its suppliers, who now have to monitor the products they send, even on the shelves of Walmart itself. Walmart’s contracts are nonnegotiable—suppliers must simply accept what is offered without modification. If a supplier isn’t able to give all of the product agreed upon, or if there is an apparent discrepancy, the supplier agrees to be “fined.” Since Walmart is the biggest buyer for food processors, processors have to do what the company says (Hauter 2012).
 - ii. In a U.S. Department of Justice (DOJ) inquiry regarding seeds, corn and soybean growers have testified to that there is a lack of choice for seeds (both genetically modified and conventional), that they are paying much higher prices for seeds compared to the mid-1990s, and that their use of seeds is greatly restricted (U.S. DOJ 2012)
 - b) This concentration of power allows a few firms in an industry to work together to set prices in their favor in an uncompetitive manner
 - i. A USDA study found that big retailers had, in some cases, used their market power to set prices below competitive prices to suppliers, and above competitive prices to consumers (Dimitri, Tegene, and Kaufman 2003)
 - c) Extended influence: Members of the boards of directors of these multinational corporations frequently overlap, and typically have very similar educational and social backgrounds, thus exacerbating the problem of power concentration. Thus, much of the power in the food industry rests in the hands of relatively few individuals who tend to share common worldviews regarding the environment, labor, and food safety issues.
 - d) These very large corporations have significant influence over policy, often indirectly through networks and connections with organizations that promote political agendas. Other influence can be direct. For example:
 - i. “In January of 1987, Mike Harper told the newly elected governor of Nebraska, Kay Orr, that ConAgra wanted a number of tax breaks—or would move its headquarters out of Omaha. The company had been based in the state for almost seventy years, and Nebraska’s tax rates were among the lowest in the United States. Nevertheless, a small group of ConAgra executives soon gathered on a Saturday morning at Harper’s house, sat around his kitchen table, and came up with the basis for legislation that rewrote Nebraska’s tax code. The bill, drafted largely by ConAgra, sought to lower the state taxes paid not only by large corporations, but also by wealthy executives. Mike Harper personally stood to gain about \$295,000 from the proposed 30 percent reduction in the maximum tax rate on personal income” (Schlosser 2001, pp. 163-164).

- e) Large corporations are able to use the legal system in their favor. For example:
 - i. Monsanto's own contracts acknowledge that seed matter can drift to other crops, but claim they are then not responsible for the contamination. On the other hand, Monsanto is able to prosecute farmers that might have crops in their fields contaminated by pollen from Monsanto seed, as the law does not require that the company prove intent on the part of the farmer. Farmers don't generally have the resources to contest Monsanto in court (Freese and Kimbrell 2013).
 - f) Large corporations are also less affected by other balances of power. For example:
 - i. "In most businesses, a high injury rate would prompt insurance companies to demand changes in the workplace. But ConAgra, IBP and the other large meatpacking firms are self-insured. They are under no pressure from independent underwriters and have a strong incentive to keep workers' comp payments to a bare minimum. Every penny spent on workers' comp is one less penny of corporate revenue." (Schlosser 2001, p 184).
3. Other consequences of consolidation
- a) The number of small and mid-sized farms has been decreasing while the number of large farms increases (U.S. Department of Agriculture 2012 and U.S. Department of Agriculture 2007)
 - i. Those grossing less than \$100,000 (small farms) decreased 7%, from 1,847,663 in 2007 to 1,721,170 in 2012. Those grossing between \$100,000 and \$249,999 (often considered mid-sized farms), decreased 6%, from 147,500 in 2007 to 138,883 in 2012. These mid-sized farm decreased by 13% between 2002 and 2012.
 - ii. The number of large-scale farms has been increasing. Those grossing \$1,000,000 or more increased by 43%, from 55,509 in 2007 to 79,225 in 2012.
 - iii. Farms of 2000 acres or more have increased by 11%, from 27,092 in 2007 to 30,158 in 2012
 - b) Some growers are functionally being turned into "serfs" with unfair contract requirements. For example:
 - i. Much broiler production is embedded in a vertically integrated system, where the industry produces the baby chicks and the chicken feed, and then purchases the birds for slaughter. Farmers have to buy all the chicks and feed from the corporation, but must build their own facilities to house the birds and sell the birds back to the same corporation. These buildings can cost \$100,000 per unit. By the time they are paid off, they will need to be updated and modernized. Hence, it is difficult for the grower to get out of debt. Many farmers don't live close enough to more than one firm that buys birds, so they don't get to negotiate prices, but have to take what is offered. Additionally, companies can have informal agreements not to take on other companies' growers, thus leaving growers with few choices or options (Heffernan 1998).
 - c) This loss of farms appears to impact rural communities
 - i. In the late 1940s, researchers started exploring whether the increase in concentration in farms, and the decrease in small independent farms, had an impact on the communities' overall well being (Lobao and Meyer 2001)
 - ii. Early research demonstrated that having more small farms was related to community well being—a finding that resulted in a huge backlash by corporations; as a result, the USDA shut down its unit that commissioned the research (Lobao and Meyer 2001)
 - iii. The majority of later studies, including much larger quantitative studies, have shown similar results

4. Impacts on other areas
 - a) Labor impacts
 - i. The bargaining power of workers is diminished when there are few employers to choose from in an industry (Lynn 2010)
 - b) Consumer impacts
 - i. Consolidation is often claimed to make prices go down for consumers, but one recent study showed prices actually went up in 4 out of 5 cases (Ashenfelter and Hosken 2008)
 - c) Animal welfare
 - i. CAFOs severely restrict animals' movements, sometimes to the point of not even being able to turn around. This restriction can limit animals from expressing their normal behaviors, causing high levels of stress that can further impact physical health (Pew Commission on Industrial farm Animal Production 2009).
 - d) Environmental and health (see also Unit 3.3, Environmental Issues in Modern Agriculture)
 - i. Concentrated animal feeding operations (CAFOs) are replacing small and mid-sized animal production farms. CAFOs concentrate animal waste in much larger quantities than can be successfully handled by the land on which the operation resides. Waste products, including pathogens and nutrients, need special handling. Hormones, antibiotics, and pesticides also accumulate and can end up in local waterways (Pew Commission on Industrial farm Animal Production 2009).
 - ii. CAFOs have impacts on animal welfare and on human health—from increasing antibiotic resistance to polluting the local community's air and water; see Unit 3.3, Environmental Issues in Modern Agriculture, for more information (Pew Commission on Industrial farm Animal Production 2009)
 - iii. CAFOs also use large amounts of resources, from water to fossil fuels, much more than most other food production efforts (Pew Commission on Industrial farm Animal Production 2009)
 - iv. Consolidation in the seed industry has led to a decrease in seed diversity (Freese and Kimbrell 2013), which in the long term could negatively impact overall food security

B. Impacts to Health

The current food system in the U.S. impacts human health and nutrition in many ways

1. Food security (Allen and Melcarek 2013; Coleman-Jensen et al. 2013)
 - a) Not having enough to eat is associated with many serious health impacts (Troy et al 2011)
 - b) Worldwide, according to 2011–2013 statistics, 842 million people (12%) are considered undernourished. While better off than a majority of countries worldwide, there are many in the U.S. who do not have enough food to eat (Food and Agriculture Organization, no date).
 - c) "The World Food Summit of 1996 defined food security as existing 'when all people at all times have access to sufficient, safe, nutritious food to maintain a healthy and active life.'" Access means both that people have the physical ability to get food and the economic resources. It also includes that people have access to preferred foods (World Health Organization, no date).
 - i. Food security is made up of three factors:
 - "Food availability: Sufficient quantities of food available on a consistent basis.
 - Food access: Having sufficient resources to obtain appropriate foods for a nutritious diet.
 - Food use: Appropriate use based on knowledge of basic nutrition and care, as well as adequate water and sanitation."

- d) During 2012, 14.5% of U.S. households were considered to be food insecure at some time during the year. This means that these households “. . . had difficulty at some time during the year providing enough food for all their members due to a lack of resources.” Slightly over one-third of these people (5.7%) have very low food security. This means that “. . . at times during the year, the food intake of household members was reduced and their normal eating patterns were disrupted because the household lacked money and other resources for food” (Coleman-Jensen et al 2013, p. 5).
 - e) The percentage of food insecure households in the U.S. fluctuated between 10.1% and 11.9% between 1998 and 2007. After 2008 it rose above 14.5%, where it has stayed since.
 - f) Part of the reason for the increase in food insecurity starting in 2008 is the extreme rise in food prices during that time. During the food crisis in 2008, food prices rose significantly for some crops, such as rice and wheat (75% and 120% respectively). Globally, average food prices rose over 50%.
 - g) Food insecurity was higher for households living below the poverty line (40.9%), with children (20.0%), and headed by a single parent (35.4% for women and 23.6% for men). Food insecurity was also higher for Black and Hispanic households (24.6% and 23.3%).
 - h) A primary cause of food insecurity is poverty (Johns Hopkins Center for a Livable Future 2010)
 - i) One factor contributing to food insecurity is food deserts (Allen and Melcarek 2013; Agricultural Marketing Service, no date; Schafft, K., E. Jensen, and C. Hinrichs 2009)
 - i. Many low-income areas are considered food deserts. Food deserts are described as “. . . urban neighborhoods and rural towns without ready access to fresh, healthy, and affordable food,” (Agricultural Marketing Service, no date). These areas have no grocery stores. They may have no access to food, or only have access to fast food or convenience stores. Thus, the immediately accessible food is less healthy and/or more expensive.
 - ii. Food deserts are also more common in low-income neighborhoods that are predominantly people of color
 - iii. Food deserts, and food insecurity, appear to be related to health problems, e.g., research has found a relationship between food deserts and obesity and diabetes.
2. Obesity (Schoonover and Muller 2006)
- a) Extent of obesity: 2/3 of people in the U.S. are overweight and 1/3 are obese. The rates of obesity among youth have doubled and even tripled for different age groups since the 1970s
 - b) Obesity is associated with many health effects, such as diabetes, heart disease, some cancers, and more.
 - c) The causes of obesity are complex (see on-line interactive diagram at: www.shiftn.com/obesity/Full-Map.html)
 - d) However, the current food system contributes several factors:
 - i. Lack of access to healthy foods, which exists in food deserts, as well as easier access to less nutritious foods, are important components
 - ii. Farm bill policies affect food prices
 - U.S. Farm Bill policies make commodities (corn and soy) much cheaper than fruits and vegetables
 - These commodities are used to make less healthy processed foods, and inexpensive sweeteners and oils. This makes less healthy food less expensive, and therefore more economical than healthier foods. For example, at McDonalds, it is more economical to buy a hamburger (partially due to cheap price of corn used to produce beef) than a salad.

- Due to economic constraints, many do not have to the capacity to buy fresh, healthier foods. Even for those that do have a choice, consumer research has found price to be a strong determining factor in what people purchase. One study found that lowering the price of healthier snacks in a vending machine encourages people to buy more of them. But when the prices returned to normal, they chose the less healthy snacks.
3. Antibiotic resistance (Center for Disease Control 2013; Pew Commission on Industrial Farm Animal Production 2009)
 - a) Industrial farming is contributing to antibiotic resistance
 - i. Many bacteria are becoming resistant to antibiotics. Antibiotic overuse is the main reason, and thus minimizing unnecessary use is critical. The two unnecessary uses are the over-prescription of antibiotics to humans, and the unnecessary use of antibiotics in animals. Currently CAFO operations use low levels of antibiotics regularly in animals as such a use has been found improve growth rates. It is estimated that up to 70% of the antibiotics used are for farm animals.
 - ii. As antibiotics become ineffective, many more people will become sick, and many will die, from simple infections
 4. Impact of agricultural chemicals (Pesticide Action Network, no date)
 - a) Agricultural pesticides increase risks of a number of diseases, such as cancer, asthma, autoimmune diseases, and others
 - b) Over 90% of Americans have tested positive for having pesticide metabolites in their blood, such as from DDT and chlorpyrifos (a neurotoxic insecticide)
 - c) Those who work on farms, their families, and the broader rural community are most affected by these chemicals
 5. Living in agricultural communities
 - a) Pesticide drift/exposure
 - b) CAFO impacts (Pew Commission on Industrial farm Animal Production 2009)
 - i. Ground water contamination can affect the drinking water supply for a large area. Infectious agents, such as flu virus, can affect the community as well as spread through the meat processing chain.
 - ii. Food-borne infections are more likely to happen due to the number of animals concentrated in one space
 - iii. Increased asthma risk and problems with odor from the facilities are other frequently cited issues

Discussion Questions

SOCIAL ISSUES IN CURRENT U.S. AGRICULTURE, LECTURES 1 & 2

1. Why do you think it is important to understand the social or human impacts of the food system?
2. What did you learn from these two lectures that was surprising to you? Why was it surprising? What did you previously assume to be true?
3. What are some of the most concerning issues raised? Why?
4. Are there any topics from these lectures that you are interested in learning more about? Why? How will you go about learning it?
5. How does learning about this material impact how you intend to participate with the food system (as a farmer, activist, consumer, etc.)?

References & Resources

SUGGESTED READINGS (DESCRIBED BELOW)

LABOR

- Schlosser, 2001, chapters 7 and 8
- Rothenberg, 1998
- Steinbeck, 1939

CONCENTRATION

- Hauter, 2012

HEALTH

- Freinkel, 2014
- Allen and Melcarek, 2013

LABOR REFERENCES/RESOURCES

Ahn, Christine, Melissa Moore, and Nick Parker. 2004. *Migrant Farmworkers: America's New Plantation Workers*. Food First Backgrounder, Vol 10, No 2. March 2004. www.foodfirst.org/fr/node/45

Good short summary of issues, particularly regarding immigration and free trade policies.

Allen, Patricia, and Hilary Melcarek. 2013. *The Human Face of Sustainable Food Systems: Adding People to the Environmental Agenda*. Sustainability in the Balance Series. Center for Agroecology & Sustainable Food Systems. Santa Cruz, CA. casfs.ucsc.edu/documents/issue-papers/sust_in_balance_5.pdf

This document summarizes recent data related to injustice in the food system. It provides statistics on health and labor issues, as well as summarizing efforts attempting to address these disparities.

Bauer, Mary, and Mónica Ramírez. 2010. *Injustice on Our Plates: Immigrant Women in the U.S. Food Industry*. Southern Poverty Law Center. www.splcenter.org/sites/default/files/downloads/publication/Injustice_on_Our_Plates.pdf

This report documents the lives of 150 immigrant women from Mexico and Central America who work in the fields and food processing factories in the U.S. It depicts the brutality of their situation, and concludes by

calling for legislation in different arenas to end the exploitation these workers frequently face.

Carrasquillo, Nelson. 2011. Race and ethnicity from the point of view of farm workers in the food system. Farmer workers in the food system. *Race/Ethnicity* Vol. 5. No.1. www.cata-farmworkers.org/Nelson%20Article.pdf

This article offers a brief history of farm work in the U.S., with a specific East Coast perspective.

Farmworker Justice. 2012. *Health Reform and Farmworkers*. Farmworkerjustice.org. www.farmworkerjustice.org/sites/default/files/documents/Health%20Reform%20and%20Farmworkers.pdf

Freinkel, Susan. 2014. Warning signs: How pesticides harm the young brain. *The Nation*. March 11. www.thenation.com/article/178804/warning-signs-how-pesticides-harm-young-brain#

This article summarizes new research on neurological effects of pesticides, particularly on the the children of farm workers.

Jayaraman, Saru. 2013. *Behind the Kitchen Door*. Ithaca, NY: Cornell University Press.

An excellent book about the food service industry. The author unveils the extent to which food service workers live below the poverty line, endure illegal treatment (withholding of wages and overtime pay), and endure race and gender discrimination. She also points out how even restaurants focused on qualities of the food movement, such as promoting local and sustainable, don't necessarily treat their employees well or even fairly. She also points to the many reasons why it matters, from human rights and dignity to the simple correlation in research that restaurants that don't treat their workers well are more likely to have health-related food practice violations. Very engaging to read. Stories can be useful for class discussions. She also provides potential solutions, with her primary goal to improve the lives of those working in the food service industry.

Kandel, William. 2008. *Profile of Hired Farmworkers: A 2008 Update*. Economic Research Report No. 60, Economic Research Service, U.S. Department of Agriculture. www.ers.usda.gov/media/205619/err60_1_.pdf

Lopez, Ann A. 2007. *The Farmworkers' Journey*. Berkeley: University of California Press..

This book explores the lives and situation of migrant farmworkers who routinely travel between west-central Mexico and central California to make a living. Ten years of conducting ethnographic research in California and Mexico led to the production of this book. Depictions of the lives of farmworkers, and subsistence farmers in Mexico, are presented along with the structural policies, institutions, and context that keep these people in perpetual poverty and this particular way of life.

McWilliams, Carey. 1935. *Factories in the Fields: The Story of Migratory Farm Labor in California*. Berkeley, CA: University of California Press.

Excellent and critical historical analysis of farm labor in California. Special emphasis is placed on the ways in which ethnicity and the seasonality of labor demand combine with industrial capitalism's infiltration of agriculture to create an unjust labor system.

The National Commission on Agricultural Trade and Export Policy. 1986. *New Realities: Toward a Program of Effective Competition*. Washington D.C.: U.S. Department of Agriculture.

Pollan, Michael. 2002. Power Steer. *New York Times Magazine*. 3/31/02. www.nytimes.com/2002/03/31/magazine/power-steer.html?pagewanted=all&src=pm

Enlightening investigative article navigating the U.S. beef industry.

Rothenberg, Daniel. 1998. *With These Hands: The Hidden World of Migrant Farmworkers Today*. New York: Harcourt Brace and Company.

This book describes the lives of farmworkers and the system within which they work. Interviews with farmworkers, contractors, farmers, and others in this area and presented in their words. Background research and the author's conclusions are also included. This wide variety of interviews gives the reader an education on the power relations and structure of employment in U.S. agriculture, as well as a

fair treatment of a very wide set of perspectives and first-person testimonies of the difficult racial, class, and citizenship problems associated with migrant labor.

Schlosser, Eric. 2001. *Fast Food Nation: The Dark Side of the All-American Meal*. New York: Houghton Mifflin Company.

This book focuses on all the components behind the production of fast food. Three chapters focus on labor issues. Chapter 3 looks at food service labor in the fast food restaurant. Chapter 7—Cogs in the Machine—give a brief history of the current meat packing industry, showing how it got to where it is today. Chapter 8 details what it is like working in the new meatpacking plants.

Schlosser, Eric. 2003. In the Strawberry Fields, in *Reefer Madness: Sex, Drugs, and Cheap Labor in the American Black Market*. New York: Houghton Mifflin Company.

Steinbeck, John. 1939. *The Grapes of Wrath*. New York: Viking Penguin Books.

At minimum, the first twelve chapters are recommended for their poignant and compelling discussion of the human and environmental impacts of agricultural modernization. The parallels between the experiences of the characters in this novel and today's migrant laborers should not be overlooked.

Thompson Jr., Charles D., and Melinda F. Wiggin eds. 2002. *The Human Cost of Food: Farmworkers' Lives, Labor, and Advocacy*. Austin, TX: University of Texas Press.

This edited book covers several topics related to farm labor, such as health, housing and immigration issues. Other chapters explore the how farmworkers are excluded from labor laws, history of the guest worker program, challenges facing migrant students, and the history of labor organizing. Includes an outline for developing a syllabus for a more extensive education, aimed at farmworker advocacy.

U.S. Department of Labor. 2012. Occupational Employment Statistics—May 2012 National Occupational Employment and Wage Estimates in the United States. Bureau of Labor Statistics. www.bls.gov/oes/current/oes_nat.htm#35-0000

U.S. Department of Labor. 2014. *Minimum Wages for Tipped Employees*. Wage and Hour Division. January 1, 2014. www.dol.gov/whd/state/tipped.htm#foot1

U.S. Department of Labor. No Date. *elaws—Fair Labor Standards Act Advisor*. Office of the Assistant Secretary for Policy. www.dol.gov/elaws/esa/flsa/screen75.asp

U.S. Department of Labor. No Date:a. *The National Agricultural Workers Survey*. Employment and Training Administration. www.doleta.gov/agworker/report9/chapter1.cfm

VanDeCruze, Denise, and Melinda Wiggins. 2008. *Poverty and Injustice in the Food System: Report for Oxfam America*. Student Action with Farmworkers. Durham, NC. ducis.jhfc.duke.edu/wp-content/uploads/2010/06/Poverty-and-Injustice-in-the-Food-System.pdf

This paper summarizes the situation of farm workers and food processing workers in the Southeastern U.S. It documents the current situation and demographics, explores the history of food workers, and discusses solutions to the particular issues in this region of the country.

Wadsworth, Gail. 2014. What Does Food Justice Mean for Farmworkers? *Food First Blog post*. January 14, 2014. www.foodfirst.org/en/What+Does+Food+Justice+Mean+for+Farmworkers%3F

Yen Liu, Y. and D. Apollon. 2011. *The Color of Food*. Applied Research Center. February 2011. www.foodfirst.org/en/node/3305

This report graphically displays statistics about food system workers throughout the supply chain. It is an excellent resource, available for free on the web.

CONCENTRATION REFERENCES/RESOURCES

Ashenfelter, Orley, and Daniel Hosken. 2008. *The Effect of Mergers on Consumer Prices: Evidence from Five Selected Case Studies*. National Bureau of Economic Research Working Paper Series, Working Paper 13859. Cambridge, MA. <http://www.nber.org/papers/w13859>

Dimitri, Carol, Ababayehu Tegene, and Philip Kaufman. 2003. *U.S. Fresh Produce Markets: Marketing Channels, Trade Practices, and Retail Pricing Behavior*. ERS Research Brief. AER-825.

Economic Research Service. U.S. Department of Agriculture. September 2003. www.ers.usda.gov/publications/aer-agricultural-economic-report/aer825.aspx#UwvviQF6V8pc

Freese, Bill, and George Kimbrell. 2013. *Seed Giants vs. U.S. Farmers*. Center for Food Safety and Save Our Seeds. www.centerforfoodsafety.org/files/seed-giants_final_04424.pdf

Hauter, Wenonah. 2012. *Foodopoly: The Battle over the Future of Food and Farming in America*. New York, NY: The New Press.

This book looks at issues around concentration and monopoly in the food system. Hauter's main thesis is that we cannot change the food system simply by voting with our pocketbooks, but that we must address the concentration, deregulation and corporate control in the biological sciences (seed) and processing/distribution realms.

Heffernan, William. D. 1998. Agriculture and monopoly capital. *Monthly Review* 50: 46 (July/August).

Loba, Linda, and Katherine Meyer. 2001. The great agricultural transition: Crisis, change and social consequences of twentieth century U.S. farming. *Annual Review of Sociology*, 27:103-124.

Lynn, B., and P. Longman. 2010. Who broke America's jobs machine: Why creeping consolidation is crushing American livelihoods. *Washington Monthly*. March 4. www.washingtonmonthly.com/features/2010/1003.lynn-longman.html

Lyson, Thomas A., and Annalisa Lewis Raymer. 2000. Stalking the wily multinational: Power and control in the U.S. food system. *Agriculture and Human Values* 17: 199-208.

Discusses multinational corporation's newfound control over the U.S. food system; the degree of concentration of control within the leadership of these firms; and the implications of this consolidation for growers, workers, and consumers.

Mitchell, Stacy. 2011. Eaters, beware: Walmart is taking over the food system. *Grist*. December 30, 2011. grist.org/food/2011-12-30-eaters-beware-walmart-is-taking-over-our-food-system/

Pew Commission on Industrial Farm Animal Production. 2009. *Putting Meat on the Table: Industrial Farm Animal Production in America*. A Project of The Pew Charitable Trusts and Johns Hopkins Bloomberg School of Public Health. www.ncifap.org/_images/PCIFAPFin.pdf

This document provides an excellent overview of the broad issues and problems stemming from large-scale animal production. It reviews how the current situation developed, public health issues, environmental impacts, animal welfare issues, effects on rural residents, and suggested solutions.

U.S. Department of Justice. 2012. *Competition and Agriculture: Voices from the Workshops on Agriculture and Antitrust Enforcement in Our 21st Century Economy and Thoughts on the Way Forward*. www.justice.gov/atr/public/reports/283291.pdf

U.S. Department of Agriculture. 2012. *Table 2: Market Value of Agricultural Products Sold Including Landlord's Share and Direct Sales: 2012 and 2007*. Census of Agriculture. www.agcensus.usda.gov/Publications/2012/Full_Report/Volume_1,_Chapter_1_US/st99_1_002_002.pdf

U.S. Department of Agriculture. 2007. *Table 2: Market Value of Agricultural Products Sold Including Landlord's Share and Direct Sales: 2007 and 2002*. Census of Agriculture. www.agcensus.usda.gov/Publications/2007/Full_Report/Volume_1,_Chapter_1_US/st99_1_002_002.pdf

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Agricultural Marketing Service. No Date. *Food Deserts*. United States Department of Agriculture. apps.ams.usda.gov/fooddeserts/foodDeserts.aspx

Allen, Patricia, and Hilary Melcarek. 2013. *The Human Face of Sustainable Food Systems: Adding People to the Environmental Agenda*. Sustainability in the Balance Series. Center for Agroecology & Sustainable Food Systems. Santa Cruz, CA. casfs.ucsc.edu/documents/issue-papers/sust_in_balance_5.pdf

This document summarizes recent data related to injustice in the food system. It provides statistics on health and labor issues, as well as summarizing efforts attempting to address these disparities.

Center for Disease Control and Prevention. 2013. *Antibiotic Resistance Threats in the United States: 2013*. U.S. Department of Health and Human Services. www.cdc.gov/drugresistance/threat-report-2013/pdf/ar-threats-2013-508.pdf

Coleman-Jensen, A., M. Nord, and A. Singh. 2013. *Household Food Security in the United States in 2012*. Economic Research Report Number 155, Economic Research Service, United States Department of Agriculture. www.ers.usda.gov/publications/err-economic-research-report/err155.aspx#.Uwu0w-F6V8pd

Food and Agriculture Organization of the United Nations. No Date. *Hunger Portal*. www.fao.org/hunger/en/

This interactive website give statistics on hunger world-wide, by country and year.

Freinkel, Susan. 2014. Warning signs: How pesticides harm the young brain. *The Nation*. March 11. www.thenation.com/article/178804/warning-signs-how-pesticides-harm-young-brain#

This article summarizes new research on neurological effects of pesticides, particularly on the children of farm workers.

Johns Hopkins Center for a Livable Future. 2010. *Hunger and Food Security: Background Reading*. From *Teaching the Food System Curriculum*. www.jhsph.edu/research/centers-and-institutes/teaching-the-food-system/curriculum/_pdf/Hunger_and_Food_Security-Background.pdf

This 6-page document provides a useful introduction to hunger and food security. It is intended as an overview for students.

Perkins, Tracy. 2009. 25 Stories from the Central Valley. twentyfive.ucdavis.edu/exhibit.aspx

This online photo exhibit documents the health impacts from agriculture pesticides and pollution on the primarily of color and poor residents of California's central valley, as well as actions of the women activists working for environmental justice.

Pesticide Action Network. No Date. www.panna.org

This is a useful website for information on pesticides, including their impacts on health and the environment.

Pew Commission on Industrial Farm Animal Production. 2009. *Putting Meat on the Table: Industrial Farm Animal Production in America*. A Project of The Pew Charitable Trusts and Johns Hopkins Bloomberg School of Public Health. www.ncifap.org/_images/PCIFAPFin.pdf

This document provides an excellent overview of the broad issues and problems stemming from large scale animal production. It reviews how the current situation developed, public health issues, environmental impacts, animal welfare issues, effects on rural residents and suggested solutions.

Rosset, Peter, Joseph Collins, and Francis Moore Lappé. 2000. Lessons from the Green Revolution: Do we need technology to end hunger? *Tikkun Magazine* 15(2) (March/April 2000): 52-56.

Good “Food First” connection of the issues of hunger, agricultural technology, ecology, income, and power.

Schafft, Kai A., Eric B. Jensen, and Clare Hinrichs. 2009. Food deserts and overweight school children: Evidence from Pennsylvania. *Rural Sociology* 74(2), pp. 153-177

Steingraber, Sandra. 2010. *Living Downstream: An Ecologist’s Personal Investigation of Cancer and the Environment*. Philadelphia, PA: Da Capo Press.

This well-written book explores the relationship of chemicals (agricultural and others) in our environment to cancer, through both the science and the author’s own story as a biologist and cancer survivor. An important and engaging effort.

Schoonover, Heather, and Mark Muller 2006. *Food without Thought: How U.S. Farm Policy Contributes to Obesity*. Instituted for Agriculture and Trade Policy. March 2006. www.iatp.org/files/421_2_80627.pdf

Troy, Lisa, Emily Ann Miller, and Steve Olson. 2011. *Hunger and Obesity: Understanding a Food Insecurity Paradigm* (workshop summary). Institute of Medicine of the National Academies. The National Academies Press. Washington D.C.

World Health Organization. No Date. *Trade, Foreign Policy, Diplomacy and Health: Food Security*. www.who.int/trade/glossary/story028/en/

OTHER RESOURCES

Alkon, Alison Hope, and Julian Agyeman, eds. 2011. *Cultivating Food Justice: Race, Class, and Sustainability*. Cambridge, MA: MIT Press.

This edited book offers a series of narratives exploring how race and class are intertwined in the food system. Its premise is that much of the food movement has come from white and middle-class people, who come from a shared perspective. This book intends to provide a broader critique of the industrialized food system, including injustice in the conversation.

Allen, Patricia. 2004. *Together at the Table: Sustainability and Sustenance in the American Agrifood System*. University Park, PA: Pennsylvania State Press.

Examines the growth and development of alternative food system initiatives in the U.S., including: The growth of organic farming and the development of the USDA National Organic Program; the growth in popularity of direct marketing relationships such as farmers’ markets and community-supported agriculture (CSA); the growth of urban agriculture and community garden programs; the increase in natural and social science research programs focused on sustainable food and farming systems.

Cunningham, Brent. 2010. Food fighter: Grist’s Tom Philpott on why class needs to be a part of the food debate. *Columbia Journalism Review*, 4 May. Online.

Friedland, William H. 1981. *Manufacturing Green Gold*. Cambridge, MA: Cambridge University Press.

A classic work describing how agricultural industry structure is related to the social relations of production and technological change.

Gottlieb, Robert, and Anupama Joshi. 2010. *Food Justice*. Cambridge, MA: MIT Press.

This book describes the myriad issues pertaining to food justice, such as farmworkers’ and meat processing workers’ conditions, food access issues, and over-processing of food. The book also describes the food justice movement that has arisen from these conditions. It tells the stories of groups and individuals working to make change, both in the U.S. and internationally.

Guthman, Julie. 2008. "If they only knew": Color blindness and universalism in California alternative food institutions. *The Professional Geographer* 60 (3):387-97.

Patel, Raj. 2007. *Stuffed and Starved*. Brooklyn, NY: Melville House Publishing.

Excellent book that provides an overview of the current food system and the results of the choices made by corporations, governments, farming communities, and others. Topics covered include farmer suicides, migration, trade agreements and development, agribusiness winnings, control of seed, and the example of soybeans—where all the factors described come together. Also includes a focus on the power of the supermarket industry and how people are constrained as consumers.

FILMS AND VIDEOS

A Place at the Table. 2012. Magnolia Pictures (84 minutes).

www.magnpictures.com/aplaceatthetable/

This film explores the issue of hunger in the U.S. It follows three families as they grapple with food insecurity, and explores the reasons behind it. The film makes the point that we can do something to end it.

Food Stamped: Is It Possible to Eat Healthy on a Food Stamp Diet? 2011. By Shira and Yoav Potash. Summit Pictures (62 minutes).

www.foodstamped.com

This documentary chronicles a couple as they attempt to live in a healthy manner on a food stamp budget. During this experiment, they also consult with others in the food system: those on food stamps, congress members, nutrition experts, etc.

Forgotten Voices: The Story of the Bracero Program. No Date.

www.youtube.com/watch?v=AL5d9CWW0Xg

This 7-minute video provides an excellent overview of one group of immigrants' experience, under one policy program. It provides a very descriptive look at the lives of these workers, including the abuses and reasons for those participating, in the program.

The Harvest / La Cosecha: The Story of Children Who Feed America. 2011. (80 minutes).

theharvestfilm.com

This film documents child labor in U.S. agriculture.

Slavery and the Making of America. 2004. Thirteen/WNET New York.

www.pbs.org/wnet/slavery/index.html

This multipart series includes the history of slavery and agriculture. This website contains interactive features. Check Youtube for video episodes.

Soul Food Junkies. 2012.

www.pbs.org/independentlens/soul-food-junkies

In a quest to understand why his father is unwilling to change his traditional soul food diet while dealing with a serious health issue, the filmmaker ". . . sets out to learn more about this rich culinary tradition and its relevance to black cultural identity." He explores the issues through conversations with a variety of people in the food system, and identifies socio-economic issues that play a large role. He also explores solutions by speaking with those in the food justice movement making those changes happen, including making healthier versions of soul food.

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