

1.0 Small Farm Viability Today

Introduction	3
Lecture 1 Outline: Developments and Directions	5
Lecture 2 Outline: Basic Principles of Agricultural Economics; Towards the Maintenance of U.S. Small Farms	11
Resources	15
Appendix: 1998 Policy Recommendations of the USDA National Commission on Small Farms: "A Time to Act"	19

Introduction: Small Farm Viability Today

UNIT OVERVIEW

This unit provides students with an overview of trends and issues that affect small farm economic viability. It begins with a brief history of the development of the U.S. agricultural economy and considerations of the concept of a “small farm.” Examination of some of the important aspects of small farms finishes out Lecture One.

Part 1 of Lecture Two defines basic economic terms that are used in subsequent sections of the lecture, which discuss implications of the economic system for small farms, barriers to economic viability, and future needs for maintaining small farms as part of the American agricultural system.

MODES OF INSTRUCTION

> LECTURE (2 lectures, 3 hours total)

LEARNING OBJECTIVES

CONCEPTS

- Historical development of the current U.S. agricultural system
- Changes in farm tenure, market share, and demographics of farmers
- Current social, economic, and political issues affecting small farms and farmers in the U.S.
- Basic agricultural economics terminology relevant to small farms
- Barriers to small farm viability
- Market strategies and their drawbacks
- Public and policy intervention strategies

Lecture 1 Outline: Developments and Directions

PART I. INTRODUCTION TO THE DEVELOPMENT OF THE U.S. AGRICULTURAL SYSTEM

(References for Part I: *A Time to Act*, 1998; NASS statistics; *Farms and Land in Farms*, 2004 (USDA); *Structural and Financial Characteristics of U.S. Farms: 2001 Family Farm Report*; Oxfam America, 2004; *Pigford Consent Decree*, 1999; *Civil Rights Action Team report*, 1997; Peterson, 1997; Miles and Brown, 2003; Labao and Meyer, 2001)

A. Historical Social Factors Influencing the Direction of Development of the U.S. Agri-food system

(Source: Unit 3.1: *The Development of U.S. Agriculture in Teaching Organic Farming and Gardening: Resources for Instructors*, Miles and Brown, 2003. Detailed lecture notes and suggested readings available online at www.ucsc.edu/casfs.)

1. Land Use and Settlement
2. Scientization and Rationalization of Agriculture
3. Commodification and Capitalization of Agriculture
4. Research, Capital, and Politics in Agriculture
5. Surplus, Over Production, Export Agriculture, and Global Food Trade

B. What Has Changed in U.S. Agriculture?

1. Concentration of land ownership
 - a. Land has become increasingly concentrated in the hands of larger farms and agribusiness corporations (see USDA Census data on land tenure over time, www.nass.usda.gov/census/; see graph: "Number of Farms and Average Farm Size," in *Farms and Land in Farms* report 2004, page 3; see also Figure 5: "Number of Farms by Tenure: 1910-1997," page 12 in *Structural and Financial Characteristics of U.S. Farms: 2001. Family Farm Report*)
 - b. Socially disadvantaged farmers have lost more land holdings than other small-scale farmers as a result of U.S. government policies that either intentionally or unintentionally put small farmers at economic risk
 - i. Land tenure inequities exist between different ethnic and gender groups of farmers (i.e., African Americans; Latinos; women). See the following USDA NASS tables: www.nass.usda.gov/census/census02/volume1/us/index1.htm.
 - Table 47. Selected Farm Characteristics by Race of Principal Operator: 2002
 - Table 48. Women Principal Operators—Selected Farm Characteristics: 2002 and 1997
 - Table 49. Spanish, Hispanic, or Latino Origin Principal Operators—Selected Farm Characteristics: 2002 and 1997
 - Table 53. Women Operators—Selected Operator Characteristics: 2002 and 1997
 - Table 54. Spanish, Hispanic, or Latino Origin Operators—Selected Operator Characteristics: 2002 and 1997
 - ii. Land price is a function of quality. As farm profits decrease, poorer (likely to be smaller) farmers farm marginal farmland, leading to decreased output, efficiency, and profitability (see below, section IIB, Characteristics; *A Time to Act*, 1998; Oxfam America, 2004; USDA Civil Rights Action Team report, 1997; Peterson, 1997).
2. Concentration of market share: vertical integration* and the effects on small farm viability (*see definitions in Lecture 2 Outline, Part I)
 - a. Due to economies of scale*, food that is produced, packaged and sold by larger, vertically integrated* firms is sold at a lower price than products produced by small-scale farmers
 - i. Small-scale growers have a higher cost per unit-output. They must receive a higher return in order to earn profits equal to larger farms.

- b. Market control, consumer prices, and small farm incomes
 - i. As larger, vertically integrated farms and agribusiness operations increase control on all levels of production and marketing, their production costs are driven even lower. Over time small-scale producers become less able to compete with larger-scale growers and agribusiness firms.
 - ii. Consumers are accustomed to low food prices. Without knowledge of hidden/externalized* social and environmental costs (which may be difficult for consumers to obtain), they may not consider purchasing small farm products if they are more expensive.
 - iii. Larger farms are often able to produce at a lower per-unit cost but do not necessarily pass these reduced costs of production down to consumers by lowering purchase prices
- c. Level of income earned from production is not sufficient to support small farm households
 - i. This translates into increased reliance on off-farm income (see Table 9, "Household income by off-farm work of operator and spouse, and by small farm typology, 1996" in Structural and Financial Characteristics of U.S. Farms: 2001 Family Farm Report)
 - ii. Off-farm employment may not be available in all areas (see page 18 in A Time to Act, 1998)

PART II: OVERVIEW OF CURRENT STATUS OF U.S. SMALL FARMS

(References for Part II: NASS, 1998; USDA ARMS Survey, 2000 cited in LaDue and Smith, 2001; USDA 2002 Census of Agriculture; USDA report Farm and Land in Farms, 2004; A Time to Act, 1998; Structural and Financial Characteristics of U.S. Farms: 2001 Family Farm Report, 2001; USDA RMA; USDA CRAT)

A. Definitions: What one considers a "farm" and a "small farm" has important and far-reaching political implications for farmers

1. Definition of a "farm"
 - a. The USDA definition of a "farm" has evolved over time
 - i. 1850: A "farm" was defined as an operation that produced at least \$100 in agricultural products
 - ii. 1959: A "farm" was defined as an operation with less than 10 acres grossing \$250 or more, OR 10 acres or more grossing \$50 or more
 - iii. 1974: The definition again addressed only sales. A "farm" is now considered an operation that produces \$1,000 or more of saleable products. (See table: "Minimum Criteria for "FARM" Definition, 1840–Present and Enumeration of Apiaries and Fur Farms" pp. 15-16, Farms and Land in Farms, 2004.)
1. Definition of small farms
 - a. USDA definition: The USDA defines a small farm as one that sells less than \$250,000 worth of agricultural products (gross receipts) per year. By this definition, 93% of U.S. farms are "small," according to the USDA 2002 Census of Agriculture Data. The current USDA definition of a small farm does not account for land area of farms, or level of family involvement in the farm operation.
 - b. Alternate definitions of small farms
 - i. USDA National Commission on Small Farms: The USDA National Commission on Small Farms gave a more stringent definition of small farms—farms with gross receipts of \$250,000 or less "on which day-to-day labor and management are provided by the farmer and/or the farm family that owns the production or owns, or leases, the productive assets" (A Time to Act, 1998)

- ii. USDA Agricultural Resources Management Study (ARMS): Using alternate definitions of a farm (such as measures of farming as the primary occupation, days worked off farm, and percent income derived from farm sources), an ARMS survey estimated that small farms totaled 73.2 % of all farms. (USDA ARMS Survey, ERS, Washington, DC, 2000, cited in LaDue and Smith, 2001:Table 3, pg. 6.)
- iii. Commercial versus “hobby” farms: The USDA Economic Research Service (ERS) labels farms with gross annual sales under \$50,000 as “non-commercial,” not commercially viable without other off-farm sources of income. These farms are considered “hobby” farms, though they may contribute a significant portion of income to the farmer. (Structural and Financial Characteristics of U.S. Farms, 1994, USDA ERS, p 20. cited in A Time to Act, 1998, pg. 18.)

PART III: CHARACTERISTICS OF U.S. SMALL FARMS

(References for part III: NASS, Farms and Land in Farms, 2004 (or most up-to-date version of this annual report); see page 2 for pie charts [farms by sales class, number of farms, farm size] and for table “Number of Farms and Land in Farms: United States 1980-2003” in Farms and Land in Farms, 2004, page 3; USDA Civil Rights Action Team Report, 1997; A Time to Act, 1998; Structural and Financial Characteristics of U.S. Farms: 2001 Family Farm Report; USDA Census of Agriculture; USDA Risk Management Agency web site)

A. Size, Number and Income of Small Farms

1. In 1997, 93% of U.S. farms were considered small by USDA definition and these farms held 68% of land. By 2003 these numbers were 92% and 63%, respectively.
2. Number of small farms and land in farms according to census data
 - a. Decrease in farm numbers (1997–2002): The number of farms decreased from 2,190,510 to 2,126,860. (See: Land and Land in Farms, NASS, 2004, pg. 1)
 - b. Land in farms: Land in farms declined from 956,010,000 acres to 938,750,000 acres*. (*Note: Beginning in 2001 pastureland was included as farmland in the annual censuses, whereas previously it had not been. Decline may have been greater than reported due to change in definition.)
3. Farm income over time: importance of on-farm income for farmer livelihood
 - a. In 1997 small farms (93% of farmers) received 41% of all farm receipts. In 2002 1,134,879 farms showed net income, while 993,861 showed net losses. As of 1998, “large family farms” (\$250,000-\$499,999 in annual sales) and “very large family farms” (annual sales of \$500,000 or more) accounted for 53% of the “national value” of production. (See Structural and Financial Characteristics of U.S. Farms, 1994, ERS. Cited in A Time to Act, pg. 18; see table: “Percent of Farms, Land in Farms, and Average Size Farm: By Economic Sales Class, United States, 2001-2003,” Farms and Land in Farms, 2004, pg. 12. See table: “Share of Farms and Value of Production by Farm Typology by Group” page (iv.) in Structural and Financial Characteristics of U.S. Farms: 2001 Family Farm Report. See table 5, “Net Cash Farm Income of the Operations and Operators,” USDA Census of Agriculture, 2002.)
 - i. Ability to supplement income – Jobs may not be available for farmers who need supplemental income off-farm (for example, jobs may not be available in Native American reservations or poverty-stricken areas) (A Time to Act, pg. 18)
 - ii. Many farmers need this supplemental income to survive financially
 - iii. Farming as a lifestyle choice – Farm income is increasingly supplemented by off-farm income. Importance of distinction between farmers that earn a livelihood from the farm and those owned by retirees or true leisure farmers (as opposed to farmers classified as “hobby farmers” based on level of farm income, as discussed above), who engage in agricultural activities solely for enjoyment.

- iv. Economic viability of agricultural activities is likely not important for this third class of hobby-leisure farmers, yet they are often grouped together with family farmers for whom farm income is a small, yet important part of household income. Grouping these together can have political and economic implications for very small farms.

For example, landowners who have non-farming occupations, and who put their land into agricultural or “hobby” production for zoning purposes, may not profit from their agricultural activities. The lack of profit may be inconsequential to these farmers, as the benefits to the landowners are seen in the form of different taxation or regulations. This alone may not pose a threat to farmers whose livelihoods depend on their farming activities, and the “hobby” farmers likely have no intention of out-competing other small farmers. However, if competitive aid programs are structured to benefit small farmers based on farming income, this second group of farmers (those for whom farm income is a significant part of household income) may be less likely to receive aid if funding is limited, due to the increased pool of applicants.

B. Demographics of Small Farmers as of 2002 Census of Agriculture

1. Age and gender: Average age of American agricultural producers was 55.3 years. 27.2% of agricultural producers were women (see NASS tables 48 and 53, USDA Census of Agriculture 2002).
2. Owner-Operator Demographics and Land Tenure Status. See respective USDA Census NASS Tables: www.nass.usda.gov/census/census02/volume1/us/index1.htm
 - Table 47. Selected Farm Characteristics by Race of Principal Operator: 2002
 - Table 48. Women Principal Operators—Selected Farm Characteristics: 2002 and 1997
 - Table 49. Spanish, Hispanic, or Latino Origin Principal Operators—Selected Farm Characteristics: 2002 and 1997
 - Table 53. Women Operators—Selected Operator Characteristics: 2002 and 1997
 - Table 54. Spanish, Hispanic, or Latino Origin Operators—Selected Operator Characteristics: 2002 and 1997
3. 2002 USDA Census data counted the following distribution of farm owners by race (see NASS Table 47, Selected Farm Characteristics by Race of Principal Operator, 2002)
 - a. Trends in owner-operator demographics, characteristic, and land tenure status illustrate loss of small farmers and disadvantaged farmers’ social position within the agricultural system
 - 983 Native Hawaiian
 - 5,935 Asian
 - 10,443 Native American
 - 19,194 Black or African American
 - 1,386,506 White

C. Programs and Policies Affecting Small Farmers

(Sources: A Time to Act, 1998; USDA RMA; www.rma.usda.gov; USDA Small Farm Program, www.usda.gov/oce/smallfarm/; Reidl, 2004; Reidl, 2002)

1. Programs intended specifically to help small farmers
 - a. USDA Small Farm Program – Provides information for small farmers about USDA policies and programs aimed at small farmers
 - b. UC Small Farm Center – A program of the UC Division of Agriculture and Natural Resources that engages in research, extension, and education specifically for small farmers and about small farms
 - c. Other programs and statewide organizations that work for small farmers

2. Policies may disserve small and disadvantaged farmers
 - a. Many policies and structures that are stated as designed to help farms actually favor large farms, farms that produce certain commodity crops (e.g., grain corn and soy farmers, etc.), or certain social classes, etc. (*A Time to Act*, 1998, pp. 14–23; USDA CRAT, 1997; Reidl, 2004; Reidl, 2002)
 - b. Crop and livestock insurance programs are often not available or applicable to small farming situations. (See USDA Risk Management Agency website for current descriptions of policy availability for small farmers and diversified cropping systems.)

D. The Importance of Small Farms

(Sources: Jolly and Jervell, 2003; *A Time to Act*, 1998; Flora, 2001; Feenstra et al., 1999; Gillespie et al., 1994; LaDue and Smith, 2001; www.populist.com/98.4.krebs.act.html for a critique of *A Time to Act*)

1. Small farms provide public goods in addition to foodstuffs
 - a. Small farms may increase biological diversity of landscapes in several ways
 - i. Diversified cropping systems within a single farm
 - ii. Diversified crops within a region
 - iii. Habitat diversity and consequent non-crop and animal/insect diversity
 - b. Land in financially successful small farms may be preserved from urban and/or industrial farming uses
 - c. Small farms provide varying levels of rural income and economic opportunity for rural residents, communities, and economies
 - d. Small urban farms and gardens enhance access to fresh foods for urban areas where food security is a problem (Feenstra et al., 1999)
 - e. Small farms are part of the cultural heritage of rural and agricultural communities
 - f. Some farmers engage in agriculture as a lifestyle choice. Economic self-determination of rural and disadvantaged communities may be enhanced in small farming and urban gardening situations (LaDue and Smith, 2001; Feenstra et al., 1999).

Lecture 2 Outline: Basic Principles of Agricultural Economics; Toward the Maintenance of U.S. Small Farms

PART I. BASIC PRINCIPLES OF AGRICULTURAL ECONOMICS

(Resources for Part I: LaDue and Smith, 2001; Peterson, 1997; Jervell and Jolly, 2003; Gillespie et al., 1994; any basic agricultural economics textbook)

A. Basic Terminology of Agricultural Economics

1. Supply: Of goods (e.g., agricultural products) and services (e.g., labor) influences price or cost of inputs
2. Demand: Consumer demand for goods and services influences price of outputs
3. Price equilibrium: The point where supply meets demand
4. Cost of production: Includes all inputs needed for production. This includes land, seed, animal feed, animals, labor (either hired or owner/family labor), equipment, water, fuel, marketing costs, etc.
5. Revenue: What is taken in at the point of sale
6. Farm-gate price: The price that the farmer receives for a product at the farm. Does not include costs of transportation to market, thus farm gate prices will be lower than retail if products are sold off-farm.
7. Marginal costs and returns: The costs and returns (revenues) per unit of production
8. Fixed costs: The costs that are fixed, regardless of quantity produced. Examples: Barn, tractor, land.
9. Profit: Essentially the difference between price received and cost of production. Fixed costs (costs that do not increase with increased scale, such as the purchase of a tractor) and variable costs (that depend on scale, such as amount of seed needed) influence the cost of production and thus the profit.
10. Economies of scale: In economics, "economy" refers to "efficiency." Larger farms produce more "economically" as production cost per unit is lower as amount produced increases (marginal costs). This does not take externalities (defined below) into account.
 - a. Example: It may cost a large grower \$0.02 per apple produced, while the small grower has a cost of \$0.04 per apple. The large firm can sell 100 apples for \$0.03 each and make one cent per apple, totaling \$1.00, while the small grower would need to sell the apple for \$0.05 per apple to make one cent per apple and earn \$1.00.
 - b. Small farms that produce efficiently may be equally efficient (or more efficient, if externalities are taken into account) as large farms in some circumstances
 - c. Other studies have more closely examined how economies of scale have been evaluated and purport that economies of scale measurements may not account for other factors that differentiate small farms from large ones. Small farms may have poorer quality land, and are likely to have off-farm employment, which takes away from management time and may lead to less efficient labor management (Peterson, 1997).
11. Externalities/Externalized Costs of Production/"hidden costs": Impacts of an economic activity on individuals or entities when they are not included in economic analysis (e.g., environmental pollution from the use of pesticides and fertilizers in agriculture; substandard working conditions and wages of agricultural labor)

12. **Commodity Crop:** A crop that is produced for sale in a commercial market. Usually refers to crops such as wheat, corn, soy, or tomatoes that are produced in mass quantities for trade and sale in the mainstream commercial marketplace.
13. **Specialty Crop:** A crop that is not classified as a commodity crop. Can range from certain varieties of tomato to specialized products such as those produced for ethnic markets.
14. **Vertical Integration:** Merging of different stages of production into a single business. Agricultural firms that grow, process, and market their products are said to be vertically integrated.

B. Influence of Economic Trends and Recent Agricultural Policies on Small Farms

1. Market conditions create an economic environment in which farmers must constantly adapt by finding new market niches or increasing the scale of production to remain economically viable (Jervell and Jolly, 2003; Gillespie et al., 1994)
2. Consumers are increasingly accustomed to cheap food and may not recognize qualitative differences in agricultural products, including both social and environmental externalized costs of production
3. Larger, well-capitalized farms adopting high technology production practices, along with vertically integrated agricultural firms, are able to capture the consumer market due to lower costs of production and under selling of small-scale producers
4. Small farms are less able to compete in conventional wholesale markets, due to constraints on liquid cash flow, as well as time constraints
5. Non-valuation of non-economic goods: Traditional economic models either ignore costs and benefits such as environmental and social goods (e.g., clean water or local jobs for community members), or classify them as externalities. This gives the impression that small farms are always less economically efficient than larger farms.

PART II: TOWARDS THE MAINTENANCE OF U.S. SMALL FARMS

(References for Part II: Blank, S. and G. Thompson, 2004; Jolly, 1998; Gillespie et. al., 1994; LaDue and Smith, 2001; Allen and Kovach, 2000; Klonsky, 2004; Howard, 2003)

A. How Small Farms Have Attempted to Adjust to Economic Disadvantages of Market Structures (Blank, S. and G. Thompson, 2004; Jolly, 1998; Gillespie et al., 1994; LaDue and Smith, 2001)

1. Niche markets: their advantages and limitations
 - a. Small farms providing products that larger farms cannot or do not provide is one way that small farmers have been able to realize economic returns in the face of increasing control of the market by larger farms and firms. Examples are specialty products (e.g., heirloom varieties and specialty cheeses), services (such as U-pick operations), or certain production methods (e.g., certified organic).
 - b. Some niche markets may eventually cease to be viable economic options for small-scale producers, as when increased demand for specialty products reaches an economic threshold, making it profitable for larger-scale producers (e.g., the development and concentration of the wholesale organic food industry). Niche markets become subject to the same economic trends that lead to the control of the market by large firms and a decline in the economic viability of small-scale producers (Allen and Kovach, 2000; Klonsky, 2004; Howard, 2004; Jolly, 1998).
2. Direct marketing (see Unit 4: Community Supported Agriculture, and Unit 5: Other Direct Marketing Options, for more information on CSA and direct marketing)
 - a. Community Supported Agriculture (CSA)
 - b. Farmers' markets and roadside farm stands
 - c. Direct sales to restaurants
 - d. Other

3. Diversification of on-farm enterprises/activities
 - a. Rather than relying on one or few crops or livestock to provide sole income, small farms may choose to diversify their production activities
 - i. Enterprise diversification provides income at more points throughout the year, rather than relying on one harvest (or one species) to provide all income
 - ii. Product diversification reduces whole farm risk: Diverse cropping strategies reduce likelihood of disease or pest outbreaks and help to assure some marketable product. This is especially important when crop insurance is not available.
 - iii. Value-Added Products: Processing, repackaging, or otherwise creating “special” or “unique” products is a way to add value that has the potential to increase profits. Examples: Preserves, dried fruits, cheeses, floral wreaths, etc.
 - iv. Services: Services may also provide diversified incomes on the farm. Examples are agricultural tourism and U-pick operations (see UC Davis Small Farm Center for resources on this topic).
4. Diversification of income from off-farm sources
 - a. Small farms often rely on off-farm income to complement farm income. In some cases off-farm incomes provide proportionately more income than on-farm income discussed above. (See Lecture 1 Outline, Part III A.3. Farm Income Over Time; A Time to Act, 1998 for more discussion of off-farm incomes.)

B. Barriers to the Effectiveness of Marketing Strategies in Attaining Economic Viability of Small Farms in the U.S. (see Jolly, 1998; Allen and Kovach, 2000; Klonsky, 2004; Howard, 2004)

1. The market as the sole determining factor in the economic viability of small-scale agriculture
 - a. As demand for niche products such as organic produce increases, larger firms are often better able to respond to this increase in demand because of their greater availability of capital for reinvestment, ability to add enterprises to the operation, and potentially greater availability of human resources
 - b. Increased production results from increased demand. The market becomes consolidated and industrialized.
 - c. Farmers must adapt and change continually, but disadvantaged farmers are less likely to be able to adapt due to already slim profit margins and limitations of available liquid capital and time for reinvestment in farming operation

C. Summary of Short- and Long-term Strategies for Maintaining Viability of Small Farms

1. Short-term economic strategies
 - a. Sound market analysis and business planning (see Unit 2: Small Farm Business Planning)
 - b. Niche markets
 - c. Diversification of on-farm enterprise
 - e. Off-farm income
2. Long-term public and private strategies
 - a. Consumer education – Awareness and appreciation of the contributions of agriculture in general, small farms, rural culture, and the economic circumstances facing small-scale agriculture. Valuing the social and environmental benefits of small farms justifies policies and economic support that aid small farmers (see Jervell and Jolly, 2003; LaDue and Smith, 2001).
 - b. Consumer support of small-scale agriculture – Consumer support through increased direct market purchases from small-scale growers

- c. The use of land trusts and conservation easements – Land trusts and conservation easements protect agricultural lands through direct fee title purchase and through purchasing and enforcing agriculture conservation easements that stipulate land use restrictions on a given property in perpetuity
By conserving land through such mechanisms, land trust may offer reduced lease rates for agriculturists and thereby ensure affordable access to land for small-scale and limited-resource farmers. (For more information see the Land Trust Alliance, American Farmland Trust, and Solano Land Trust web sites, listed in the Resources section.)
- d. Public policy adjustments needed to support small farms – see Appendix 1: Policy Recommendations Made by the USDA National Commission on Small Farms 1998 report, A Time to Act
 - i. Policies limiting consolidation – Federal and State policy measures that limit the concentration of ownership in the U.S. agri-food system
 - ii. The development of policies that provide economic support for small-scale agriculture and the adoption of conservation farming practices
 - iii. Policies that limit externalizing social and environmental costs of production
- e. Need for multiple strategies
 - i. Changing consumer awareness and behavior and implementing changes to agricultural policy are complex. This is an important step, but must be coupled with other strategies.

Resources

REFERENCES CITED

- A Time to Act: A Report of the USDA National Commission on Small Farms. 1998. United States Department of Agriculture. Miscellaneous Publication (MP 1545).
The National Commission on Small Farms on the status of small farms and ranches in the United States was established in 1997, with a two-year mandate to research, analyze and make recommendations to the U.S. Secretary of Agriculture on strategies to enhance the economic livelihood of smallholder operations. A set of eight detailed policy recommendations range from establishment of fair and competitive markets for small farms to establishing future generations of farmers and promoting humane working conditions on farms. Available online at www.csrees.usda.gov/nea/ag_systems/pdfs/time_to_act_1998.pdf p 1-94.abstract; www.csrees.usda.gov/nea/ag_systems/in_focus/smallfarms_if_time.html.
- Allen, Patricia and Martin Kovach. 2000. The capitalist composition of organic: the potential of markets in fulfilling the promise of organic agriculture. *Agriculture and Human Values* 17: 221-232. Kluwer Academic Publishers.
Analyzes the growth of the organic food industry and raises the question of the ability of the organic food market to contribute to progressive social and environmental goals. Identifies contradictions between popular ideals associated with organic agriculture and the ability of the market to deliver such results.
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- Farms and Land in Farms. 2004. United States Department of Agriculture Agricultural Statistics Board, National Agricultural Statistics Service (NASS).
The USDA National Agricultural Statistics Service publishes a report each year that summarizes updated statistical estimates of the number of farms and land in farms. This is a supplement to the Census of Agriculture, which is rendered every five years (see pages p 1-19). Available online at usda.mannlib.cornell.edu/reports/nassr/other/zfl-bb/fmno0204.pdf (2004 report); www.usda.gov/nass/pubs/reportname.htm (list of reports online).
- Feenstra, G., S. McGrew, and D. Campbell. 1999. *Entrepreneurial Community Gardens: Growing Food, Skills, Jobs and Communities*. Davis, CA: University of California Department of Agriculture and Natural Resources Publication 21587. 110 pages.
Entrepreneurial community gardens are recognized as a potential strategy for meeting multiple community needs such as food security and economic development simultaneously. This study surveyed 27 such gardens in California and nationwide as to their products, processes, funding, profitability, community support, and measures of success. Recommendations for future strategies and contact information for the gardens interviewed are included at the end of the report. Available online at www.sarep.ucdavis.edu/pubs/entrepreneurial.htm; anrcatalog.ucdavis.edu.
- Gillespie Jr., G. W., Lyson, T. A., and D. A. Harper. 1994. Diversified rural livelihood strategies among low-income farm families in the Northeast. Final Report, Grant No. 890-0628 from The Rural Economic Policy Program, The Aspen Institute for Humanistic Studies and the Ford Foundation. Pp 1-23.
Report describes how low-income farm households in the Northeast sustain themselves, based on survey results. A brief overview of the "Emergence of the Modern Economy" gives background on the economy as it relates to agriculture, touching on the "informal economy," reciprocity, and self-provisioning as parts of rural farm economies. Outlines diversified rural livelihood strategies, internal and external influences on these, and cites examples.
- Flora, C. B. 2001. Shifting agroecosystems and communities. Chapter 2. In C. B. Flora (ed.), *Interactions Between Agroecosystems and Rural Communities*, 5-13. USA: CRC Press.
Chapter two gives an overview of agroecosystem interactions with market, state, and civil society. Natural and social capital are discussed as a backdrop to the importance of sustaining agroecosystems as a part of sustaining rural communities. Other chapters of this book address the community-agroecosystem interactions in South and Central America, North American Midwest, and Native American systems. See www.crcpress.com or available at university libraries.

- Howard, Phil. 2003. Consolidation in food and agriculture: implications for farmers and consumers. CCOF Magazine. Winter 2003/04. Volume XXI, Number 4.
Provides a concise qualitative and quantitative description of the concentration of ownership in the U.S. agri-food system and how these consolidation trends are being replicated in the organic food industry. Available online through the CCOF Foundation (see CCOF Magazine Online, www.ccof.org).
- Jervell, A. M. and D. A. Jolly. 2003. Beyond food: towards a multifunctional agriculture. Working paper 2003-19, pages 1–21. Norwegian Agricultural Economics Research Institute, Oslo.
Small-scale agriculture holds multiple values and functions as exemplified by policy changes and new livelihood strategies that farmers have developed. This paper cites ways in which farmers are creating alternative profit-making enterprises, as well as listing cultural heritage, landscape, food security and rural community effects of agriculture. Political recognition of “non-food” values is explored, and scale differences in the agricultural system are examined in the context of a multifunctional agriculture. Available online at www.nilf.no/Publikasjoner/Notater/En/2003/N200319Contents.shtml; www.nilf.no/Engelsk/Hoved.shtml.
- Jolly, D. A. 1998. Organics on the brink: bonanza or boondoggle. Small Farm News. Spring 1998. Small Farm Center, UC Davis.
Gives a brief narrative of the origins of the organic market in United States agriculture, discussing the motivations and evolutions of the “natural”-turned-“organic” foods movement. Contemplates the future of the organic market, including the implications for small growers and the effects of regulations on production practices and market share. Available online at www.sfc.ucdavis.edu/pubs/SFNews/Spring98/organics.html.
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Provides an overview of the growth and development of the organic food industry from 1992–2002. Available online through the CCOF Foundation (see CCOF Magazine Online, www.ccof.org).
- Labao, L. and K. Meyer. 2001. The great agricultural transition: crisis, change and social consequences of twentieth century U.S. farming. *Annual Review of Sociology* 27:103-124.
- LaDue, E. L. and R. D. Smith. 2001. Why Conduct Research and Extension Programs for Small Farms. Cornell Program on Agricultural and Small Business Finance. Cornell University, Ithaca, NY. pp. 1–16.
University research tends to be applicable only to large farms. Three oft-cited reasons for this are exclusion of some farms from the USDA definition of a farm, economies of scale issues, and the low level of income generated by small farms. This paper explores these three statements and details how many small farms are in fact farms, the extent to which economies of scale do or do not constitute justification for exclusion from research agendas, and the relative importance of income generated from farms to make the point that research directed toward small farms is in fact relevant and needed.
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Distills information from the Pigford vs. Glickman Supreme Court case, and its outcomes. Available online at www.oxfamamerica.org/newsandpublications/news_updates/archive2003/art4066.html.
- Peterson, W. L. 1997. Are Large Farms More Efficient? Staff Paper Series P97-2. Department of Applied Economics, College of Agriculture, Food and Environmental Sciences, University of Minnesota.
This paper examines estimates of economies of scale, questioning the extent to which their accuracy can be generalized. Peterson cites three potential measurement problems that affect estimates of returns to scale: combining farm housing with capital inputs; correlation of environmental and management characteristics with size; and the effect of off-farm employment on production costs. Economic models are used to support Peterson’s claim that it is not always true that large farms are more efficient than small ones.

Reidl, Brian M. 2004. Another year at the federal trough: farm subsidies for the rich, famous, and elected jumped again in 2002. Backgrounder #1763. The Heritage Foundation, Washington D. C., May 24. Available online at www.heritage.org/Research/Budget/bg1763.cfm

Reidl, Brian M. 2002. Still at the federal trough: farm subsidies for the rich and famous shattered records in 2001. Backgrounder #1542. The Heritage Foundation, Washington D. C., April 30. Available online at www.heritage.org/Research/Agriculture/BG1542.cfm.

Structural and Financial Characteristics of U.S. Farms: 2001 Family Farm Report, Robert A. Hoppe (ed.). Resource Economics Division, Economic Research Service, United States Department of Agriculture. Agriculture Information Bulletin No. 768. p 1-101, 2001.

This report discusses differences of importance to the farm sector of the diverse farm typologies as defined by the USDA Economic Research Service (ERS). Topics include attributes of farms and farmers, business organization, female farm operators, income, government payments and federal tax policies. Available online at www.ers.usda.gov/publications/aib768/.

USDA Census of Agriculture

The census of agriculture is conducted every five years by the National Agricultural Statistics Service (NASS) and is the most comprehensive source of facts and statistics about U.S. agricultural production and demographics. It provides a detailed picture of U.S. farms and ranches. Recent censuses were conducted in 2002, 1997 and 1992. Available online at www.nass.usda.gov/census.

USDA Civil Rights Action Team report. March 17, 1997. USDA CRAT

Available online at www.usda.gov/da/cap.htm.

USDA National Agricultural Statistics Service (Online Statistical Tables)

The online databank for agricultural statistics measured by the USDA. Includes links to historical data including demographics, land in farms, commodity crops, as well as maps, graphs, tables and more. Available online at www.nass.usda.gov.

USDA NASS Index of Tables

Table 47. Selected Farm Characteristics by Race of Principal Operator: 2002

Table 48. Women Principal Operators—Selected Farm Characteristics: 2002 and 1997

Table 49. Spanish, Hispanic, or Latino Origin Principal Operators—Selected Farm Characteristics: 2002 and 1997

Table 53. Women Operators—Selected Operator Characteristics: 2002 and 1997

Table 54. Spanish, Hispanic, or Latino Origin Operators—Selected Operator Characteristics: 2002 and 1997

Available online at www.nass.usda.gov/census/census02/volume1/us/index1.htm.

ADDITIONAL READING

Ag legend still at top of his field [interview with agricultural economist Harold Briemyer]. Columbia Daily Tribune, January 29.

Available online at archive.columbiatribune.com/2000/jan/20000129busi01.htm.

Operationalizing evil: Christian realism, liberal economics, and industrial agriculture, by L. Glenna. *Agriculture and Human Values* 19: 205-216, 2002. *Article deduces the institutionalization of what the author describes as “evil” in U.S. society and policy. Explores 1985 Farm Bill as an example of the extent to which unethical acts are accepted (or expected) in the political arena, and how this affects farmers.*

United States Department of Agriculture. Meeting the Challenge of a Time To Act: USDA Progress and Achievements on Small Farms. U.S. Department of Agriculture. Miscellaneous Publication No. 1563, 2000.

Provides highlights of the progress and achievements made by the Department between January 1998 and December 1999 in assisting small farmers. Available online at www.usda.gov/oce/smallfarm/reports/pa_rpt1.htm.

What makes a small farm successful? Agricultural Outlook, November, 1999. USDA ERS.

Provides a brief discussion of different perceptions of “success,” according to farmers and the USDA. Available online at www.ers.usda.gov/publications/agoutlook/nov1999/ao266c.pdf.

WEB RESOURCES

American Farmland Trust:

www.farmland.org

The web site for American Farmland Trust, a national organization working on farmland conservation models.

California Farm Link:

www.californiafarmlink.org

California FarmLink is a nonprofit organization that serves to build family farming and conserve farmland in California by linking aspiring and retiring farmers, and promoting techniques and disseminating information that facilitate intergenerational farm transitions. This site provides information about California FarmLink services and programs as well as case studies on farm transfer models and links to other helpful sites. Sample language from which to develop legal land tenure agreements is also available through California FarmLink and other organizations.

Environmental Working Group's Farm Subsidy Database:

www.ewg.org:16080/farm/findings.php

Web site with extensive data on USDA subsidy payments, including who receives how much, and the crops that receive subsidies.

Land Trust Alliance:

www.lta.org/aboutlt/faq.shtml

An information clearing house on land trusts in the U.S. Provides useful information, publications and links to resources on the role of land trusts and conservation easements in the preservation of open space and agricultural lands.

Marin Agricultural Land Trust:

www.malt.org

Founded in 1980 by a coalition of ranchers and environmentalists to preserve farmland in Marin County, California, MALT acquires agricultural conservation easements on farmland in voluntary transactions with landowners. The MALT web site contains many online articles on agricultural conservation easements, sample conservation easements, and multiple case studies in agriculture land preservation through the sale of conservation easements.

Solano Land Trust:

www.solanolandtrust.org

Solano Land Trust is an example of a private California, nonprofit organization whose mission is to preserve agricultural lands, open space, and resources through the acquisition of land and conservation easements, education and land management.

UC Small Farm Center:

www.sfc.ucdavis.edu

The UC Small Farm Center (SFC) serves as a clearinghouse for questions from farmers, marketers, farm advisors, trade associations, government officials and agencies, and the academic community. The SFC maintains a library of books, scientific and popular journals, reports, directories, and periodicals covering production, marketing and policy issues. SFC publishes manuals, proceedings, pamphlets, leaflets, and a quarterly newsletter that includes news of upcoming events, publications, topical issues, and profiles of farmers and farm advisors. The SFC organizes and coordinates statewide conferences, workshops, and symposia and supports advisors, farmers' markets, and farm organizations in regional and local programs.

USDA Office of Small Farms:

www.usda.gov/oce/smallfarm/

This web site is intended to be a one-stop gateway to resources, benefits, and services offered by USDA for small farmers. It includes a section that provides visitors with a link to the USDA Progress Reports and Small Farms Database developed by the Department in response to the recommendations submitted in the USDA National Commission on Small Farms report, "A Time To Act." This site contains many links to current publications and reports on small farm viability in the U.S.

USDA Risk Management Agency (RMA):

www.rma.usda.gov

RMA serves America's agricultural producers through effective, market-based risk management solutions. RMA promotes, supports, and regulates sound risk management solutions to preserve and strengthen the economic stability of America's agricultural producers. Offers multiple programs in support of small farm viability.

Appendix: 1998 Policy Recommendations of the USDA National Commission on Small Farms: “A Time to Act”

1. Recognize the importance and cultivate the strengths of small farms
2. Create a framework of support and responsibility for small farms
3. Promote, develop, and enforce fair, competitive, and open markets for small farms
4. Conduct appropriate outreach through partnerships to serve small farm and ranch operators
5. Establish future generations of farmers
6. Emphasize sustainable agriculture as a profitable, ecological, and socially sound strategy for small farms
7. Dedicate budget resources to strengthen the competitive position of small farms in American agriculture
8. Provide just and humane working conditions for all people engaged in agriculture

