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Why U.S. Agriculture and Rural Areas Have a Stake in Small Farms

Despite a two-thirds decline in the number of farms since 1945, small farms remain important contributors to rural communities and U.S. agriculture. They constitute 60 percent of all farms, own 29 percent of farmland held by farmers, and hold 39 percent of the farm sector's net worth. Small farmers often concentrate on alternative crops and niche markets, pioneering new areas for U.S. agriculture. They also contribute significantly to the rural economy as purchasers of inputs and supplies, preservers of the rural landscape, and sources of off-farm workers in local economies.

Small farms are still important to U.S. agriculture and rural communities even though the overall number of farms has been in long-term decline. Defined here as farms with sales of less than \$20,000 per year (see glossary, p. 27), small farms make up about 60 percent of all farms, 1,138,584 according to the 1992 Census of Agriculture (fig. 1). They also remain vital to rural communities even though farm families, on average, now make up less than 10 percent of the population of rural counties. Examining the contributions of small farms helps in understanding why both agriculture and rural communities have a stake in their viability and sustainability. Recent debates on small farm policy and conferences such as the First National Small Farm Conference (in Nashville, TN, September 1996) have underscored the continuing importance of small farms.

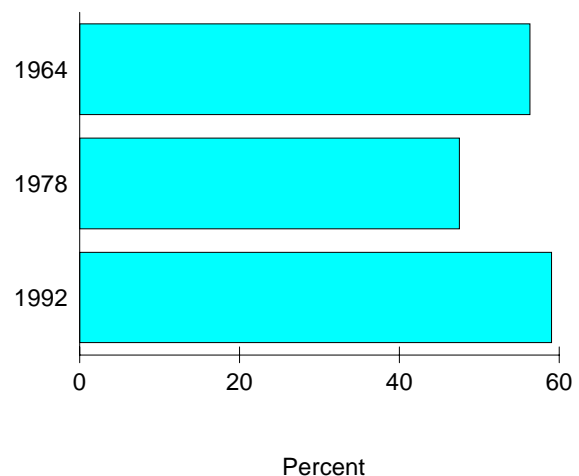
All segments of the American population are found on small farms. Although racial minorities accounted for only 3 percent of small farm operators in 1992, most minority farmers operated small farms. According to the 1992 Census of Agriculture, 86 percent of Black farmers produced less than \$20,000 in sales per year, as did 75 percent of Native Americans, 70 percent of Hispanics, 52 percent of Asian-Americans or Pacific Islanders, and 75 percent of other races (fig. 2). Seventy-seven percent of

women farm operators operated small farms in 1992. Small operators also include a disproportionate share of retirees.

Figure 1

Small farms as share of all U.S. farms, 1964-92

Small farms have remained near or over 50 percent of all farms for several decades



Note: To adjust for inflation, farms counted as small in 1964 had sales under \$5,000, in 1978 under \$10,000, and in 1992 under \$20,000.

Source: 1992 Census of Agriculture.

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Glossary

Federal agencies, including the U.S. Department of Agriculture (USDA), the Bureau of the Census, and the Bureau of Economic Analysis (BEA), define a *farm* as any establishment that produces and sells (or normally would have sold) at least \$1,000 worth of agricultural commodities within a given calendar year.

The definition of a small farm adopted here is consistent with the Food and Agricultural Act of 1977, which defines a small farm as any establishment with annual gross agricultural sales of less than \$20,000.

Alternative agricultural enterprises are considered to be new or seldom-grown agricultural products usually aimed at niche markets.

Community-supported agriculture is a marketing approach whereby the farmer sells shares in the future crop of the farm to local consumers, providing the small farmer with a prepaid market, market stability, and cash-flow.

A *cooperative* is a user-owned business that may fill a variety of needs for its member-users, including processing and marketing their products, purchasing their production supplies or consumer goods, providing credit, or building and operating utilities to serve rural areas.

Debt/asset ratio is a solvency measure used to indicate the relative dependence of the farm business or firm on debt, and the ability of the business to obtain additional credit.

Empowerment Zones and Enterprise Communities were established under the Revenue Reconciliation Act (RRA) of 1993 in an effort to revive the economies of some of the Nation's most economically depressed areas. Under the RRA, an individual can claim a tax credit for a qualifying contribution to a designated *community development corporation (CDC)*. Tax credits for contributions to designated CDC's should increase the funds available to such organizations to promote employment and business opportunities.

Purchase development rights (PDR) programs buy limited rights (called easements) to prevent farmland and similar lands from converting to other uses, especially residential or commercial development. Easements measure the public's valuation of preserved farmland and compensate farm landowners for the lost development value of their farmland.

Sustainable agriculture as defined in the Food, Agriculture, Conservation, and Trade Act of 1990, is an integrated system of plant and animal production practices having site-specific application that will, over the long term, satisfy human food and fiber needs; enhance environmental quality and the natural resource base upon which the agricultural economy depends; make the most efficient use of nonrenewable resources and onfarm resources; integrate, where appropriate, natural biological cycles and controls; sustain the economic viability of farm operations; and enhance the quality of life for farmers and the society as a whole.

Small Farms Contribute to Local Economies

Although they make up only 4 percent of all U.S. agricultural sales, small farms account for a significant proportion of the production value of several commodities. About 20 percent of hay and tobacco, for example, were produced on farms with total sales under \$20,000 in 1994. Over 11 percent of cattle and calves and sheep, lambs, and wool were sold from small farms (fig. 3). The marketing activities of small farmers help generate jobs in local economies.

Small farm operators invest in farm machinery and other capital inputs, adding directly to the economies of local and neighboring communities. Small farms purchased 11 percent of noncapital inputs in 1994 within the farm sector and 22 percent of capital inputs. Other rural businesses are also affected by the patronage of small farm families.

Finally, small farmers are significant as owners of wealth and as taxpayers. Despite low sales, small farms held 39 percent of farm assets (fig. 4) and only 18 percent of farm debt in 1994. In general, small farms incur little farm debt. Seventy-five percent of small farms had a low debt/asset ratio in 1992 (no more than 10 percent), compared with 48 percent of other farms. In addition, small farm operations pay 24 percent of the real estate and property taxes within the farm sector, adding to local government revenues.

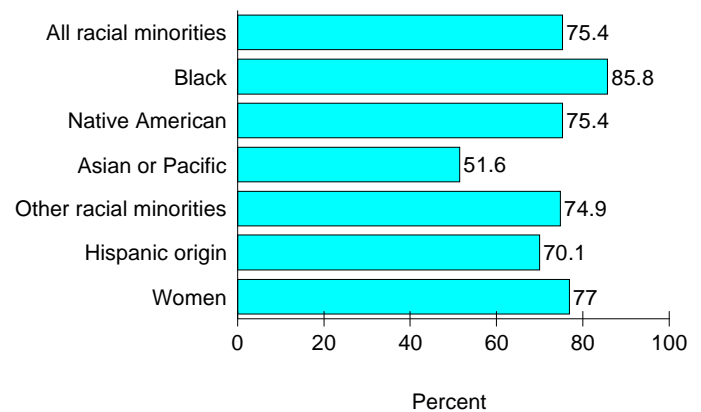
Small Farms Own a Significant Portion of the Farm Sector's Land Base

Farms with sales under \$20,000 own 29 percent of U.S. agricultural land held by farmers even though they have

Figure 2

Share of minority and female farm operators who run small farms

Most minority or female operators run small farms

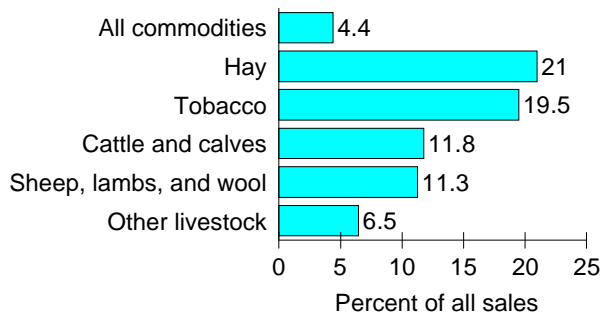


Source: 1994 Farm Costs and Returns Survey.

Figure 3

Share of U.S. value of production from small farms for selected commodities

Small farms account for 4 percent of value of production, but larger proportions of specific commodities



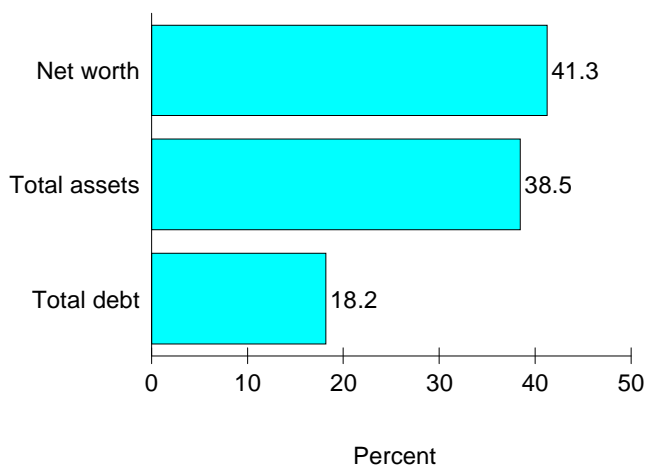
Note: Other livestock consists of horses and ponies; mules, burros, and donkeys; bees and honey; goats, mohair, and goat milk; mink and pelts; rabbits and pelts; and fish and aquaculture products. The coefficient variations for sheep, lambs, and wool, and other livestock are between 25 and 50.

Source: 1994 Farm Costs and Returns Survey.

Figure 4

Small farms' share of the U.S. agricultural sector's assets, debt, and net worth

Small farms account for a large share of farming's net worth



Source: 1994 Farm Costs and Returns Survey.

less land per operation (134 acres on average) than the average for all U.S. farms (448 acres).

The large proportion of land owned by small farmers makes them important participants in the preservation of the U.S. agricultural sector's land base. In addition to their own farming operations, small farmers frequently

provide land for larger enterprises. Small farmers rent out 39 percent of all land rented in the United States by farmers from other farmers. Operators of larger farms often find that renting or leasing allows them to use resources without tying up their own capital.

Like other farmers, owners of small farms are faced with the problem of protecting the ecosystems on which their farms depend while preserving the quality of community and life. Small farms participate in the Conservation Reserve Program (CRP) at the same rate as larger farms (13 percent). Forty-one percent of all CRP acreage is from small farms. In an effort to provide long-term protection to environmentally sensitive lands, the 1996 farm legislation established the Environmental Conservation Acreage Reserve Program (ECARP), whereby existing acreage can be renewed under CRP and new acreage can be enrolled.

Small Farms Seek Alternative Agricultural Enterprises

Operators of small farms often pursue alternative agricultural enterprises to gain a competitive edge in domestic and foreign markets. Small-scale farmers use such resources as farmer cooperatives, community-supported agriculture, and farmers' markets to gain access to niche and specialty markets. (See the article by Fred Gale in this issue.)

Small farmers often recognize the need for innovation in marketing that will allow them not only to survive but to thrive in the global marketplace. State and farmers' commodity associations aid small-scale operations in looking for new crops, new methods of production, and new products to provide a competitive edge for the small-scale farming operation. Collaborative small farm programs help small-scale enterprises identify niche markets. Products suitable for these markets may be nontraditional specialty crops or livestock, a traditional crop harvested out of season, or crops enhanced through processing or marketed with special packaging (see "USDA and State Programs Offering Assistance to Small Farmers and Rural Communities," p. 29).

One nontraditional crop being tried by small farmers is shiitake mushrooms grown on scrap pieces of hard wood and sold for medicinal purposes and their superior taste. Small farmers in California, North Carolina, and Bullock County, Alabama, are growing this crop for export as well as domestic consumption. The Kerr Center for Sustainable Agriculture in Oklahoma teaches small farmers to add value to this product by marketing shiitake mushroom gravy for sale in airport gift shops. In moving toward a more market-oriented agricultural economy, the 1996 farm legislation authorized \$10 million annually for the next 7 years for projects that help private farms or cooperatives to develop alternative products.

USDA and State Programs Offering Assistance to Small Farmers and Rural Communities

Alternative Farming Systems Information Center (AFSIC), operated by the National Agricultural Library (NAL), provides information about sustainable and alternative agricultural systems, new and industrial crops, and alternative crops. Popular topics of inquiry include community supported agriculture, organic farming, exotic livestock production, whole-farm sustainable systems, and industrial fiber crops.

USDA's *Sustainable Agriculture Research and Education* (SARE) supports AFSIC's *Sustainable Agriculture Network* (SAN) and is a cooperative effort of university, government, farm, business, and nonprofit organizations dedicated to the exchange of scientific and practical information on sustainable agriculture.

The *Rural Business-Cooperative Service* (RBS) was established under USDA's former Rural Economic and Community Development (RECD) mission, renamed the Rural Development Mission under the 1996 farm legislation. The mission of RBS is to enhance the quality of life for all rural Americans by providing leadership in building competitive businesses and cooperatives that can prosper in the global marketplace. Major RBS programs include Business and Industrial Guaranteed Loans, Rural Business Enterprise Grants, Economic Development Loans and Grants, and Local Technical Assistance and Planning Grants.

RBS seeks to empower rural residents to pursue economic development opportunities through networking, leveraging loan and grant funds, and through access to the "Information Superhighway." RBS also works closely with the *Alternative Agricultural Research and Commercialization* (AARC) Corporation, an arrangement that encourages research and assists with the commercialization of new nonfood uses of agricultural commodities. AARC's goal is to create jobs, enhance economic development of rural communities, and diversify markets for raw agricultural/forestry products and animal byproducts.

The *Cooperative Extension System*, in partnership with USDA's *Cooperative State Research, Education, and Extension Service* (CSREES), delivers programs and services to the small-scale farmer and rancher at the local level. *Land Grant Colleges and Universities* (both 1862 and 1890 schools) have extension programs that offer a wide range of services and benefits to small farms and many of the Land Grant Colleges have specific small farm programs.

The *Office for Small-Scale Agriculture* (OSSA) within CSREES provides national leadership to respond to the needs of the small-scale farmer and coordinates activities to enhance the national status of small-scale farmers. Ongoing initiatives focus on enterprises with potential for the small-scale agricultural entrepreneur. For example, the University of California-Davis operates a small farm program that concentrates on alternative marketing, specialty production and enterprises, getting started in farming, and the needs of small-scale, under-represented farm groups. Washington State-Pullman faculty works with owners of small farms, who are growing as urbanization creates smaller parcels of land. Florida State University's Low Input Sustainable Agricultural Program for Small Farmers in north Florida designs, tests, and evaluates low-input technologies for crop/livestock systems and compares their economic benefits with traditional systems. The University of Nebraska has launched new outreach efforts to small farmers that make use of electronic media, including World Wide Web sites, to direct farmers to appropriate information sources. North Carolina State University's "Ways to Grow" program reaches farmers through training (Small Farm Institute), applied research (farm demonstrations), and networking (collaboration of government and nongovernment organizations). The program focuses on introducing small-scale farmers to specialty products like greenhouse tomatoes, basil, shiitake mushrooms, catfish, botanicals, ornamental landscape plants, timber, sawdust, and compost.

The Large Number of Small Farms Helps Preserve the Rural Landscape

The Nation's rural landscapes are blanketed by small farms. Major concentrations are in the South and on the east coast (fig. 5). Small farms constitute over 50 percent of all farms in 39 States and at least 30 percent of all farms in every State. In States such as Alabama, Florida, Hawaii, and Tennessee, small farms account for over three-fourths of total farms. The greatest share of small farm enterprises is in West Virginia (88 percent). This high density of small farms perpetuates the traditional quality of rural landscapes.

In the Northeast, where historic associations are an especially important element in tourism, farmland preservation is integral to the cultural heritage and its marketabili-

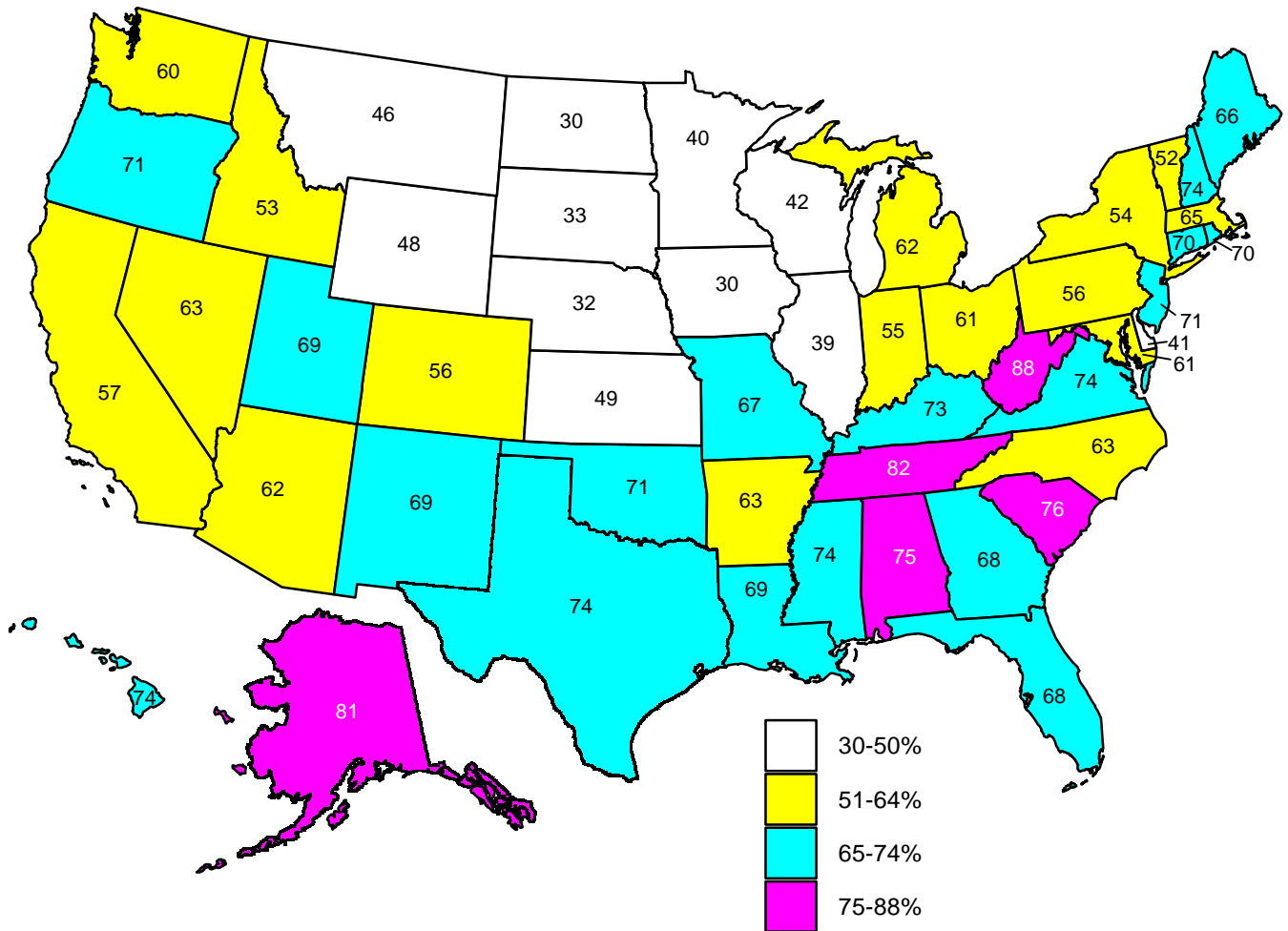
ty. Rural and small farm communities are developing tourism as an important sector within their economies.

Governments are increasingly ensuring the protection of agricultural lands by slowing conversion to urban uses. Legislation at the Federal, State, and local levels has been enacted favoring the preservation of open areas, including farmland. The Federal Agriculture Improvement and Reform Act of 1996 established a \$35 million fund through the new Farmland Protection Program authorizing the Secretary of Agriculture to purchase voluntary easements with emphasis on conserving natural resources and preserving wildlife habitation.

Figure 5

Small farms as a share of all farms, 1992

Small farms account for over 50 percent of farms in 39 States



Source: Calculated by ERS using data from the 1992 Census of Agriculture.

Small Farm Well-Being Closely Tied to Off-Farm Job Market

Most operators of small farms (75 percent) reported a nonfarm principal occupation as contributing significantly to their household income. Farm operator household income is the sum of income from farm and nonfarm sources. Small farm households averaged \$42,686 in income from nonfarm sources in 1994, compared with a U.S. farm household average of \$38,093 (fig. 6). Because most small farms had negative farm income, they averaged just \$38,281 in total household income in 1994, or 89 percent of that for all U.S. households. But this was still larger than the \$33,571 average for all nonmetro U.S. households.

The importance of off-farm income to the financial well-being of small-farm households illustrates the link between the farm and nonfarm sectors of the economy.

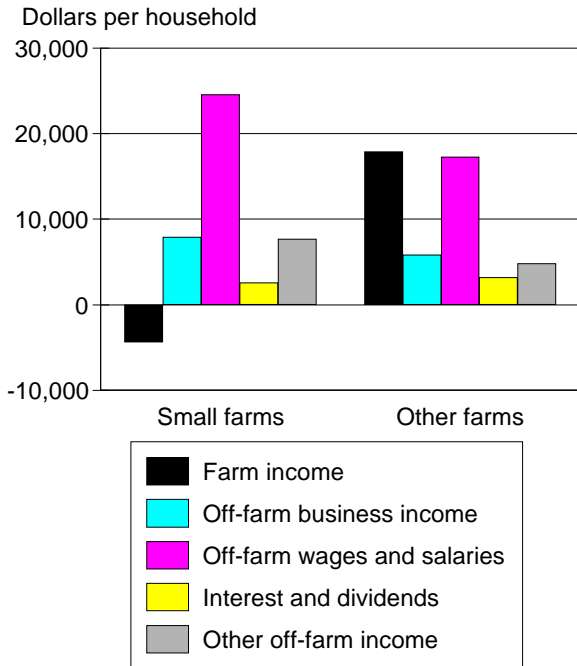
The more diversified mix of jobs now available in rural areas has smoothed out the effects of wide fluctuations in farm income which once affected many rural communities. Where many small farmers once endured poverty because their farm resources were too small to produce adequate incomes, greater opportunity for off-farm jobs in rural areas has helped raise the household incomes of farm families. Furthermore, because so many small-farm operators are also employed off the farm, policies that support rural economic and community development through such means as Community Development Corporations, Empowerment Zones, and Enterprise Communities may also assist in maintaining the economic viability of small farms.

Off-farm employment has, in turn, affected the operations of small farms. Farm investment decisions, choice of enterprise, input use, and production practice are all

Figure 6

Components of farm operator household income

Small farm households depend on off-farm income



Note: Total farm operator household income equals the sum of income from farm and nonfarm sources.

Source: 1994 Farm Costs and Returns Survey.

influenced by off-farm employment and the resulting income. Many small farmers have found it profitable to specialize in products like beef cattle, tobacco, and hay, which do not conflict with off-farm employment. For many small operators, farming has become a means of attaining economic diversification, asset security, and retirement income.

Conclusion

Trends suggest that small farms will persist in their production of specialty crops, while small farmers contribute to local economies by buying consumer and capital goods, using service industries and financial institutions, and paying taxes.

As increasing global competition affects international trade, small farms will likely find niche markets increasingly attractive. With urban encroachment and large-scale specialization, small farms must remain innovative to survive. Small-scale operations will more than likely hold a distinct advantage in specialty crop production.

The large number of small farms suggests that they will continue to preserve natural resources and the environment by rebuffering or slowing residential and commercial development. Environmental stewardship at the small-farm level increases the vitality of U.S. agricultural systems.

Small farms' involvement in production and grazing practices that are environmentally sensitive, including preservation of natural habitats, strengthens the agricultural sector's land base and the viability of U.S. agricultural systems and communities.

For Further Reading . . .

Mary Ahearn and John Lee, Jr., "Multiple Job-Holding Among Farm Operator Households in the United States" in M. C. Hallberg, ed., *Multiple Job-Holding Among Farm Families*, Iowa State Press, Ames, 1991.

Henry Buist, Carolyn Fischer, John Michos, and Abebaayehu Tegene, *Purchase of Development Rights and the Economics of Easements*, USDA-ERS, AER-718, June 1995.

Michael Compson, *The Revenue Reconciliation Act of 1993: Tax Provision of Significance to Farmers and Rural America*, USDA-ERS, Staff Report No. AGES 9328, Dec. 1993.

Denis Ebodaghe, *Overview of Small Farm Programs at the Land Grant Colleges and Universities*, USDA, Cooperative State Research, Education, and Extension Service in Partnership with Land Grant Colleges and Universities, Sept. 1996.

Annica C. Jansen and Thomas D. Rowley, "Rural Development Policy: Responding to Change," *Rural Development Perspectives*, Volume 9, No. 1, Oct. 1993, pp. 2-7.

W. K. Kellogg Foundation and Rainbow Research, *The Importance of Community Collaboration to Support Sustainable Agriculture*, Oct. 1996.

Provisions of the Federal Agriculture Improvement and Reform Act of 1996, USDA-ERS, AIB- 729, Sept. 1996.

"Small is Bountiful: A Special Report on Small Farms," *California Agriculture*, Vol. 47, No. 2, Mar.-Apr. 1993, University of California, Division of Agriculture and Natural Resources.

Data Sources

Farm and operator characteristics and financial data for farms with sales less \$20,000 and their related households are from the 1994 Farm Costs and Returns Survey (FCRS).

Farm numbers and minority operator characteristics data are from the 1992 Census of Agriculture.