Summary

This summary of trends in Washington State agriculture is designed to assist agricultural researchers, educators, policymakers, planners, and service providers in better understanding and meeting the needs of Washington State farmers. Based on U.S. Department of Agriculture (USDA) criteria, 90% or 35,269 of Washington’s farms are considered small. While the total number of farms in Washington State increased slightly between the 2002 and 2007 agricultural census, this increase was primarily due to the increase in the number of farms in the very smallest farm size category.

Of all the farms counted in Washington in 2007, over 18,443 farms reported annual sales below $2,500, which was up from the 15,000 farms that reported this amount in 2002. There was also growth in the number of the very largest farms, those with over $500,000 in sales. However, there has been a continued loss of the small- and mid-sized farms that can generate household income. Among the fastest growing agricultural sectors in Washington State were women-owned farms, Latino-owned farms, and direct market farms.

Introduction

Small farms comprise 91% of all farms in the United States and account for over half of its farmland (USDA 2009b). A recent global assessment on the future of agriculture was done by an intergovernmental panel known as the International Assessment of Agricultural Knowledge, Science and Technology for Development (IAASTD). This assessment suggests that intensifying productive capacity and resource conservation among diversified small farmers constitutes a unique opportunity to strengthen rural livelihoods, increase food security, enhance social equity, and improve the environment (McIntyre et al. 2009).

While smallholder agriculture represents the dominant form of production in the world, typical agricultural knowledge and technology development models have often failed to improve small farm productivity, enhance resource conservation, reduce rural poverty, or improve regional food security (McIntyre et al. 2009). The Food and Agriculture Organization of the United Nations (FAO) has made “sustainable intensification of smallholder crop production” one of its key strategic objectives over the next 15 years (FAO 2011). Making gains in small farm capacity while conserving and enhancing the resource base will require rethinking standard approaches to agricultural research and extension.

Defining a Small Farm

In the seminal report “A Time to Act,” the USDA National Commission on Small Farms defined small farms as “farms with less than $250,000 gross receipts annually 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” (USDA 1998, 28). The USDA continues to use this description of a small farm. While farms vary tremendously by region and by commodity, as well as by the amount of income actually netted from gross sales, this guideline can be helpful in categorizing various farm sizes. Classifying farms by acreage can be misleading in a state like Washington, where productivity per acre can differ vastly depending on water availability, type of crop, and the farming strategies employed.

Figure 1. Percent of Washington State farms with sales less than $250,000. Source: USDA Census of Agriculture, 2009.
**Washington State Small Farm Numbers and Trends**

As stated earlier, according to USDA criteria, 90% of the 39,284 farms counted in Washington State are classified as small (USDA 2009a). These small farms are spread throughout the state (Figure 1) and produce an array of commodities from fresh fruits, vegetables, and flowers to meats, dairy products, grains, and seed crops. The number of small farms in Washington State has decreased over the past decade. In 1997, there were 40,113 farms in Washington State of which 36,233 were classified as small. The most recent data, from the 2007 Census of Agriculture, as set out in Figures 2 and 3, show a decrease in small farms to 35,269, a loss of 3%. Overall, average farm sales in the state for 2007 totaled $172,917, up 17% from a total of $148,327 in 2002. By the measure of acreage, 80% of the state’s farms had less than 180 acres in 2007, however, this is up from 78% in 2002 (see Table 1 and Figure 4).

The historical trends, as displayed in Figures 2 and 3, show only a slight decline in the total number of farms in Washington State over the past decade. However, looking at farm numbers as a whole masks a dramatic loss of viable, income-generating farms. In 2007, only 53% of the total farms counted in Washington State had sales of $2,500 or more (Figure 4). Only around a third of all farms had sales over $10,000. Between the 1997 and the 2007 census, nearly all but the very smallest and the very largest farms declined in number. The number of farms with total sales over $500,000 increased by 25% and those with sales under $10,000

![Figure 2. Number of Washington State farms by market value: 1997, 2002, 2007. Source: USDA Census of Agriculture, 2007.](image)

increased 6%, but farms with sales from $50,000 to $500,000 decreased by 30%. The most rapid loss of farms is occurring among those with sales from $100,000 to $250,000. These farms declined by 38% in the 10-year period between 1997 and 2007. Farms with sales from $250,000 to $499,999 declined 18%, with a loss of over 350 farms. Finally, the overall farmland acreage in the state has declined significantly, as shown in Table 1. Washington State is rapidly losing its base of productive farms and farmland that can generate income.


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<tbody>
<tr>
<td>1 to 49 acres</td>
<td>20,669</td>
<td>339,990</td>
<td>24,001</td>
<td>387,520</td>
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<tr>
<td>50 to 179 acres</td>
<td>7,223</td>
<td>694,722</td>
<td>7,307</td>
<td>714,014</td>
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<td>180 to 499 acres</td>
<td>3,439</td>
<td>1,029,428</td>
<td>3,479</td>
<td>1,039,618</td>
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<td>500 to 999 acres</td>
<td>1,635</td>
<td>1,159,437</td>
<td>1,731</td>
<td>1,206,606</td>
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<tr>
<td>1,000 to 1,999 acres</td>
<td>1,364</td>
<td>1,910,378</td>
<td>1,218</td>
<td>1,688,140</td>
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<tr>
<td>2,000 acres or more</td>
<td>1,609</td>
<td>10,183,547</td>
<td>1,548</td>
<td>9,936,891</td>
</tr>
<tr>
<td>Total</td>
<td>35,939</td>
<td>15,318,008</td>
<td>39,284</td>
<td>14,972,789</td>
</tr>
</tbody>
</table>

### The New Face of Washington State Agriculture

In addition to the changes occurring in farm numbers, new trends are emerging in the characteristics of farm operators in Washington State.

#### A growing number of women farmers

Across the country, a growing number of farm operators and owners are women. From 1978 to 2002, the propor-
tion of farms with women as principal farm operators grew from 5% to 11%. By 2007, 14% of U.S. farms reported having a woman as the principal operator (USDA 2009a).

Washington State has a higher proportion of women-operated farms than the national average, with the number of female principal operators increasing from 5,379 (13% of all farms) in 1997 to 8,090 (21% of all farms) in 2007. Combined, women operators manage 881,612 acres of Washington State farmland and sell $184,307,000 annually in farm products. Cattle and calves are the most commonly produced commodity on women-operated farms, followed closely by poultry and eggs. The commodity with the highest sales value is fruit, with combined annual sales of $57,692,000.

The average age of female principal operators is 56, slightly younger than the average Washington State farmers’ age of 57. As illustrated in Figures 5 and 6, most of these farms (76%) are 50 acres or less and 98% have sales under $250,000 (USDA 2009a). In reality, the number of women farm operators is higher than the number reported here as “principal” operators because in the agricultural census, only one member of a household can be listed as the

![Figure 5. Washington State farms with women principal operators by acreage, 2007. Source: USDA Census of Agriculture, 2007.](image)

![Figure 6. Washington State farms with women principal operators by market value, 2007. Source: USDA Census of Agriculture, 2007.](image)
principal operator. Therefore, many women who operate a farm jointly with a spouse may only be counted as secondary operators.

**A growing number of immigrant farmers**

Between 1997 and 2007, the proportion of U.S. farms reporting “Spanish, Hispanic or Latino” principal operators grew from 1.5% to 3%. In Washington State, Spanish, Hispanic, and Latino principal operators now comprise 4.2% of all Washington State farm operators, up from 2.4% in 1997. Crops, grains, vegetables, and fruit farm classifications account for the majority (65%) of farms with Spanish, Hispanic, and Latino operators, while animal production, ranching, dairy, hogs, sheep, aquaculture, and poultry classifications represent 35% of these farms. The average age for a Latino operator is 49.8, well below the state average age of 57. Most of their farms (77%) have 50 acres or less and 85% have sales under $250,000 (Figures 7 and 8). The number of Latino farmers is most certainly undercounted on the census due to poor English language skills, low literacy rates, mistrust of government, and low representation on farm lists maintained by agricultural agencies (Garcia and Marinez 2005).

Washington State also has a growing number of Hmong farmers. Although they are not a separate category in the census, the WSU Small Farms Program has identified 101 Hmong-operated farms, mostly located in King, Snohomish, and Pierce Counties. Washington State is also home to refugees and immigrants from East Africa and Eastern Europe who aspire to start farms.

![Figure 7](http://example.com/figure7.png)

**Figure 7. Washington State farms with principal operators of Spanish, Hispanic, or Latino origin by acreage. Source: USDA Census of Agriculture, 2009a.**

![Figure 8](http://example.com/figure8.png)

**Figure 8. Washington State farms with principal operators of Spanish, Hispanic, or Latino origin by market value. Source: USDA Census of Agriculture, 2009a.**
The Value of Income from Small Farms

While it is commonly assumed that farm efficiency increases in a linear relationship to size, some research with Midwest commodity producers suggests that gains in efficiencies may begin to level off at around $100,000 to $250,000 in gross sales (Duffy 2009). Further, some intensively farmed specialty crops on small acreages can produce net profits per acre well above conventional commodity levels (Kambara and Shelly 2002). A statewide survey of Washington State farmers found that income generated by small farms can be significant to families and communities (Ostrom et al. 2003), and the 2007 agricultural census confirmed these findings (USDA 2009c). The census found that among farms with total sales between $25,000 and $100,000, just under half reported that their farms generated at least 25% of their total household income. A third said that their farms generated 50% or more of their total household income. Among farms with total sales from $100,000 to $250,000, 70% of respondents said that farm income constituted at least 25% of their household income, while a third said their farms generated from 75% to 100% of their total household income (USDA 2009c). The Washington State survey found that operators of smaller farms were more likely to report local purchasing than were operators of larger farms (Ostrom et al. 2003).

The Increasing Importance of Direct Marketing

The 2007 agricultural census found a sharp increase (25%) in direct market sales reported by Washington State farmers between 2002 and 2007. In both years, most (97%) of the farms reporting direct sales were small farms (USDA 2009a). In the previously mentioned Washington statewide survey, more than 62% of Washington State producers agreed that direct marketing is an effective way to improve farm profitability (Ostrom et al. 2003). Table 2 shows that over 8% of respondents in this survey said they used farmers markets to sell some of their products. Among vegetable growers, specifically, farmers markets were even more important, with 35% reporting that they marketed some of their products this way.

Small farm operators report marketing through farmers markets more frequently than large farm operators do, while roadside stands appear to be commonly used by farmers across a range of farm sizes (Ostrom et al. 2003; Ostrom and Jussaume 2007). Roadside stands and farmers markets were the most commonly used direct marketing outlets among farmers participating in the survey. While very little information exists on the extent of sales from roadside stands, data have been collected on farmers markets.

Farmers markets have clearly become a major sales outlet for small-scale producers in Washington State. Nationally, the total number of farmers markets has increased dramatically since the USDA first began collecting data in 1994. There are now over 6,130 farmers markets in the U.S., growing 249% between 1994 and 2010 (USDA 2010). In 2010, researchers identified 160 markets in Washington State, which were operating in all but three counties. One of the strongest markets in the state reports average daily sales of $1,100 per vendor and total market sales of over $3 million annually. In 2009, sales from all markets combined were conservatively estimated to total between $45 to $50 million (Ostrom et al. 2010). Farmers markets offer a regular and flexible outlet for vendors to sell a wide range of produce, meat, eggs, plants, and value-added farm products in a short period of time. Farmers markets are also an important opportunity for product development, farm visibility, and overall business incubation and development.

Community-supported agriculture (CSA) is also an important marketing strategy for smaller operations, especially for vegetable growers. The number of CSA farms in Washington State has grown in the past 5 years, with 140 farms currently listed. The highest number of CSA farms is concentrated in the Puget Sound area. More than 8% of vegetable growers surveyed said they sell at least some of their produce through a CSA program, although overall less than 2% of farmers used this method (Ostrom et al. 2003). While difficult to track, direct sales to restaurants, food cooperatives, grocery retailers, and institutions like schools and hospitals are also becoming increasingly important sources of revenue for small farms.

Informational Needs of Small Farmers

The 1998 report by the USDA National Commission on Small Farms called attention to the need to focus more resources on the research and informational needs of small farm operators, noting that these farmers typically receive a disproportionately small share of public agricultural assistance dollars (USDA 1998). Meeting the diverse needs of small and limited resource producers will be challenging. When Washington State small farm operators were specifically asked about their informational needs, they ranked marketing assistance, followed closely by soil fertility management as top priorities (Ostrom et al. 2003). When asked about how they obtained new information, they indicated that learning from other farmers was the most common method. Electronic forms of communication appear to be increasingly effective, although it remains to be seen whether all small farms will gain access to high-speed

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### Table 2. Use of direct marketing methods by Washington State farmers. Source: Ostrom and Jussaume 2007.

<table>
<thead>
<tr>
<th>Method</th>
<th>Vegetable Growers</th>
<th>Fruit Growers</th>
<th>All Growers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roadside Stands</td>
<td>46.3%</td>
<td>21.2%</td>
<td>12.2%</td>
</tr>
<tr>
<td>Farmers’ Markets</td>
<td>35.2%</td>
<td>15.3%</td>
<td>8.2%</td>
</tr>
<tr>
<td>U-Pick Sales</td>
<td>23.4%</td>
<td>12.9%</td>
<td>6.8%</td>
</tr>
<tr>
<td>Restaurants</td>
<td>7.5%</td>
<td>3.8%</td>
<td>3.4%</td>
</tr>
<tr>
<td>CSA</td>
<td>8.4%</td>
<td>2.1%</td>
<td>1.7%</td>
</tr>
</tbody>
</table>
Internet in the near future. The 2007 agricultural census found that among small farm operators in Washington State, 41% had high-speed Internet access.

Based on the experiences of small farms programs, new farmer training programs, and county extension offices, interest in small-scale agriculture as a way to get started in farming is also strong around the country. Immigrant farmers just starting out have an especially strong need for support from public extension and outreach programs (USDA 1998). At a time of declining public investment in agricultural research and extension, creative new approaches will be required to address the needs of incoming and existing small farm operators, many of whom will constitute the next generation of Washington State agricultural producers.

**Conclusion**

Small farms are important to Washington State, with significant numbers of them found in every county. Like other small businesses, small farms can be valuable community assets, generating income and employment opportunities. Beyond their economic contributions, these farms serve critical environmental, aesthetic, cultural, and social functions. A diverse array of productive, independently owned farms operating throughout the state can ensure a dependable and accessible local food supply and the conservation of natural resources for the future. Yet, if current trends hold, we will see continued erosion of commercially viable small- and moderate-sized farms and their associated farmland. At present, the only growth in overall farm numbers is occurring among very large farms and extremely small, non-income-generating farms. The proportion of women- and Latino-owned farms and direct market farms is also increasing. Targeted research and outreach approaches that account for the unique needs of all Washington State farmers will be necessary to improve small farm viability and slow rates of farm and farmland loss.

**References**


