# Overview Section: Organization

## *Size, Type, and Classification of Farms and Ranches in the Rockies*

By Jayash Paudel

THE 2010 COLORADO COLLEGE STATE OF THE ROCKIES REPORT CARD

## Key Findings:

- Only seven percent of the nation's family farms are in the Rockies region.
- The Rockies contains 70 percent of the total cooperative, institutional, and trust farm acres in the U.S.
- Since 1987, the Rockies has experienced a 30 percent growth in the number of individual or family farms, but a 13 percent decline in acreage.
- Family farms represent 92 percent of the total farms and 68 percent of the total farm acreage in the Rockies region.

### Introduction

Farms in the U.S. cover a wide spectrum of production, ranging from subsistence farmers growing food for their families to commercial farmers trying to maximize profit as they serve large numbers of people. According to United States Department of Agriculture (USDA), a farm is defined as any place from which $1,000 or more of agricultural products is produced and sold, or normally would have been sold, during the year under consideration.[1] Historically, most farms in the U.S. have been household-based operations, usually organized as an individual or family (sole) proprietorship or partnership. The number of corporate-owned production operations has in recent decades increased, however, prompting many to question the future make-up of agriculture in the United States. This section of the Report Card outlines the types of farms in the U.S. and trends in farm organization over the last 20 years. Furthermore, it touches upon the broad definition of a family farm in the U.S. and how this may restrict financial support for beginning farms.

### Farm Organization

The USDA 2007 Census of Agriculture classifies farms into four different types according to their business organization: individual or family (sole proprietorship), partnership, corporation (family-held

*About the author: Jayash Paudel (Colorado College class of 2010) is a 2009-10 Student Researcher for the State of the Rockies Project*

and nonfamily-held), and other (cooperative, estate or trust, and institutional).[2] Historically, family farms predominated and remain a nostalgic image in the public's mind of a "typical" farm or ranch; the actual characteristics that define this form of agriculture are given in Table 1.

A family farm is one in which ownership and control of the farm business is held by a family of individuals related by blood, marriage, or adoption. Family ties can and often do extend across households and generations. Historically, a family farm would supply labor for the farm and own all of the land and capital of the farm. Today, the extent to which individual farms hire nonfamily labor or rent their land varies greatly across farms. According to the USDA Economic Research Service (ERS), family farms may be organized as sole or family proprietorships, partnerships, or family corporations, but they may not hire any managers to operate the business.[3] For instance, two family members may establish a partnership, or siblings can start a family corporation as stockholders with distantly related siblings retaining an interest in the farm. Alternatively, nonfamily farms include farms organized as nonfamily corporations, cooperatives, estates, trusts, and grazing associations, and hire general managers to run the business.[4]

## Table 1: What is a Family Farm?

No specific, formal definition for family farms exists; Congress and researchers use different definitions, some of which are summarized below.

* Person-year = One whole year, or fraction thereof, worked by an employee. Expressed as a quotient (to two decimal places) of the time units worked during a year (hours, weeks, or months) divided by the like total time units in a year. For example: 80 hours worked is 0.04 of a person-year, 4 weeks worked is 0.08 of a person-year.

◦ All farms except large, nonfamily corporations; farms using less than 1.5 person-years of hired labor; no hired manager (U.S. Congress, 1985)

◦ Farms with no hired manager; no nonfamily corporations or cooperatives (Salant et al., 1986; Hoppe et al., 1996). Economic Research Service uses this definition.

◦ Farms with less than 3.0 person-years* of labor; family supplying at least half of labor (Irwin, 1973)

◦ Farms with less than 1.5 to 2.0 family workers and the same or fewer number of hired workers; buying and selling in the market; self-managed; tenancy not extremely high (Breimyer, 1991)

◦ Farms where agricultural production is either the primary occupation of the operator (or is an important contributor to family income). Provides at least half-time employment for an operator, family member, or a hired laborer. Operated by no more than three extended families (Sumner, 1985).

*Significance of Farm Organization*

Over the last century, farming has progressively contributed a smaller share of gross domestic product (GDP) and employed a smaller share of the labor force (See the Overviews by Russell Clarke and Zoë Wick in this Report Card). The percentage of the U.S. labor force in agriculture decreased from 41 percent in 1930 to 1.9 percent in 2002, and the contribution of agriculture to total U.S. gross domestic product (GDP) fell from 7.7 percent in 1930 to 0.7 percent in 2002.[5] Yet the food and agriculture sector continues to play a strong role in the national economy. Though fewer than one million Americans are farmers—considerably less than 1 percent of the workforce—understanding farm organization is important.[6]

Farm organization is significant for a number of reasons including food security, agricultural heritage, and land management control. As E-coli and other contaminant outbreaks occur in products from spinach to beef, consumers increasingly want to know who produces their food, how it is produced, and how these factors impact product safety and price as well as the land and communities.[7]

Photo by Fair & Thompson, 1904. Lewiston Valley, ID. Library of Congress.

Gunnarson Farmstead, Bonneville County, ID. Library of Congress.

## Table 2a: Farm Organization Statistics, Number and Acres of Farms by Farm Type, 2007

| | Number of Farms | | | | | Acres in Farms | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Individual or family (sole proprietorship) | Partnership | Corporation: Family held | Corporation: Other than family held | Other - cooperative, estate or trust, institutional, etc. | Individual or family (sole proprietorship) | Partnership | Corporation: Family held | Corporation: Other than family held | Other - cooperative, estate or trust, institutional, etc. |
| United States | 1,906,335 | 174,247 | 85,837 | 10,237 | 28,136 | 572,524,175 | 161,416,999 | 113,882,525 | 10,819,589 | 60,838,445 |
| Rockies | 130,943 | 14,096 | 10,338 | 877 | 3,140 | 94,335,656 | 36,022,515 | 43,237,534 | 3,145,418 | 44,235,199 |
| Arizona | 13,721 | 962 | 612 | 117 | 225 | 1,597,797 | 1,378,550 | 1,714,673 | 146,596 | 21,280,283 |
| Colorado | 30,164 | 3,762 | 2,103 | 239 | 786 | 19,125,603 | 6,527,619 | 3,751,760 | 521,327 | 1,678,602 |
| Idaho | 21,308 | 2,124 | 1,434 | 99 | 384 | 5,874,172 | 2,343,151 | 2,196,738 | 129,515 | 953,807 |
| Montana | 22,625 | 2,839 | 3,353 | 156 | 551 | 29,645,852 | 10,263,436 | 16,982,934 | 585,392 | 3,910,848 |
| Nevada | 2,542 | 284 | 207 | 23 | 75 | 1,416,997 | 616,765 | 1,609,413 | 956,143 | 1,266,074 |
| New Mexico | 18,185 | 1,456 | 780 | 59 | 450 | 20,116,491 | 7,274,300 | 7,345,325 | 178,657 | 8,323,276 |
| Utah | 13,614 | 1,645 | 917 | 97 | 427 | 3,429,156 | 1,810,957 | 1,348,312 | 109,737 | 4,396,538 |
| Wyoming | 8,784 | 1,024 | 932 | 87 | 242 | 13,129,588 | 5,807,737 | 8,288,379 | 518,051 | 2,425,771 |

Source: USDA Census of Agriculture, 2007

## Table 2b: Farm Organization Statistics, Number and Acres of Farms by Farm Type, by Percent, 2007

| | Number of Farms | | | | | Acres in Farms | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Individual or family (sole proprietorship) | Partnership | Corporation: Family held | Corporation: Other than family held | Other - cooperative, estate or trust, institutional, etc. | Individual or family (sole proprietorship) | Partnership | Corporation: Family held | Corporation: Other than family held | Other - cooperative, estate or trust, institutional, etc. |
| Rockies percent of U.S. total | 7% | 8% | 12% | 9% | 11% | 16% | 22% | 38% | 29% | 73% |
| Rockies States' percents derived from Rockies total | | | | | | | | | | |
| Arizona | 10% | 7% | 6% | 13% | 7% | 2% | 4% | 4% | 5% | 48% |
| Colorado | 23% | 27% | 20% | 27% | 25% | 20% | 18% | 9% | 17% | 4% |
| Idaho | 16% | 15% | 14% | 11% | 12% | 6% | 7% | 5% | 4% | 2% |
| Montana | 17% | 20% | 32% | 18% | 18% | 31% | 28% | 39% | 19% | 9% |
| Nevada | 2% | 2% | 2% | 3% | 2% | 2% | 2% | 4% | 30% | 3% |
| New Mexico | 14% | 10% | 8% | 7% | 14% | 21% | 20% | 17% | 6% | 19% |
| Utah | 10% | 12% | 9% | 11% | 14% | 4% | 5% | 3% | 3% | 10% |
| Wyoming | 7% | 7% | 9% | 10% | 8% | 14% | 16% | 19% | 16% | 5% |

Source: USDA Census of Agriculture, 2007

*Significance in the Rockies Region*

With a rapidly growing population and expanding cities, the Rockies region is home to dynamic and distinctive farm organization. The 2007 Census of Agriculture reported that only seven percent of the U.S. family farms lie in the Rockies region (Tables 2a and 2b). Statistics for acreage of family farms, however, paint a different and more meaningful picture. The same Census of Agriculture reported that the Rockies region contains 16 percent of total family farm acres in the U.S. This is comparable to the acreage of the family farms in the West North Central Division (34 percent) and the West South Central Division (21 percent).[8]

Comparing farm data for the census Mountain Division (the same eight states as the Rockies region) against other census divisions highlights some interesting regional conditions (see Table 2b). Similarly, the Rockies region possesses only eight percent of the total number of partnership farms in the U.S., but includes 22 percent of the total partnership farm acreage. The percentages are even higher in the case of corporation farms. The Rockies region is home to 38 percent of the total family-owned corporate farm acres, 33 percent of the total non-family corporation farm acres, and 70 percent of the total cooperative, institutional, and trust farm acres in the U.S.[9] Although the number of farms in the Rockies may be relatively small, the region ranks second out of the nine census divisions in the number of acres devoted to agriculture.[10]

**Trends over the Past 20 Years**

In recent years, public discussion has focused on the seemingly rapid expansion of corporate agriculture at the expense of traditional, family farms. Historically, family farms were the weft and warp of the Midwest.[11] But can family farms survive as corporate farms continue to grow and increase?

Although present trends indicate that the family farm is losing its place as the nucleus of U.S. agriculture,[12] data from the USDA show the family farm enterprise holding steady. In the past 20 years, the U.S. has seen five percent growth in the number of individual or family farms. As shown in Figure 1, the Rockies region (Census Mountain Division) experienced the highest growth rate of any division, with 30 percent growth in the number of individual farms. In terms of acreage, however, the U.S has seen a nine percent decline in the total area of individual farms. The Rockies experienced a 13 percent decline in the total acreage of these farms between 1987 and 2007. Although individual or family farms have increased in number, their total area has decreased. This implies that individual or family farms are on average becoming smaller.

Figure 1:
Change in Individual or Family Farms, by Percent, 1987 - 2007
Source: USDA Census of Agriculture, 1987 and 2007
Note: Change calculated using the difference between 1987 and 2007 values

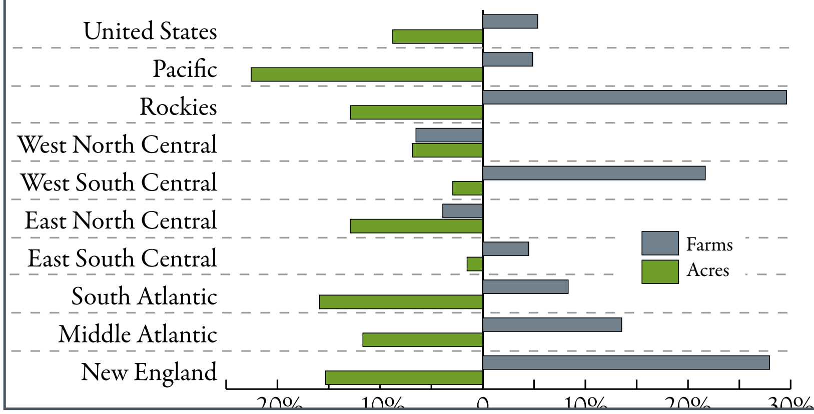



Figure 2:
Number and Total Acres of Farms, by Type of Organization, United States, 2007
Source: USDA Census of Agriculture, 2007

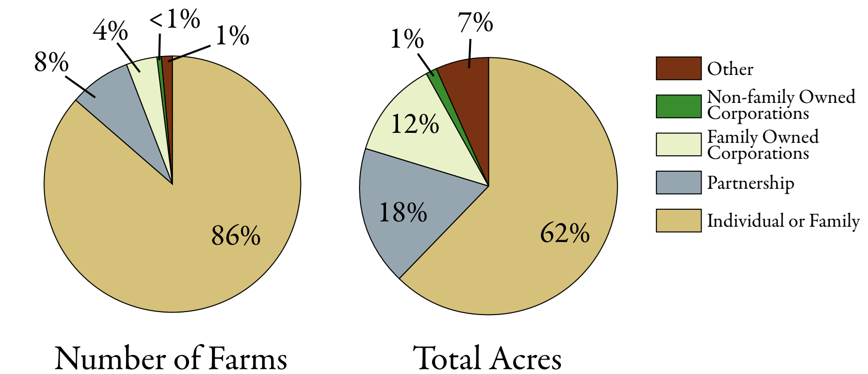
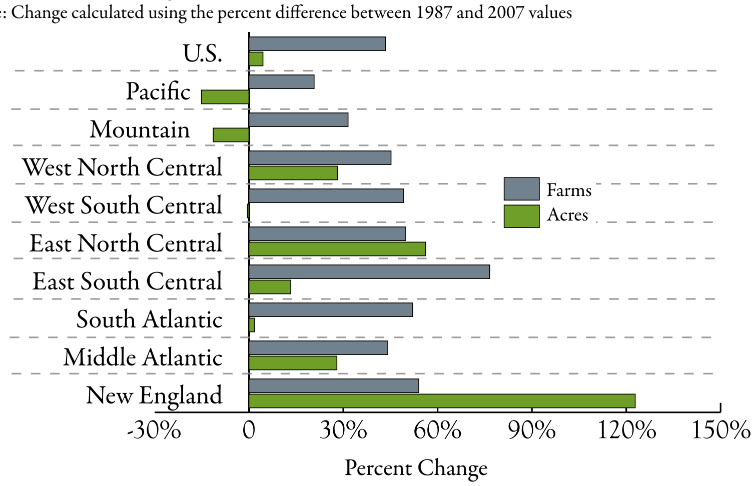



Figure 3:
Change in Corporate Farms (Family Held and Other than Family Held), by Percent, 1987 - 2007
Source: USDA Census of Agriculture, 1987 and 2007
Note: Change calculated using the percent difference between 1987 and 2007 values



The comparative size of family farms as of 2007 is shown in Figure 2. Individual or family farms account for 86 percent of the total number of farms and 62 percent of the total farm acreage in the U.S. While family farms currently make up the majority of the U.S. farms, corporate farms are growing at a much faster rate in terms of number and acreage. Census data suggest that corporate farms (both family-owned and non-family owned) represent almost five percent of the total number of farms and share 13 percent of the total agricultural acreage in the U.S. Although this is only one-fifth of the land covered by individual or family farms, corporation farms are growing at a faster rate than other types of farms. Corporation farms (both family-owned and non family owned) at the national level, as shown in Figure 3, underwent net positive growth, increasing 43 percent in number and 4 percent in acreage in the U.S. For the Mountain Census Division the number of corporate farms increased by approximately 25 percent while the acres farmed by corporate entities decreased approximately 5 percent.

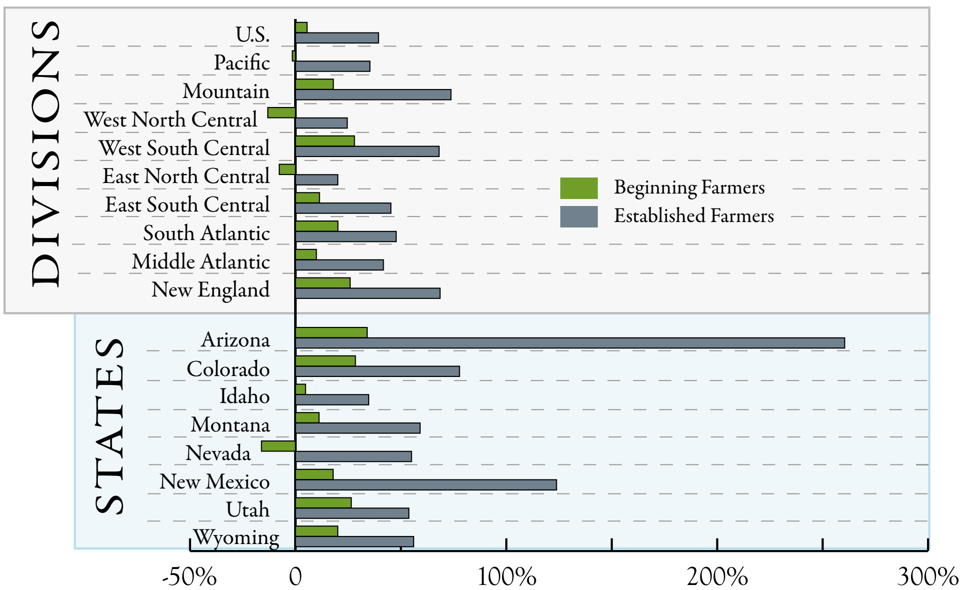
Figure 4:

Change in Beginning and Established Farmers, by Percent, 1987 - 2007

Source: USDA Census of Agriculture, 1987 and 2007

Note: Change calculated using the percent difference between 1987 and 2007 values

The USDA defines a beginning farm as one operated by a farmer who has operated a farm or ranch for 10 years or less either as a sole operator or with others who have operated a farm or ranch for 10 years or less.




## Issues for Family Farms

The dominance of family farms in U.S. agriculture has been enabled, in part, by USDA programs designed to encourage the growth of family farms, such as Emergency Farm Loans and Direct Operating Loans.[13] Legislators, however, have not formally defined family farms, and various organizations and researchers have employed different definitions of a family farm. Many definitions equate family farms with small, limited production farms, while associating the larger farms that generate the bulk of production with corporate, non-family interests. Even the abovementioned ERS definition of a family farm captures a broad range of farms. The ERS's definition of family farms includes sole proprietorships, partnerships, and even corporations, as long as the principal operator's family owns more than half of the farm business. An operator whose family owns 51 percent of the farm business and chooses to find investors still qualifies as a family farmer, even if they no longer own the land or any production inputs.[14] Because the USDA's definition of a family farm includes such a wide variety of farms, policymakers have trouble targeting federal assistance at farms actively engaged in agricultural production. This has serious repercussions for beginning farmers and hinders efficient subsidy allocation (See Case Study on Family Farms).

## Beginning Farmers

The USDA defines a beginning farm as one operated by a farmer who has operated a farm or ranch for 10 years or less either as a sole operator or with others who have operated a farm or ranch for 10 years or less.[15] This broad definition can adversely affect the efficient allocation of federal subsidies.

Farm subsidies are intended to alleviate farm poverty and help struggling family farmers (See Case Study on Farm Subsidies), but they may have an unintended effect of preventing young people from entering farming. The cap for federal subsidies is very high; the larger the farm becomes, the more subsidies they receive,[16] and economists estimate that subsidies inflate the value of farmland by 30 percent.[17] Larger commercial farms tend to bid up the prices, making it more difficult for new farmers to enter the business. The result is that beginning farmers need substantial financial assistance to run their business successfully.

Support programs designed for beginning farmers are also affected by the amount of money the USDA allocates for federal farm programs in general. According to a report prepared by the U.S. Government Accountability Office (GAO), the USDA does not have adequate controls in place to prevent payments to individuals who exceed income eligibility limits. The USDA has previously relied on individuals' one-time self-certifications that they meet income eligibility requirements and their promise to notify the USDA if they no longer meet these requirements.[18] These self-certifications are not viewed by critics as reliable, and furthermore, the report claims, the USDA has not always withheld payments from ineligible individuals.

Although broad family farm definitions inhibit support to beginning farmers, USDA data (Figure 4) show that there has been an increase in the number of beginning farmers in the U.S. In the Rockies region an even stronger

Figure 5:

Distribution of Corporation Farms (Number of Farms) by Division, 2007

Source: USDA Census of Agriculture, 2007

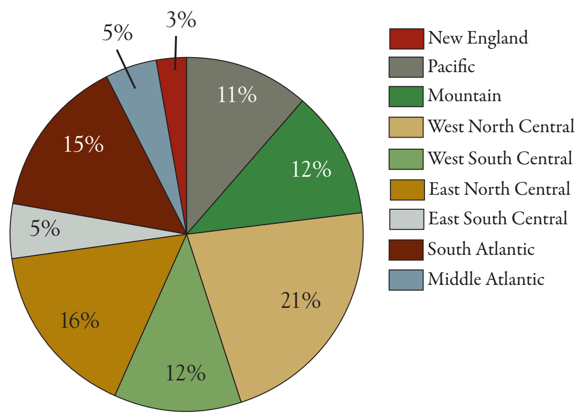
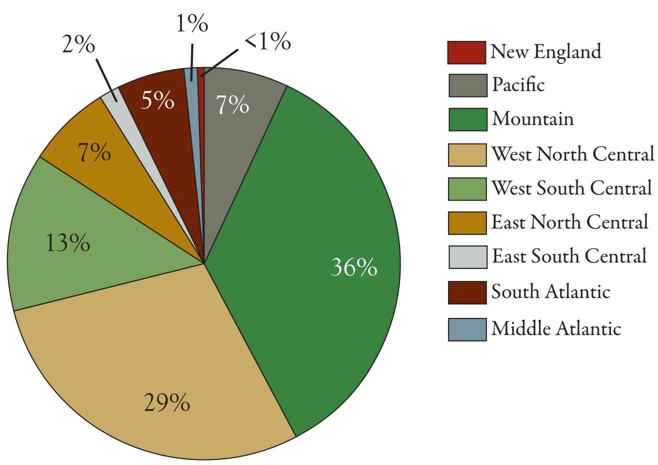



Figure 6:

Distribution of Corporation Farms Acres by Division, 2007

Source: USDA Census of Agriculture, 2007




growth has occured; seven of the eight states have shown a positive growth rate in the number of beginning farmers.

The USDA is increasingly targeting its programs to address the potential financial challenges faced by beginning farmers. Most of the current assistance comes in the form of loans from the USDA's Farm Service Agency (FSA) and from the independent Farm Credit System (FCS).[19] From fiscal years 2000 through 2006, FSA loans to beginning farmers rose from $716 million to $1.1 billion annually, representing 35 percent of the total amount of USDA loans to all farmers.[20] According to a study conducted by the GAO, however, the USDA should outline the goals of beginning farmer assistance programs and demonstrate program effectiveness, rather than simply recording the number of farmers assisted and the amount of money provided.[21]

**Conclusion**

Patterns across the U.S. of corporate farms by number and size depict one important dimension to farming (See Figure 5 and Figure 6). Family farms are important in the region, not only in terms of their size and number, but also in terms of the implications of their broad definitions. The Rockies region contains more farm acreage than any other U.S. region, but only seven percent of U.S. farms, indicating unique farm organization patterns. Because the definitions of a family farm are so broad, caution is needed when interpreting aggregate farm organization statistics. Narrower definitions can help policymakers achieve goals such as providing support to beginning farmers to meet the needs of future generations and preserve our natural resources.

[1] United States Department of Agriculture. http://www.ers.usda.gov/briefing/FarmStructure/Questions/Closeup.htm (Accessed July 16, 2009).

[2] *Ibid*.

[3] United States Department of Agriculture. http://www.ers.usda.gov/Briefing/FarmStructure/Questions/familyfarms.htm (Accessed July 16, 2009).

[4] *Ibid*.

[5] Dimitri, Carolyn, Anne Effland, and Neilson Conklin. "The 20th Century Transformation of U.S. Agriculture and Farm Policy." United States Department of Agriculture Economic Information Bulletin. Number 3, June 2005. http://www.ers.usda.gov/publications/eib3/eib3.htm (Accessed July 16, 2009).

[6] America's Census Bureau, referenced in "Filling the hoppers." *The Economist*. November 1, 2007.

[7] Ikerd, John. "Farm Economy State of the Union Address." http://newfarm.rodaleinstitute.org/features/1102/ikerd_address/index.shtml (Accessed July 6, 2009).

[8] United States Department of Agriculture. *2007 Census of Agriculture.* 2009.

[9] *Ibid*.

[10] *Ibid*.

[11] "True Grit." *The Economist*. http://www.economist.com/world/unitedstates/displaystory.cfm?story_id=E1_NPQGST (Accessed June 28, 2009).

[12] Breimyer, Harold F. and A.L. (Roy) Frederick. "Does the Family Farm Really Matter?" University of Missouri Extension G820. Reviewed October 1993. http://extension.missouri.edu/publications/DisplayPub.aspx?P=G820 (Accessed July 12, 2009).

[13] "Beginning Farmers: Additional Steps Needed to Demonstrate the Effectiveness of USDA Assistance." United States Government Accountability Office Report to the Chairman. Committee on Agriculture, Nutrition, and Forestry, and U.S. Senate, September 2007.

[14] O'Donoghue, Erik J., Robert A. Hoppe, et al. "Exploring Alternative Farm Definitions: Implications for Agricultural Statistics and Program Eligibility." United States Department of Agriculture. Economic Information Bulletin Number 49, March 2009.

[15] Ahearn, Mary, and Doris Newton. "Beginning Farmers and Ranchers." United States Department of Agriculture, Economic Information Bulletin Number 53, May 2009.

[16] "In The Great American Desert." *The Economist*. December 13, 2001.

[17] Riedl, Brian. "How Farm Subsidies Harm Taxpayers, Consumers, and Farmers, Too." The Heritage Foundation. http://www.heritage.org/research/agriculture/bg2043.cfm (Accessed July 10, 2009).

[18] "Federal Farm Programs: USDA Needs to Strengthen Controls to Prevent Payments to Individuals Who Exceed Income Eligibility Limits." United States Government Accountability Office Report to the Chairman. Committee on Agriculture, Nutrition, and Forestry, U.S. Senate, September 2007.

[19] Aheard and Newton, 2009.

[20] United States Government Accountability Office. "Beginning Farmers: Additional Steps needed to Demonstrate the Effectiveness of USDA Assistance." September, 2007.

[21] *Ibid.*

# Case Study: Small Family Farms

## By Jayash Paudel

**Introduction**

Farming in the United States is diverse, ranging from very small family and retirement farms to large corporations with millions of dollars in sales. Because the USDA's definition of family farms (refer to the Overview on Farm Organization) is very broad, the USDA Economic Research Service (ERS) has grouped farms into categories based on gross sales in a given year and the principal occupation of the farmer.[1] This section outlines the types of family farms in the Rockies region, focusing on the significance of small family farms, as categorized by the ERS, and the prevalence of bankruptcy among small family farmers.

**Farm Types**

Based on annual gross sales and the principal occupation of the farm operator, the ERS classifies farms into three types: small family farms, large-scale family farms, and non-family farms. The characteristics of these types of farms are summarized in Table 3. Small family farms have gross sales less than $250,000, large-scale farms exceed sales of $250,000, and nonfamily farms are nonfamily corporations, cooperatives, or farms that hire a general manager. By this system, gross farm sales determines the "size" of a farm independent from the legal definition of ownership. Gross sales is calculated as the farm's crop and livestock sales plus the shares of production received by any landlords and production contractors.[2] The measure also includes all

**Table 3: Classifications and Definitions of Farm Types**

| Farm Type | Classification | Definition |
|---|---|---|
| Small family farms | Limited-resource farms | Farms with gross sales less than $100,000 in 2003 and less than $105,000 in 2004. Operators must also receive low household income in both 2003 and 2004. Household income is considered low in a given year if it is less than the poverty level for a family of four, or it is less than half the county median household income. Operators may report any major occupation except hired manager. |
| | Retirement farms | Farms whose operators report they are retired. |
| | Residential/lifestyle farms | Farms whose operators report a major occupation other than farming.* |
| | Farming-occupation farms | Farms whose operators report farming as their major occupation. These farms may be either low-sales farms (gross sales less than $100,000) or medium-sales farms (gross sales between $100,000 and $249,999). |
| Large family farms | Large family farms | Farms with gross sales between $250,000 and $499,999. |
| | Very Large family farms | Farms with gross sales of $500,000 or more. |
| Nonfamily farms | This is discussed in the Overview section on farm organization. | Farms organized as nonfamily corporations or cooperatives, as well as farms operated by hired managers. Also include farms held in estates or trusts. |

Source: Robert A. Hoppe, Penni Korb, Erik J. O'Donoghue, and David E. Banker, "Structure and Finances of U.S. Farms Family Farm Report, 2007 Edition," Economic Information Bulletin Number 24, June 27, http://www.ers.usda.gov/Publications/EIB24/. Accessed August 4, 2009.
* Note: Excludes Limited-resource farms whose operators report this occupation.
The definition of Small Family Farms: Family farms with gross sales less than $250,000. Four types of small family farms are discussed in this table.

government payments received by the farm and its landlords. Table 3 sub-divides small family farms and large-scale family farms into sub-classifications.[3]

**Significance of Family Farms in the Rockies**

Family farmers are important to the Rockies region. They pass down among generations farming traditions and cultural values. Data from the 2007 Census of Agriculture show the overwhelming prevalence of family farms in the Rockies. According to the Census of Agriculture, family farms (including small family farms and large-scale family farms) represent 92 percent of the total farms and 68 percent of the total farm acreage in the Rockies region.[4]

The total acreage of family farms[5] is, perhaps, more interesting than the number of family farms in the Rockies region. For instance, the 2007 Census of Agriculture reported that the Rockies region contains only seven percent of the nationwide total number of small family farms, five percent of the total number of large-scale family farms, and nine percent of the total number of nonfamily farms.[6] Statistics on farm acreage shown in Figure 7 give us a different picture. Census data suggest that the Rockies region has 20 percent of the total small family farm acres in the U.S. Though the Rockies region has only a low *number* of small family farms, its has comparatively more *acres*.

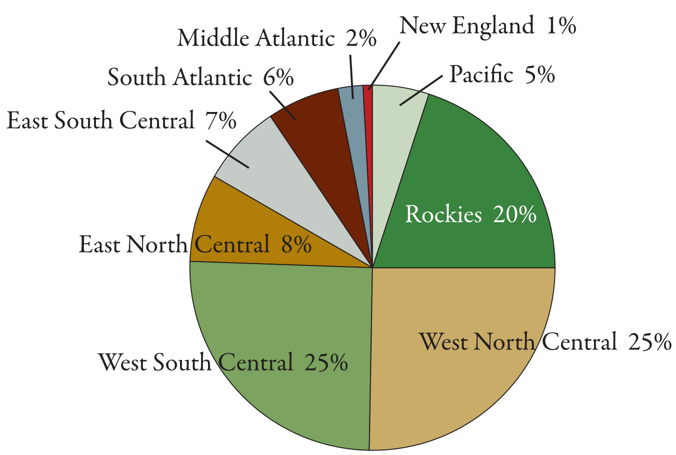
Data on the Rockies region illuminate the importance of small family farms (see Table 4). By number of farms, small family farms account for the highest percentage of total farms in each state in the Rockies region. Nevada has the lowest percentage of small family farms (84 percent of the total number of farms). While Arizona has the highest percentage (91 percent of total number of farms), its small family farms make up the lowest percentage of total farm acreage (7 percent). Colorado has the largest percentage of acres in small family farms in the Rockies region (52 percent of total farm acreage).

Based on the principal occupation of the farm operator, the small family farm is further classified into occupation farms and residential/lifestyle farms (Illustrated in Table 3.).[7] Among the total number of farms in the Rockies region, only 18 percent fall under farming occupation farms, and approximately 35 percent fall under residential/lifestyle farms (See Table 5). This suggests that the Rockies region might have a large number of farmers who are involved with

Figure 7:

Total Acres of Small Family Farms, by Census Division, 2007

Source: USDA Census of Agriculture, 2007




| Table 4: Small Family Farms, Number and Acreage by Percent, Rockies States, 2007 | | | | | | |
|---|---|---|---|---|---|---|
| | Small family farms (number) | Total number of farms [1] | Small family farms as percent of total number of farms | Small family farms (acres) | Total acres of farms [2] | Small family farms as percentage of total farms acreage |
| Arizona | 14,201 | 15,637 | 91% | 1,916,476 | 26,117,899 | 7% |
| Colorado | 32,659 | 37,054 | 88% | 16,415,785 | 31,604,911 | 52% |
| Idaho | 21,821 | 25,349 | 86% | 4,618,245 | 11,497,383 | 40% |
| Montana | 25,706 | 29,524 | 87% | 29,263,664 | 61,388,462 | 48% |
| Nevada | 2,633 | 3,131 | 84% | 916,138 | 5,865,392 | 16% |
| New Mexico | 18,938 | 20,930 | 90% | 19,087,442 | 43,238,049 | 44% |
| Utah | 15,082 | 16,700 | 90% | 3,883,345 | 11,094,700 | 35% |
| Wyoming | 9,547 | 11,069 | 86% | 12,602,608 | 30,169,526 | 42% |

Source: USDA Census of Agriculture, 2007

Note: [1] Total number of farms is the sum of small family farms, large family farms, and nonfamily farms.

[2] Total acres of farms is the sum of acres of small family farms, large family farms, and nonfamily farms.

either full-time off-farm jobs or alternative farm enterprises to generate supplemental income. (See Case Study on alternative farm enterprises).

Policymakers are attempting to refine the broad definitions of a farmer to include a narrower, more measurable sense of "active engagement."[8] One goal is to target farm program payments more effectively. To do this, it is important to determine whether farm operators in the Rockies region rely on farming for a living or farm mainly as a hobby. Small family farmers may be involved with recreational agricultural acitivity to generate additional income, balance the flucations in agricultural income, fully utilize their resources, or provide employment for family members.[9]

Among the eight states in the Rockies region, Montana has the highest number of farming occupation farms. Both Utah and Colorado have the highest number of residential/lifestyle farms (almost 42 percent of the total number of farms) (See Table 5). This implies that Utah and Colorado might have substantial alternative agricultural enterprises. These enterprises conduct either farm-related services or off-farm activities. Today's small family farms must struggle to keep up with economic and technological changes that have affected the U.S. agricultural industry over the last several decades.[10] The competitive world in which small farms operate has created business uncertainty and added more risk to farm operations.

**Financial Status of Small Family Farms**

The fiancial status of farms can be measured through several ratios. Table 6 lists the principal financial ratios used by the ERS to determine the financial performance of farms.[11] Profitability measures are strongly associated with farm size. Data suggest that the average operating profit margin and average rates of return on assets and equity are negative for small farms, but positive for large-scale and nonfamily farms.[12] Since large farms have large sales, the profitability ratios are higher for large farms. Although nearly half or more of the farms in each small farm type had a negative operating profit margin in 2004, 15–28 percent of each small farm type had an operating profit margin of at least 20 percent.[13] Furthermore, a number of small family farms generated positive net farm income. However, the average net farm income of small family farmers was lower than that of large family farmers. Overall, net farm income for all the farms averaged $25,000 per farm in 2004 (See Table 7).[14]

## Table 5: Number and Percent of Small Family Farm Types, 2007

| | Total Number of Farms [1] | Small Family Occupation-farms (number) | Small Family Occupation-farms, Percent of Total Farms | Small Family Residential/ lifestyle Farms (Number) | Small Family Residential/ Lifestyle-farms, Percent of Total Farms |
|---|---|---|---|---|---|
| United States | 2,204,792 | 359,025 | 16% | 801,844 | 36% |
| Rockies Region | 159,394 | 28,688 | 18% | 55,445 | 35% |
| Arizona | 15,637 | 2,709 | 17% | 3,639 | 23% |
| Colorado | 37,054 | 6,199 | 17% | 15,498 | 42% |
| Idaho | 25,349 | 4,175 | 16% | 9,494 | 37% |
| Montana | 29,524 | 7,336 | 25% | 9,016 | 31% |
| Nevada | 3,131 | 577 | 18% | 1,074 | 34% |
| New Mexico | 20,930 | 3,028 | 14% | 5,914 | 28% |
| Utah | 16,700 | 2,151 | 13% | 6,986 | 42% |
| Wyoming | 11,069 | 2,513 | 23% | 3,824 | 35% |

Source: USDA Census of Agriculture, 2007
Note: Total number of farms is the sum of small family farms, large family farms, and nonfamily farms.

## Table 6: Principal Financial Ratios Used by the ERS to Determine the Financial Performance of Farms

| Ratio | Definition |
|---|---|
| Return on assets | = 100% * (net farm income + interest paid - charge for unpaid operators' labor and management ) / total assets[1] |
| Return on equity | =100% * (net farm income - charge for unpaid operators' labor and management) / net worth. |
| Operating profit margin | = 100% * (net farm income + interest paid - charge for unpaid operators' labor and management) / gross farm income. |
| Operating expense ratio | = 100% * total cash operating expenses / gross cash farm income. |
| Debt/asset ratio | = 100% * total liabilities/total assets. |

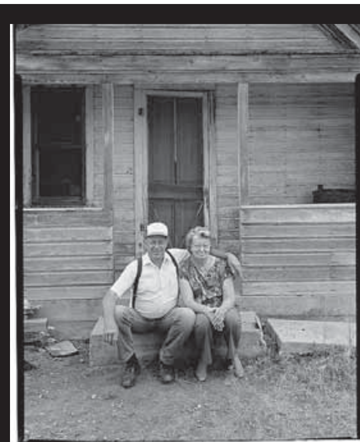
Source: Robert A. Hoppe, Penni Korb, Erik J. O'Donoghue, and David E. Banker, "Structure and Finances of U.S. Farms Family Farm Report, 2007 Edition," Economic Information Bulletin Number 24, June 27, http://www.ers.usda.gov/Publications/EIB24/. Accessed August 4, 2009

[1]Assets include: Farm real estate assets, machinery and equipment, value of crops stored, livestock and poultry inventories, purchased inputs on hand, investments in cooperatives, and other financial assets.

Given their low profit margin and farm income, small family farms often have to rely on off-farm income. Average off-farm income in 2004 ranged from $13,600 for limited-resource households to $96,900 for households operating residential/lifestyle farms (See Table 3 for classification of small family farms).[15] Most off-farm income is generated from earned sources, either a wage-and-salary job or self-employment. However, households operating limited-resource or retirement farms receive well over half their off-farm income from sources such as Social Security, pensions, dividends, interest, and rent.

**Small Family Farms and Bankruptcy**

Because small family farmers are usually financially dependent on off-farm income, small farm households are



Photos from the Library of Congress. Aurora and Denver, Colorado.

## Table 7: Selected Performance Measures, by U.S. Farm Type, 2004

| Item | | Small Family Farms | | | | | Large-scale Family Farms | | Non-family Farms | All Farms |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Limited Resource | Retirement | Residential or Lifestyle | Farming - Occupation | | | | | |
| | | | | | Low Sales | Medium Sales | Large | Very Large | | |
| Total Farms | | 197,793 | 338,671 | 837,542 | 395,781 | 133,299 | 86,087 | 71,708 | 47,103 | 2,107,925 |
| Profitability Measures | Rate of return on assets [1] | -4.0% | -1.5% | -2.0% | -2.7% | -0.4%# | 2.5% | 6.8% | 7.1% | 0.5%** |
| Profitability Measures | Rate of return on equity [2] | -4.4% | -1.7% | -2.8% | -3.2% | -1.3%** | 1.8%* | 6.7% | 7.1% | -0.1%# |
| Profitability Measures | Operating profit margin [3] | -86.7% | 27.8%* | -35.5% | -36.1% | -2.4%# | 10.8% | 18.3% | 23.8% | 3.0%** |
| Income Measures: Net farm income | | $1,812** | $9,655 | $4,544 | $9,098 | $39,804 | $87,499 | $287,921 | $175,795 | $25,003 |
| Farms with positive net farm income | | 66.7% | 79.5% | 62.8% | 68.7% | 76.9% | 82.2% | 83.8% | 72.2% | 69.6% |

Source: Structure and Finance of U.S. Family Farms, Environmental Research Service, USDA. 2007.

[1] Return on assets = 100% X (net farm income + interest paid - charge for unpaid operators' labor and management ) / total assets.

[2] Return on equity = 100% X (net farm income - charge for unpaid operators' labor and management ) / net worth.

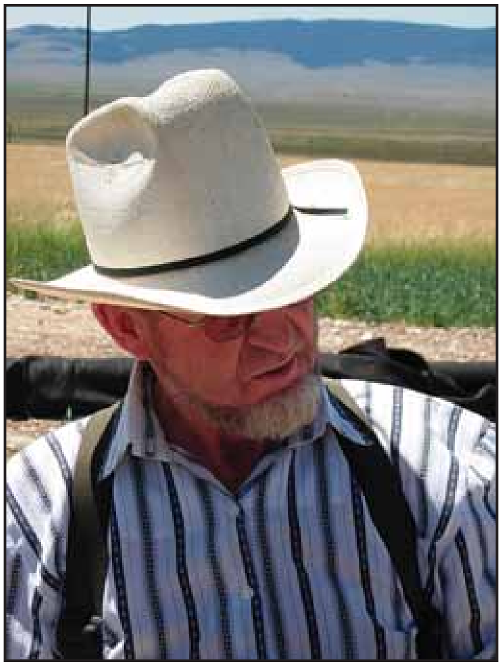
[3] Operating profit margin = 100% X (net farm income + interest paid - charge for unpaid operators' labor and management) / gross farm income.

* = Standard error is between 25 percent and 50 percent of the estimate.

** = Standard error is between 51 percent and 75 percent of the estimate.

# = Standard error is greater than 75 percent of the estimate.

significantly affected by the nonfarm economy.[16] Since the Rockies region consists of many small family farms, it is important to examine whether this reliance renders small farmers more prone to high risk and bankruptcy. A study by the ERS and the University of Arkansas found only a weak link between declining farm numbers and farm bankruptcies.[17] However, the interaction of bankruptcy policy and farm policy is important because the lengthy biological production process necessary for farming generates considerable physical and financial risk.[18]



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Bankruptcy generally describes proceedings undertaken in a federal court when a debtor is unable to pay or to reach an agreement with creditors. There are two basic types of bankruptcy filings: liquidation under Chapter 7 of the bankruptcy code and rehabilitation or reorganization of the debtor under Chapters 11, 12, and 13 of the bankruptcy code.[19] Chapter 12 from the Bankruptcy Abuse Prevention and Consumer Protection Act was re-enacted in 2005 to help alleviate the farm financial crisis.

Chapter 12 bankruptcy code gives family farmers with regular income but financial burden an opportunity to reorganize debts while running the farm business and implementing a court-approved plan to repay all or part of their debts. Eligible family farming operations for this bankruptcy code can be individually owned, partnerships, or corporations.[20] The debt ceiling is $3.237 million, and farmers with more debt than the maximum limit lose eligibility for Chapter 12.[21] The maximum debt limit is high compared to the average debt of farms nationwide. According to a USDA report in 2007, average debt levels ranged from less than $100,000 for smaller family farms to nearly $600,000 for very large farms.[22] A debtor may qualify for Chapter 12 only if 50 percent (previously 80 percent) of his/her income originates from a farming operation. When determining income eligibility, either the prior year or each of the second and third years preceding bankruptcy filing can be considered.[23]

The Chapter 12 plan grants three different kinds of bankruptcy claims: priority, secured, and unsecured, and usually lasts three to five years. Table 8 defines each type of bankruptcy claim.[24] One of the characteristic features of Chapter 12 is that payments to secured creditors can sometimes last longer than the three-to-five year period of the plan.[25] The plan permits farmers to submit a reorganizational plan directly to the bankruptcy court, with no assessment by the creditors. Once the court approves the debt repayment plan, creditors cannot go against the law provided that they receive as much as under Chapter 7 liquidation. Consequently, creditors may be wary of granting credit to young, small farmers.[26] This has resulted in lenders adopting a tiered interest rate structure for loans and increasing the interest rate spread to riskier borrowers.

**Conclusion**

Small family farms are agriculturally significant in the Rockies region and are also becoming more involved with substantial off-farm activities. Because the majority of small family farmers are dual-career, federal fiscal programs and monetary policies regarding the interest rate both vitally affect the non-farm economy and thus are important in determining the well-being of the families and therefore the continuing viability of small family farms in Rockies agriculture.

## Table 8: Definitions of Bankruptcy Claims under Chapter 12

| Bankruptcy Claims | Definitions |
|---|---|
| Priority | Claims that are granted special status by the bankruptcy law, such as most taxes and the costs of bankruptcy proceeding. |
| Secured | Claims for which the creditor has the right to liquidate certain property if the debtor does not pay the underlying debt. |
| Unsecured | Claims for which the creditor has no special rights to collect against particular property owned by the debtor. |

Source: "Chapter 12: Family Farmer or Family Fishermen Bankruptcy," U.S. Courts, http://www.uscourts.gov/bankruptcycourts/bankruptcybasics/chapter12.html. Accessed July 24, 2009.

[1] Hoppe, Robert A., Penni Korb, et al "Structure and Finances of U.S. Farms Family Farm Report, 2007 Edition." Economic Information Bulletin. Number 24, June 27. p. 2. http://www.ers.usda.gov/Publications/EIB24/. (Accessed August 4, 2009).

[2] *Ibid.*

[3] *Ibid.*

[4] United States Department of Agriculture. *2007 Census of Agriculture*. 2009.

[5] Classified in terms of organization (based on nature of organization, farms can be individual or family, partnerships, corporations, or other). Classifying family farms by gross sales yields a similar result.

[6] United States Department of Agriculture. *2007 Census of Agriculture*. 2009.

[7] *Ibid.*

[8] Erik O' Donoghue, Robert A. Hoppe, et al. "Exploring Alternative Farm Definitions: Implications for Agricultural Statistics and Program Eligibility." United States Department of Agriculture. Economic Information Bulletin Number 49, March 2009.

[9] Rita J. Black, Norma P. Nickerson, "The Business of Agritourism/recreation in Montana," Research Report 50 ,Institute for Tourism and Recreation Research School of Forestry The University of Montana Missoula, MT, July 1997

[10] Stephan Tubene and David Holder, Serving Small Farms in the 21st Century, College of Agriculture and Natural Resources, University of Maryland, http://extension.umd.edu/agriculture/smallFarms/files/csrees_report.pdf. (Accessed Aug. 7, 2009).

[11] Hoppe and Korb, et al. "Structure and Finances of U.S. Farms Family Farm Report, 2007 Edition." 2007.

[12] *Ibid.*

[13] *Ibid.*

[14] *Ibid.*

[15] *Ibid.*

[16] *Ibid.*

[17] Stam, Jerome. "Are Bankruptcies Behind the Drop in Farm Numbers?" *Amberwaves*. April 2004.

[18] "Are Farmer Bankruptcies A Good Indicator of Rural Financial Stress?" United States Department of Agriculture, December, 1996.

[19] Carroll, Stephen, Noreen Clancy, et al. "The Bankruptcy Abuse Prevention and Consumer Protection Act of 2005: Evaluation of the Effects of Using IRS Expense Standards to Calculate a Debtor's Monthly Disposable Income." Published by RAND Corporation, 2007.

[20] "Chapter 12: Family Farmer or Family Fishermen Bankruptcy." U.S. Courts. http://www.uscourts.gov/bankruptcycourts/bankruptcybasics/chapter12.html (Accessed July 24, 2009).

[21] Bennett, David, "New Chapter 12 rules friendlier to farmers." Delta Farm Press. http://deltafarmpress.com/mag/farming_new_chapter_rules/ (Accessed July 19, 2009).

[22] Hoppe and Korb, et al. "Structure and Finances of U.S. Farms Family Farm Report, 2007 Edition." 2007.

[23] Bennett, 2009.

[24] "Chapter 12: Family Farmer or Family Fishermen Bankruptcy," 2009.

[25] *Ibid.*

[26] *Ibid.*

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