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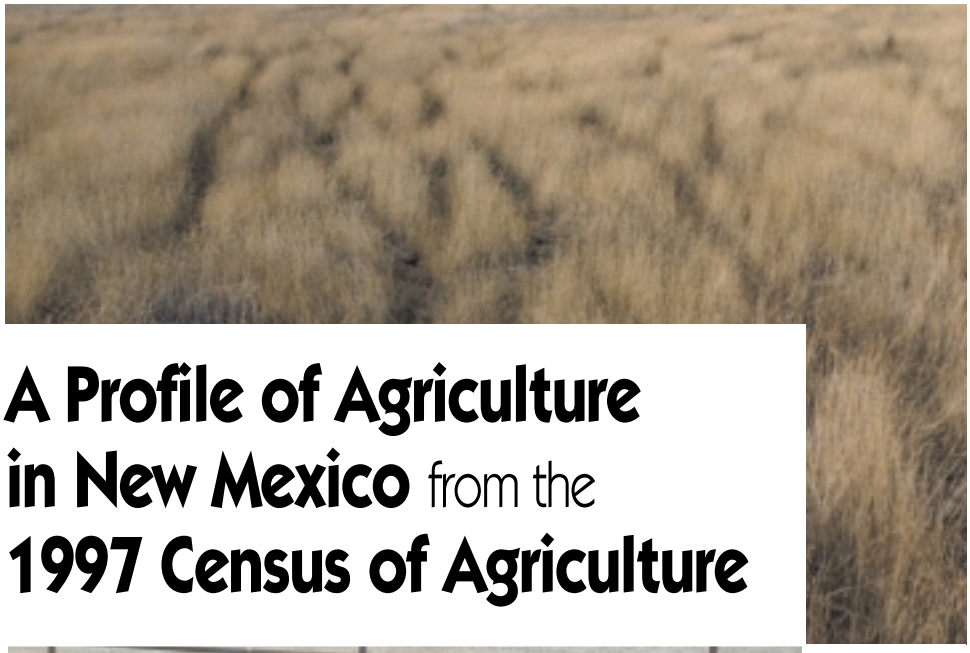

A Profile of Agriculture in New Mexico from the 1997 Census of Agriculture

Agricultural Experiment Station
College of Agriculture and Home Economics
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SUMMARY

This report summarized 1997 Census of Agriculture data for New Mexico. Data for individual counties in the state can be obtained from the sources listed below. Information for other items enumerated in the census is available and reported for both the state and counties. The data reported here deal primarily with questions related to the structure of agriculture, such as farm ownership, distribution of farm sales and income, agricultural inputs, and farm operators.

The structure of agriculture in a community, a county, a region, or a state is often poorly understood and is described using inappropriate data. For instance, the use of farm income averages in New Mexico and most of the state's counties can contribute to a very inaccurate picture of agriculture. Likewise, using average farm size (from sources such as the U.S. Census of Agriculture) to characterize agricultural operations in New Mexico is misleading. Many New Mexico counties have both small, irrigated farms and large cattle ranches (along with large farms and small livestock operations). An aggregate average farm size will not reflect these differences. Thus, great care should be taken when using any type of average calculation to characterize agricultural production in New Mexico. The distribution of farming operations across size, gross sales, and income categories provides a much more accurate, although not as neatly packaged, picture of agriculture in the state.

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A Profile of Agriculture in New Mexico from the 1997 Census of Agriculture

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WHAT IS THE CENSUS OF AGRICULTURE?

The first Census of Agriculture was taken in 1840 and was conducted every 10 years for several decades. Since the 1920s, data for the Census of Agriculture have been collected every five years. The Census of Agriculture is required by law, with the most recent census taken in 1997. Final documentation for the 1997 census was made available to the public in March 1999.

The Census of Agriculture is the primary source of statistics about U.S. agriculture and the only source of consistent, comparable data for county, state, and national levels. Census statistics are used by Congress for the purposes of developing and modifying federal assistance to the farm sector. Historical trends in U.S. agriculture are analyzed using census data. Many national and state programs use census data for the allocation of funds, such as for the Cooperative Extension Service and agricultural research programs.

For each census, a separate document is published for each state and territory and for the entire nation. The state documents contain data for individual counties. Paper and CD-ROM copies of the census are available from the National Agricultural Statistics Service of the United States Department of Agriculture. Census data can also be accessed through the Internet at http://www.usda.gov/ .

WHAT IS THE OBJECTIVE OF THIS REPORT?

The objective of this report is to summarize some of the 1997 Census of Agriculture data for New Mexico. New Mexico's population is one of the fastest growing in the U.S., with an estimated 1999 population of 1.7 million (Bureau of Business and Economic Research). New Mexico's population increased 14.6% between 1990 and 1998. A majority of the growth in population is seen in or around the state's three major metropolitan areas including Albuquerque, Las Cruces, and Santa Fe.

These same metropolitan areas are also home to numerous irrigated farms that produce many of the state's higher valued agricultural commodities. Population growth and development in these areas are affecting the structure of agriculture, the nature of agricultural production, and related agribusiness industries. For example, although Doña Ana is a metropolitan county with a high rate of population growth, cash receipts from agricultural commodities in that county are consistently the first or second highest of all New Mexico counties. The growth in rural residences and subdivisions in the state's irrigated river-basin farming areas has led to higher land values, increased nuisance claims against traditional agricultural operations, competition for water resources, and concerns about the future of agriculture and related industries. It is hoped that this report will provide information of value to communities throughout the state, where residents are grappling with issues related to the current and future status of their local agricultural sectors.

WHAT IS THE STATUS OF NEW MEXICO AGRICULTURE?

New Mexico's history in agriculture dates back several thousand years. It is believed that as many as 1,000 years ago some 25,000 acres of land were being irrigated for crops (New Mexico Economic Development

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Department). Early crops included squash, onions, pumpkins, corn, cotton, and potatoes. Alfalfa, wheat, chile peppers, melons, sugarcane, legumes, and fruit trees were introduced by the Spaniards during their colonization of the region. The Spanish colonial period also saw the beginnings of the state's livestock industry.

Currently, agriculture continues to play an important role in New Mexico's economy. In 1997 the agriculture industry produced a total of $1.6 billion in products with $462 million in crops and $1.16 billion in livestock production (New Mexico Department of Agriculture). The market value of agricultural products sold increased 29% with an average per-farm increase of 30% from $88,163 to $114,780 (New Mexico Department of Agriculture). New Mexico is ranked first in the nation for the production of chile and summer onions. The state also makes relatively large contributions to the national pecan, peanut, and dairy product supplies.

New Mexico's dairy industry is the fastest growing in the nation. Dairy production in the state recently reached a value of nearly $500 million (New Mexico Department of Agriculture). In 1997, the state was ranked 11th in the nation for the value of dairy products sold. In 1992, the state was ranked 20th and in 1987, 32nd. This growth in New Mexico dairy operations can be attributed to New Mexico's large-scale dry-lot farms, many of which have relocated here from California.

The rural, agricultural ambiance of many of the communities found in New Mexico is a strong drawing point for the state. Advertising by public and private community entities uses agricultural images in an effort to attract visitors, new residents, and new businesses. The chile pepper has become synonymous with the southern region of the state, and many new residents and businesses have located themselves in what were formerly chile fields. To the north, open space and mountainous landscapes that have traditionally supported ranching operations, and land in small family farms are becoming the targets of urban development. The question thus arises as to whether or not the same factors that attract people to the state are being dramatically altered by the new arrivals, thus serving to change the quality of life New Mexicans have traditionally enjoyed and become accustomed to.

FARM NUMBERS, SIZES, AND SALES IN NEW MEXICO

The 1997 Census of Agriculture reported 14,094 farms throughout the state of New Mexico. The current definition of "farm" is any place from which $1,000 or more of agricultural products were produced and sold or normally would have been sold during the census year. The census includes data for farms with actual sales of less than $1,000 but having the production potential for sales of $1,000 or more or receiving government payments of $1,000 or more.

This definition of "farm" has been criticized nationwide for several years as providing an unrealistic picture of U.S. agriculture. Clearly, the census currently counts many rural residences as farms, even though they do not provide any amount of livable farm income, always have negative net farm income, and do not produce significant quantities of food and fiber.

The 14,094 farms in New Mexico include both crop and/or livestock farming operations. The census identified 7,444 farms (53% of the total) with 804,616 acres of irrigated land in New Mexico. These irrigated lands are located primarily in the narrow strips of land surrounding the Rio Grande and Pecos River, the easternmost counties, and in the northwest and southwest corners of the state. Data from the 1992 Census of Agriculture showed 7,331 farms and 738,272 irrigated acres in the state.

The types of farms shown to have increased in numbers between 1992 and 1997 were in the largest and smallest size categories. This reflects national trends.

The census provides a breakdown of the 14,094 total farms by size or acreage (table 1). However, the census does not separate these numbers for crop or livestock operations. From table 1, it is apparent that smaller

Table 1. Distribution of New Mexico farms by size, both crop and livestock producers.

	1997		1992	
Acreage category	# farms	% farms	# farms	% farms
1–9 acres	2,594	18.4	2,600	18.2
10–49 acres	2,618	18.5	2,611	18.2
50–179 acres	2,163	15.3	2,142	15.0
180–499 acres	1,721	12.2	1,748	12.2
500–999 acres	1,232	8.7	1,260	8.8
1,000–1,999 acres	1,111	7.8	1,161	8.1
2,000 acres or more	2,655	18.8	2,757	19.3

Table 2. Distribution of New Mexico farms by value of sales, both crop and livestock producers (1997).

Value of sales	# farms	% farms	$ total sales	% total sales
Less than $1,000	3,092	21.93	629,000	0.03
$1,000–$2,499	2,005	14.22	3,282,000	0.20
$2,500–$4,999	1,811	12.84	6,441,000	0.39
$5,000–$9,999	1,710	12.13	12,050,000	0.74
$10,000–$19,999	1,339	9.50	18,871,000	1.16
$20,000–$24,999	416	2.95	9,919,000	0.61
$25,000–$39,999	740	5.25	23,216,000	1.43
$40,000–$49,999	359	2.54	16,058,000	0.99
$50,000–$99,999	896	6.35	63,318,000	3.91
$100,000–$249,000	847	6.00	134,007,000	8.28
$250,000–$499,999	394	2.79	137,983,000	8.52
$500,000 or more	485	3.44	1,192,622,000	73.69

farming operations dominate the number of agricultural production units in New Mexico. Sixty-four percent of farms operate on less than 500 acres. The census also breaks the gross total of farms (both crop and livestock producers) into "value of sales" categories. This distribution is shown in table 2.

The distribution of farms shown in table 1 and table 2 is similar to that of the entire U.S. farm sector at the current time. Over half the farms (61%) in New Mexico have annual sales of less than $10,000. The number of farms with less than $10,000 in sales grew by 2% between 1992 and 1997. The middle category of farms ($10,000–$99,999) shrank 9.3% over the same period. At the national level, this group of farms (often defined as the "disappearing middle") also has decreased. Farms with sales over $100,000 have been traditionally considered "commercial" farms that are capable of generating a relatively low, but positive, net farm income after production expenses. Net farm income is generally one third of gross farm sales. While consisting of only 12.2% of farms in New Mexico, these farms have captured a disproportionate farm revenue share consisting of 90.5% of all gross farm income within the state.

The highest sales category of farms is becoming smaller locally and nationally as a result of farm consolidation. Consistently negative net farm incomes characterize farms in all sales categories except the largest. These farming operations are supported through off-farm employment. At the national level, the "disappearing middle" is often adjusted to where a commercial farming operation is defined as one that achieves at least $250,000 in annual gross sales. Farms with less than $250,000 in annual gross sales have a difficult time generating steady, acceptable net farm incomes, tend to be supplemented by off-farm incomes, and are subject to consolidation with larger farming operations.

New Mexico agriculture is very concentrated in terms of the value of commodity sales (and thus positive net farm incomes). The 87.8% of the state's farms with annual sales less than $100,000 account for 9.5% of the value of New Mexico's agricultural output. Using higher ($250,000) gross sales as a cutoff point for commercial farming operations, there are slightly fewer than 900 (6.4% of total) of these farms in New Mexico, and they account for 82% of all gross farm sales, while the remaining 93.6% of farms generate 18% of gross sales.

The production of food and fiber commodities at the national level is similarly concentrated. There are approximately 2 million farms in the United States. "Noncommercial" farms (i.e., using annual sales less than $100,000) make up 81.9% of all farms, yet account for 12.6% of all commodity sales. Farms with annual sales over $100,000 are 18.1% of total farms—yet they produce 87.4% of all sales. Farms in the largest sales category ($500,000 or more) are responsible for 56.6% of all commodity sales.

DISTRIBUTION OF MARKET VALUE BY COMMODITY IN NEW MEXICO

New Mexico produces several agricultural commodities. The distribution of sales value by commodity is shown in table 3. The value of sales of all commodities produced in New Mexico is provided by the census. It should be noted that the market value of cattle and calves sold includes both beef animals and dairy calves, heifers, and cull milk cows. The census reporting of cattle and calves sold does not provide separate information for the beef and dairy industries.

FARM PRODUCTION EXPENSES IN NEW MEXICO

Information for farm production expenses for New Mexico's farms enumerated in the 1997 Census is shown in table 4. The data are broken down by expense category. From table 4 it is evident that the purchases of livestock feed and labor expenses dominate the costs of producing agricultural commodities in New Mexico. Livestock feed purchases are made primarily by the state's dairies and beef cattle operations, while labor expenses are incurred across all the commodities (although they are concentrated in vegetable production).

FARM INCOME IN NEW MEXICO

Due to the wide dispersion of New Mexico farming operations by size and sales category, any calculations of average per-farm net income is very misleading. For instance, the 1997 Census of Agriculture shows that the average per-farm net cash return from agricultural sales for the farm unit was $29,184. The complex differences among New Mexico's farms makes this average unusable as a descriptor of the state's farm sector. This average net cash return gives an inaccurate and distorted perception of agriculture as found to exist within some of New Mexico's regions and commodities. As mentioned above, the majority of New Mexico farms have gross sales that cannot generate average net cash returns anywhere near $29,184.

The average net cash return calculated by the census thus includes many "farms" that cannot produce livable, positive net farm incomes. It also includes multimillion dollar industrialized farming operations. Furthermore, research has found that residents of many rural households engage in commodity production (which allows them to reach the $1,000 annual sales threshold criteria of being called a farm for the purpose of the census), but have no intention of earning a living from farming. Many of these people have rural residence lifestyles,

Table 3. Distribution of market value by commodity, New Mexico, 1997.

Commodity	$ sales	% total sales
Total sales	1,617,708,000	100.00
Crop commodities total	462,178,000	28.56
Corn for grain	36,904,000	2.28
Wheat	26,645,000	1.64
Soybeans	28,000	0.00
Sorghum for grain	16,236,000	1.00
Barley	850,000	0.05
Oats	242,000	0.01
Other grains	4,933,000	0.30
Cotton and cottonseed	38,956,000	2.40
Hay, silage, and field seeds	118,808,000	7.34
Vegetables, sweet corn, and melons	88,776,000	5.48
Fruits, nuts, and berries	43,560,000	2.68
Nursery and greenhouse crops	48,409,000	2.99
Other crops	37,830,000	2.33
Livestock commodities total	1,155,530,000	71.43
Poultry	16,306,000	1.00
Dairy products	463,423,000	28.64
Cattle and calves (dairy and beef)	647,440,000	40.02
Hogs and pigs	900,000	0.06
Sheep, lambs, and wool	16,997,000	1.05
Other livestock and products	10,463,000	0.65

Table 4. Farm production expenses, New Mexico farms, 1997.

Production expense category	$ expenditure	% total expenses
Total farm production expenses	1,204,227,000	100.00
Livestock and poultry purchased	221,246,000	18.37
Livestock feed	334,541,000	27.78
Seeds, plants, and trees	20,014,000	1.66
Commercial fertilizer	34,563,000	2.87
Agricultural chemicals	18,085,000	1.50
Petroleum products	49,544,000	4.11
Electricity	30,598,000	2.54
Hired farm labor	140,862,000	11.69
Contract labor	29,672,000	2.46
Repair and maintenance	55,600,000	4.61
Custom work and machine hire	18,436,000	1.53
Interest	78,791,000	6.54
Cash rent	31,086,000	2.58
Property taxes paid	17,764,000	1.47
All other production expenses	123,425,000	10.25

and farming is more properly classified as a *consumptive* activity rather than a *productive* one.

NEW MEXICO FARMS WITH SALES OF $10,000 OR MORE

The Census of Agriculture provides information separately for farms with annual sales of $10,000 or more. The 1997 census identified 5,476 such farms in New Mexico. More than 72% (3,978) of these farms reported net positive (or zero) cash returns from agricultural sales for the farm in 1997. Another 1446 farms (26.4%) had net negative returns from farming during the census year.

GOVERNMENT PAYMENTS TO NEW MEXICO FARMS

Historically, the majority of federal government payments to farmers nationwide have been paid to grain producers, specifically corn and wheat growers. Federal subsidies to farmers have changed significantly in recent years. The nature of government payments is evolving away from traditional production-linked subsidies tied to specific commodities, toward subsidies related to environmental or conservation objectives. In 1996, commodity-specific subsidies were abandoned in favor of payments that give farmers much broader flexibility in choosing which crops to grow. Emergency payments to farmers (as a result of adverse weather and market conditions) in 1998 and 1999 reversed a longer trend of gradual reductions in government subsidies to the agricultural sector.

Few crops in New Mexico have received or currently receive direct government subsidies or government-mandated price supports. Cotton, grains, and milk have been the most heavily subsidized agricultural commodities produced in New Mexico. Traditionally, cotton and grain farmers have received direct government payments, while the dairy industry has been assisted through a price support program and a federal marketing order.

Farms in New Mexico received a total of $29,524,000 in government payments in 1997 (table 5). The money was provided through production flexibility payments to grain and cotton growers, livestock emergency assistance, and several environmentally oriented programs, such as the Conservation Reserve Program and the Environmental Quality Incentives Program.

Table 5. Farm income in New Mexico, 1997.

	Cash totals	Avg. per farm	Number of farms
Net cash returns	410,261,000	29,184	14075[d]
Net cash gains[a]	467,311,000	71,531	6533
Net cash losses	57,051,000	7,564	7542
Direct government pmts.	29,524,000	11,417	2586
Other farm-related income	19,066,000	9,495	2008
Direct sales[b]	3,819,000	4,373	873
Other government pmts.[c]	16,130,000	13,929	1158

[a]Farms with zero net farm income are included as farms with gains.

[b]Products sold directly from farm for human consumption.

[c]Including the Conservation Reserve Program and Wetlands Recovery Program.

[d]Total "number of farms" reflects the number of farms for income gain or loss. Reported farm numbers for other income sources may fall in either the gain or loss categories. Not all farms for which census data were collected provided farm income data.

CHARACTERISTICS OF FARM OPERATORS IN NEW MEXICO

Of the 14,094 farm operators enumerated in the 1997 Census of Agriculture, 51% (7,197) have farming as their principal occupation. These 7,197 farms are the state's "full-time" farms. Almost 49% (6,897) of the state's farm operators listed another occupation as their primary activity. Operators of 40.8% (5,752) reported having no days of off-farm work, while 53% (7,506) reported having worked "some" days off-farm, and 5.9% (836) did not report.

More than 61% (8,653) of the state's farm operators are full owners of their farms, while 29% (4,079) reported being part owners, and 9.6% (1,362) are tenants.

The age distribution of farm operators in New Mexico is shown in table 6. The average age of a farm operator in the state was 56.5 years in 1997. This is higher than the national average of 54.3 years.

According to the 1997 Census of Agriculture, 88.1% (12,429) of New Mexico farm operators are male and 11.8% (1,665) are female.

Almost 84% (11,783) of New Mexico's farms are individual or family operators (i.e., sole proprietorships). Another 1,158 farms (8.2%) are operated as partnerships. There are 754 family-held corporations in the state, accounting for 5.3% of farms. Other types of organizations such as nonfamily corporations, estates, trusts, or institutions, account for another 399 (2.8%) of farms.

Table 6. Age distribution of New Mexico and U.S. farmers, 1997.

	New Mexico farm operators		United States farm operators	
Age category	#	%	#	%
Under 25 years	111	0.79	20,850	1.09
25–34 years	717	5.09	128,455	6.72
35–44 years	2,238	15.88	371,442	19.43
45–54 years	3,414	24.22	466,729	24.41
55–59 years	1,608	11.41	222,736	11.65
60–64 years	1,610	11.42	204,618	10.70
65–69 years	1,517	10.76	179,858	9.41
70 years and over	2,879	20.43	317,171	16.59

Table 7. Minority farm operators by ethnic origin, 1997.

Ethnic origin	Number of farms	Farms with sales ≥ $10,000
Afro-American	19	3
American Indians	412	91
Asian or Pacific Islander	7	1
Other races	1,694	266
Hispanic	3,477	834

FARM OPERATORS BY SELECTED RACIAL GROUPS

New Mexico is a state with substantial ethnic diversity. This diversity extends to agricultural operations within the state. The 1997 census reports the number of farms operated by "selected racial groups" and "Hispanic operators" separately. Collectively, there are 5,609 farms in New Mexico operated by minorities. Twenty-one percent (1,195) of these farms reported sales of $10,000 or more. Of the 2,132 farms operated by Black and "other" races, 1,348 (63%) reported being full owners, while 602 (28%) reported being part owners and 182 (8.5%) reported being tenants. The distribution of operators by ethnicity can be seen in table 7.

WHERE TO GET MORE INFORMATION ABOUT NEW MEXICO AGRICULTURE

As indicated above, the U.S. Census of Agriculture is available from the National Agricultural Statistics Service of the United States Department of Agriculture. Census data can be accessed at the following World Wide Web site: http://www.usda.gov/nass/ . At this Web site, click on "Census of Agriculture," and then click on "U.S., State, and County Tables." Clickable maps are available.

Another useful publication, *Agricultural Statistics*, also is available at http://www.nass.usda.gov . Click on Publications," and then on "AG Statistics USDA."

New Mexico Agricultural Statistics is published annually by the New Mexico Department of Agriculture and the New Mexico state office of the U.S. Department of Agriculture National Agricultural Statistics Service. This publication is available online at http://www.nass.usda.gov/nm/ . Click on "New Mexico Agricultural Statistics Report," scroll to the bottom of the page, then click on "1998 NM Annual Bulletin."

Information about federal agricultural programs can be found at: http://www.fsa.usda.gov/ . Click on "Agriculture Programs," and then click on "Fact Sheets."

The U.S. Department of Agriculture's Economic Research Service (ERS) (http://www.ers.usda.gov/) provides analysis of food, agriculture, and natural resources in the United States. Clicking on "State Fact Sheets" at the ERS Web site provides a brief summary of New Mexico data.

Information about agricultural trade can be found at http://www.fas.usda.gov/ .

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