Marshall County (Iowa)
Farm & Food Economy

Highlights of a data compilation
by Ken Meter, Crossroads Resource Center (Minneapolis)
for
Prairie Rivers RC&D
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Marshall County: (Bureau of Economic Analysis)
39,214 residents receive $1.3 billion of income annually (2007). Real personal income has increased fairly steadily, from just under $1 billion, in 1969. Manufacturing jobs rank first, accounting for $248 million of personal income. Interest, rent and dividend payments totaling $230 million are the second most important source of personal income. Transfer payments (public payments such as pensions or other benefits) total $190 million. Personal income from the service industry ranks fourth, at $126 million.

In the food sector, food manufacturing generates over $60 million in personal income, while retail food workers earn $10 million, and dining service workers earn $13 million, of income.

Although population has risen since 1969, there has been only limited public planning to assure a secure and stable food supply.

Issues affecting low-income residents of Marshall County:
Over 9,824 residents (26%) earn less than 185% of federal poverty guidelines. At this level of income, children qualify for free or reduced-price lunch at school. These lower-income residents spend about $19 million each year buying food, including $5 million of SNAP benefits (formerly known as food stamps) in addition to WIC coupons (this means federal nutrition aid amounts to at least 25% of low-income food expenditures). 745 (80%) of the county’s 928 farmers receive a combined total of $18 million in subsidies (29-year average, 1979-2006), mostly to raise crops such as corn or soybeans that are sold as commodities, not to feed county residents. Data from Federal Census of 2000, Bureau of Labor Statistics, & Bureau of Economic Analysis.

1,278 county households (nearly 3,300 residents) earn less than $10,000 per year. Source: Federal Census of 2000.

Food-related health conditions in Iowa:
11% of Iowa adults aged 18-64 have no health insurance. Source: Centers for Disease Control.

Food has become a leading cause of death in the U.S, rivaling tobacco. A high-calorie diet,
combined with a lack of exercise, accounts for one-fifth of the annual deaths in the U.S.\(^1\) Six of the fifteen leading causes of death are related to poor diet and low physical activity.\(^2\)

64% of Iowa residents are overweight (38%) or obese (27%). Four of every five state residents (80%) eat fewer fruits and vegetables that nutritionists recommend (five servings per day), and 75% report they have less than 20 minutes of physical activity three times each week. 7% of state residents have been diagnosed with diabetes. *Source: Centers for Disease Control.*

### The county's farms (Agricultural Census, 2007)

*Agriculture Census data for 2007 were released February 4, 2009*

#### Land:
- 928 farms. This is a 9% increase over 848 farms in 2002.
- Marshall County has 1% of Iowa farms.
- 94 (10%) of these are 1,000 acres or more.
- 290 (31%) farms are less than 50 acres.
- The most prevalent farm size is 180-499 acres, with a total of 218 farms (23% of farms).
- Average farm size is 349 acres, just above Iowa’s average.
- The county has 324,270 acres of land in farms, a decrease of 3% since 2002.
- This amounts to 1% of the state's farmland.
- 91% of farmland is cropland, and 9% is devoted to other uses.
- County farms have 276,000 acres of harvested cropland.
- Only three farm operators in Marshall County are non-white; no Latinos are listed as farm operators.
- 10 farms have a total of 762 acres of irrigated land.
- Average value of land and buildings per farm is $1.3 million. This is 116% of the state average.

#### Sales (Note that there may be discrepancies between Ag Census data and Bureau of Economic Analysis data, below):
- $190 million of crops and livestock sold (2007), 0.xx% of state ag sales.
- This is a 44% increase in sales over 2002 sales of $132 million, though the number of acres farmed decreased 3%.
- Total farm production expenses were $138 million, for an increase of $22 million (19%) in production costs since 2002.
- The single largest expense item involved in farm production was the cost of cash rent for land and buildings and grazing fees, which totaled $23 million. Purchased feed ranked second, at $17 million. Next were the costs of fertilizers and soil conditioners, totaling $16 million. Depreciation ranked fourth at $15 million. Livestock purchases totaled $13 million, and seed purchases totaled $12 million.
- $140 million of crops were sold (74% of sales), $55 million (64%) more than in 2002.

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$50 million of livestock and products were sold (26% of sales). This is $3 million (7%) more sales than in 2002.

346 (37%) of the county’s farms sold less than $10,000 of products in 2007. Their aggregate sales of $634,000 amounted to less than 1% of the county’s farm product sales.

342 farms (37%) sold more than $100,000 of products, an aggregate total of $176 million, 93% of county farm product sales.

745 (80%) farms received $7.6 million of federal subsidies in 2007, 33% more than in 2002. [Note that Agriculture Census data differ from Bureau of Economic Analysis data; see below.]

25% (234) of county’s farms reported net losses in 2007 after subsidies are taken into account. This is similar to the Iowa average of 26%.

Grains, Dry Edible Beans, Oil Crops, and others:

- Marshall County farms sold $133 million of grains, oil crops and edible beans.
- 537 Marshall County farms sold $89 million (29 million bushels) of corn on 161,542 acres in 2007.
- This was an average price of $3.07 per bushel.
- 458 Marshall County farms sold $44 million (5.8 million bushels) of soybeans from 106,481 acres in 2007.
- This is an average sale price of $7.58 per bushel.
- 22 farms raise 42,713 bushels of oats on 598 acres.

Cattle & Dairy:

- 214 farms hold an inventory of 25,000 cattle and calves.
- 18,260 Cattle worth $16 million were sold from 200 farms in 2007.
- 2 farms were reported as selling milk or dairy products.
- Milk sales figures were not released by USDA, to protect confidentiality.
- 188 farms produced 22,075 dry tons of forage crops (hay, etc.) on 6,004 acres of cropland.
- In addition, 22 farms produced 50,000 tons of corn silage on 2,031 acres.

Other livestock & animal products:

- 58 farms sold 279,835 hogs and pigs for a total of $27 million. This is a decrease of 26 farms (-31%), and a decrease of $2.2 million (-8%) in sales, over the past five years.
- 56 farms hold an inventory of 140,135 hogs and pigs.
- Xx farms sold a total of $xx,000 of horses. This means xx xx (xx%) farms sold $xx,000 (xx%) xx than in 2002.
- 25 farms raise laying hens, holding an inventory of 1,594.
- Marshall County had 11 broiler chicken producers, with an inventory of 2,350.
- 37 farms sold $226,000 of poultry and products in 2007., up from 13 farms selling $15,000 in 2002.
- 59 farms held an inventory of 3,262 sheep, lambs, and goats. Sales figures were not released by USDA, to protect confidentiality.

Nursery, Landscape and Ornamental Crops:

- 2 farms sold ornamental and nursery crops. Sales figures were not released by USDA, to protect confidentiality.

Vegetables & Melons (some farmers state that Ag Census data does not fully represent vegetable production):

- 13 farms produced vegetables on 43 acres of land, one more farm than in 2002.
• Vegetable and potato sales were $79,000 in 2007, down 67% from the 2002 level of $236,000.
• 1 farm raised potatoes.

Fruits (some farmers state that Ag Census data does not fully represent fruit production):
• The county has 13 fruit farms with 25 acres of orchard, compared to 4 fruit farms in 2002.
• Ten of these farms sold $81,000 of fruit and nuts, $46,000 more than 2002 sales, which were made by 4 farms.

Direct & organic sales:
• 46 farms sell $228,000 of food directly to consumers. This is a 35% increase in the number of farms selling direct (34 in 2002), and a 16% increase in direct sales, over $196,000 in 2002. Direct sales account for 0.1% of county farm sales, one-fourth the national average.
• County farmers make up 1.5% of the farms selling direct, and account for 1.4% of Iowa’s direct sales ($16.5 million of direct sales in Iowa in 2007, up from $11.6 million in 2002).
• 8 county farms sold $67,000 of organic crops from 8 acres, over $8,000 sales per acre.
• This is 1.5% of Iowa farms (542) selling organic, and 0.2% of state sales ($34 million).
• 3 farms market through community supported agriculture (CSA).
• 28 farms produce added-value products on the farm.

Conservation practices:
• 87 farms use rotational management or intensive grazing.
• 507 farms use conservation practices.
• 12 farms generate some electricity on the farm.

Other Marshall County highlights (Agriculture Census 2007):
• Ranks 2nd in Iowa for inventory of quail.
• Ranks 5th in state for inventory of pheasants.
Iowa highlights (Agriculture Census 2007):

- Ranks 1st in nation for acreage devoted to corn (8.6 million acres).
- Ranks 1st in nation for acreage devoted to soybeans (13.8 million acres).
- Ranks 1st in U.S. for sales of hogs and pigs ($4.8 billion) and inventory held (19 million).
- Ranks 1st in nation for inventory of laying hens (54 million).
- Ranks 1st in nation for inventory of pullets for replacing laying hens (11 million).
- Ranks 2nd in nation for sales of grains and oilseeds, at $10 billion.
- Ranks 3rd in the nation in farm commodity sales, with $20 billion.
- Ranks 3rd in U.S. for sales of crops, with $10 billion.
- Ranks 3rd in nation for sales of livestock, with $10 billion.
- Ranks 4th in nation for sales of cattle and calves ($3.6 billion).
- Ranks 4th in nation for sales of sheep and goats ($40 million).
- Ranks 7th in nation for inventory of cattle and calves (3.9 million).
- Ranks 7th in nation for acreage devoted to oats for grain (66,651 acres).
- Ranks 8th in nation for acreage devoted to corn for silage (220,646 acres).
- Ranks 9th in nation for inventory of turkeys (4 million).
- 2,987 state farms earned $16.5 million selling products directly to consumers, $4.9 million (44%) more than in 2002, when 2,455 farms sold $11.6 million of products directly.
- Direct food sales from farms account for more sales than the state’s 11th-largest crop, oats.
- 542 farms devoted 566 acres to organic production.
- These organic farms sold $34 million of organic products, including $19 million of crops (this may include ornamental and greenhouse crops), and $15 million of livestock and poultry, and related products.
- 487 farms market through community supported agriculture (CSA).
- 2,246 state farms produce value-added products.
- 41,350 farms use conservation methods.
- 10,267 farms practice rotational management or intensive grazing.
- 539 farms generate energy or electricity on the farm.
Iowa’s top farm commodities in 2007 (Economic Research Service)

See chart on next page

<table>
<thead>
<tr>
<th>Commodity</th>
<th>$ millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corn</td>
<td>6,351</td>
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<tr>
<td>Hogs</td>
<td>4,327</td>
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<tr>
<td>Soybeans</td>
<td>3,510</td>
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<tr>
<td>Cattle and calves</td>
<td>2,676</td>
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<tr>
<td>Chicken eggs</td>
<td>825</td>
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<tr>
<td>Dairy products</td>
<td>810</td>
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<tr>
<td>Hay</td>
<td>163</td>
</tr>
<tr>
<td>Turkeys</td>
<td>137</td>
</tr>
<tr>
<td>Other</td>
<td>147</td>
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</tbody>
</table>

Note: Broilers and Sweet Corn were also listed among Iowa’s top 18 products, but sales figures for these products were not released by ERS.

Note also that at $16 million, direct sales from farmers to consumers amount to more than the value of the 11th ranking product, oats.

Source: USDA Economic Research Service
Balance of Cash Receipts and Production Costs (Bureau of Economic Analysis):

*Note:* Bureau of Economic Analysis farm income data differ from Agriculture Census data.

Marshall County farmers sell $175 million of commodities per year (1979-2009 average), spending $171 million to raise them, for an average gain of $4 million each year.

However, county farmers lost $103 million from 1998 to 2004, an average of $15 million per year, on average sales of $135 million. Moreover, 25% of the county's farms and ranches reported a net loss in 2007 (Agriculture Census), even after subsidies are taken into account.

Marshall County farmers and ranchers earned $37 million less by selling commodities in 1969 than they earned in 2007 (in 2007 dollars). Sales of livestock and related products fell 65%, from $138 million in 1979 to $40 million in 1999, while crop income stayed fairly constant. The single largest farm expense, and the one rising the fastest, is chemical and fertilizer costs at $26 million.

Farmers and ranchers earn another $10.6 million per year of farm-related income — primarily rental income for land and insurance payments (29-year average for 1979-2007). Federal farm support payments average $17.7 million per year for all county farms over the same years.

Marshall County consumers (2007):

Marshall County consumers spend $104 million buying food each year, including $58 million for home use. Most of this food is produced outside the county. $228,000 of food products (0.1% of farm cash receipts, and 0.2% of local consumer needs) are sold by 46 farms directly to consumers — but not always to Marshall County consumers, since these figures include internet sales.

Estimated change in net assets for all county households was a combined loss of $55 million in 2007 alone (BLS). This places additional pressure on Marshall County residents as they pay for food.

Farm and food economy summary:

Farmers gain $4 million each year producing food commodities, spending $80 million buying inputs from external suppliers, for a total outflow of $76 million from the county economy.

Meanwhile, consumers spend more than $90 million buying food from outside. Thus, total loss to the county is $166 million of potential wealth each year. This loss amounts to 87% of the value of all commodities raised in the county.
Marshall County: markets for food eaten at home (2007):
Source: Bureau of Labor Statistics

<table>
<thead>
<tr>
<th>Item</th>
<th>billions</th>
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<tbody>
<tr>
<td>Meats, poultry, fish, and eggs</td>
<td>$ 13</td>
</tr>
<tr>
<td>Fruits &amp; vegetables</td>
<td>11</td>
</tr>
<tr>
<td>Cereals and bakery products</td>
<td>7</td>
</tr>
<tr>
<td>Dairy products</td>
<td>6</td>
</tr>
<tr>
<td>“Other,” incl. sweets, fats, &amp; oils</td>
<td>21</td>
</tr>
</tbody>
</table>

If Marshall County consumers purchased only 7% of the food they need for home use directly from county farmers, this would produce $4 million of new farm income in Marshall County — an amount equivalent to the farm production surplus for each of the 29 years from 1979-2007.

State of Iowa: markets for food eaten at home (2007):
Source: Bureau of Labor Statistics

Iowans purchase $8.3 billion of food per year, $4.6 billion of this to eat at home. Home food purchases break down in the following way:

<table>
<thead>
<tr>
<th>Item</th>
<th>millions</th>
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<tbody>
<tr>
<td>Meats, poultry, fish, and eggs</td>
<td>$1,007</td>
</tr>
<tr>
<td>Fruits &amp; vegetables</td>
<td>840</td>
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<tr>
<td>Cereals and bakery products</td>
<td>582</td>
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<tr>
<td>Dairy products</td>
<td>512</td>
</tr>
<tr>
<td>“Other,” incl. sweets, fats, &amp; oils</td>
<td>1,693</td>
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</tbody>
</table>
Key data sources:

Bureau of Economic Analysis data on farm production balance
http://www.bea.doc.gov/bea/regional/reis/

Food consumption estimates from Bureau of Labor Statistics Consumer Expenditure Survey
http://www.bls.gov/cex/home.htm

U.S. Census of Agriculture
http://www.nass.usda.gov/census/

USDA/Economic Research Service food consumption data:
http://www.ers.usda.gov/data/foodconsumption/

USDA/ Economic Research Service farm income data:
http://ers.usda.gov/Data/FarmIncome/finfidmu.htm

Centers for Disease Control: Behavior Risk Factors Surveillance System
BRFSS http://apps.nccd.cdc.gov/brfss-smart/

National Association of County and City Health Officials (NACCHO)
Big Cities Health Inventory http://www.naccho.org/

For more information:

To see results from Finding Food in Farm Country studies in other counties of the U.S.:
http://www.crcworks.org/locales.html

To read the original Finding Food in Farm Country study from Southeast Minnesota (written by Ken Meter and Jon Rosales for the Community Design Center and the Southeast Minnesota Experiment in Rural Cooperation): http://www.crcworks.org/ff.pdf

To view a PowerPoint presented in March, 2008, by Ken Meter at Rep. Collin Peterson’s (D-MN) Minnesota agricultural forum, called the “Home Grown Economy”:
http://www.crcworks.org/crcppts/petersonKM08.pdf

To get a brief list of essential food facts, many of which are cited in the presentation above,
http://www.crcworks.org/foodmarkets.pdf

To link to further analysis of farm and food economies in the U.S.:
http://www.crcworks.org/econ.html

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