The Economic Impacts of Immigrant Labor on U.S. Dairy Farms

Labor Issues Facing Agriculture & The Rural Midwest
Federal Reserve Bank of Chicago
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Overview

- Survey of Dairy Farmers
- Economic Importance of Immigrant Labor
- Some Implications
The Survey

• Supported by National Milk Producers Federation
• 2015 Survey Sent to 5,000 Dairy Farm in Hard Copy and Electronic Form
• 1,223 Questionnaires were Returned – 1,000 were Usable
Representative of Industry

- Responses Came from All U.S. Regions and from All Herd Sizes
- Higher Proportion of Responses from Larger Farms that Hire Labor
- Geographic Dispersion Similar to NASS Reported Dairy Farm Data

<table>
<thead>
<tr>
<th>Number of Dairy Cows</th>
<th>Number of Dairy Farms Responding</th>
<th>% of Total Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;50</td>
<td>45</td>
<td>4.5%</td>
</tr>
<tr>
<td>50-199</td>
<td>193</td>
<td>19.3%</td>
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<tr>
<td>200-499</td>
<td>154</td>
<td>15.4%</td>
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<tr>
<td>500-999</td>
<td>269</td>
<td>26.9%</td>
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<tr>
<td>1,000-1,999</td>
<td>184</td>
<td>18.4%</td>
</tr>
<tr>
<td>2,000+</td>
<td>155</td>
<td>15.5%</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Region of the United States</th>
<th>Number of Dairy Farms Responding</th>
<th>% of Total Respondents</th>
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</thead>
<tbody>
<tr>
<td>Northeast</td>
<td>172</td>
<td>17.3%</td>
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<tr>
<td>Southeast</td>
<td>38</td>
<td>3.8%</td>
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<tr>
<td>Midwest</td>
<td>467</td>
<td>46.9%</td>
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<tr>
<td>Southwest</td>
<td>72</td>
<td>7.2%</td>
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<tr>
<td>West</td>
<td>246</td>
<td>24.7%</td>
</tr>
</tbody>
</table>
U.S. Dairy Farm Labor

- Survey Results Indicate 114,092 Full-Time and 36,326 Part-Time Employees on U.S. Dairies for a Total of 150,418

- Slightly More than Half, 76,968, of U.S. Dairy Labor are of Immigrant Origin

Source: National Dairy Labor Survey, n=911
Immigrant Workers on U.S. Dairy Farms, 2013

**Percent**

- Share of Farms with Immigrant Labor: 33.7%
- Immigrant Labor as Share of Total: 51.2%
- Share of Milk Produced on Farms with Immigrant Workers: 79.1%

**Source:** National Dairy Labor Survey, n=911; Percents are for Farms with 50 or More Cows
U.S. Dairy Labor Compensation

- U.S. Dairy Employees Earn an Average $11.54/Hour
  - Dairies with Immigrant Labor Pay $11.69/Hour
- Dairy Employees Work an Average of 54 Hours per Week, Earn $623/Week or >$31,000/Year
- Most Dairy Farms Pay a Wide Array of Benefits

Effects of Employee Turnover on Surveyed Dairy Operations

% Change

- Production: -1.8%
- Calf Loss: 1.7%
- Cow Death: -1.6%
- Herd Health: -1.8%
- Feed Efficiency: -1.3%

Immigrant Labor Loss Reduces Dairy Herd and Production & Raises Retail Milk Prices

Source: National Dairy Labor Survey, n=955
Input/Output Definitions

- **Output**: Increase in Business Sales Required to Support $1 of Exports
- **Value Added**: Additional Gross National/State Product due to $1 in Exports
- **Employment**: Additional Employees Required for $1 Million in Exports
- **Direct**: Sales of Output to Customers
- **Indirect**: Purchases of Inputs Required to Produce the Products for Sale
- **Induced**: Expenditures by Employees and Households in the Input Industries
U.S. Dairy Sales Support Economic Activity

Total Output: $136.9 Billion (Sales + Additional Output)
- Sales: $49.6 Billion
- Additional Output: $87.3 Billion
- Value Added: $58.4 Billion
- Employment: $406.9 Billion

Source: National Dairy Labor Survey and IMPLAN
Economic Impacts of 50% Immigrant Labor Loss

- $5.8 Billion Milk Sales
- $10.2 Billion Additional Output
- $6.8 Billion Value Added
- 1,000 Jobs

Total Output Lost: $16.0 Billion (Sales + Additional Output)

Source: National Dairy Labor Survey and IMPLAN
Economic Impacts of 100% Immigrant Labor Loss

- $11.6 Billion Milk Sales
- $20.5 Billion Additional Output
- $13.7 Billion Value Added
- 208.2 Thousand Employment

Source: National Dairy Labor Survey and IMPLAN
Implications

- U.S. Dairies are Highly Dependent on Immigrant Labor for Milk Production
- A Significant Loss of Immigrant Labor Would:
  - Lower Milk Production
  - Increase the Price to Consumers
  - Cost the Economy Billions of Dollars in Output and Thousands of Jobs
Implications

- Substitute Capital for Labor
- Robotic Milking Technology

Advantages:
- Increase production
- Increase quality
- Better management

Disadvantages:
- Cost
- High management ability and development