Introduction

Immigrant labor has become increasingly important to U.S. agriculture and the Texas dairy sector in recent years. It is estimated that migrant labor utilized on Texas dairies accounts for up to fifty percent of the dairy farm workforce. Shortages of agricultural labor, including migrants, were the most severe in many years. Further compounding the problem is the lack of willing, skilled labor to work on Texas dairies. Agricultural labor shortages were attributed to increased enforcement of labor regulations, longer wait times at Texas/Mexico border crossings, and higher wages in other occupations, such as construction. The economic impacts of labor losses on the Texas dairy sector are summarized below. These impacts do not include any impacts related to potential losses associated with the dairy processing sector.

The Texas Dairy Cow Sector

In 2005, 1,500 Texas dairies produced 6.4 billion pounds of milk valued at $986 million, making the dairy sector one of the most important in the state. Texas dairies maintain an average of 320 cows, with each cow producing 20,131 pounds of milk annually. The largest dairies, those with more than 500 head, account for about 69 percent of the Texas dairy herd, while dairies with 100-499 cows account for 26 percent. Dairies with less than 100 cows account for about five percent of the Texas dairy herd.

The total economic impact of the Texas dairy sector on the economy is substantial. In 2005, dairy output of $986 million was supported by $1.9 billion in economic activity throughout the Texas economy. The Texas dairy sector supported $558 million in income and 10,290 workers.

Estimated Economic Impacts of 10% and 20% Labor Losses on the Texas Dairy Sector*

<table>
<thead>
<tr>
<th></th>
<th>Production</th>
<th>Business Activity</th>
<th>Income</th>
<th>Jobs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005 Baseline</td>
<td>$985.6</td>
<td>$1,910.9</td>
<td>$558.1</td>
<td>10,290</td>
</tr>
<tr>
<td>10% Labor Loss</td>
<td>-$197.1</td>
<td>-$382.2</td>
<td>-$111.6</td>
<td>-1,654</td>
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<tr>
<td>20% Labor Loss</td>
<td>-$492.8</td>
<td>-$955.4</td>
<td>-$279.1</td>
<td>-3,932</td>
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</tbody>
</table>

* Production, business activity and income reported in million dollars. Jobs are reported in actual full-time equivalents.

Labor Loss Impacts

Industry experts estimate that a ten percent labor loss would result in a 20 percent loss in milk output statewide. The initial impact would be a $197 million loss in economic activity. Subsequent losses would reach $185 million, for a total loss of $382 million. Income losses to the dairy sector, as well as input suppliers, transportation and other supporting industries would be $112 million. Of this total, $92 million would be direct dairy cow sector losses. In addition, the loss in
total employment is estimated to be 1,654 jobs. About 404 direct dairy cow sector jobs would be lost initially, while an 1,250 jobs would be lost in support sectors and industries.

It is estimated that a 20 percent labor loss would lead to a 50 percent decline in milk output in Texas. The total economic impact of this decline in dairy output is estimated to be $955 million. This includes $493 million in lost milk sales and an additional $462 million in purchases of dairy inputs and other supporting activities. Total income losses to the dairy sector would reach $279 million. This would include $49 million in losses to dairy cow operations. An additional $230 million would be lost by other sectors and industries that support milk production and households that are negatively affected by declining dairy sales and lost employment.

Job losses in dairy cow operations and supporting sectors would be substantial. It is estimated that 3,923 full time equivalent jobs would be lost. About 808 of these are attributed directly to lost jobs in dairy cow operations. There would be additional losses of 3,124 jobs in those sectors that support dairy production. About 2,337 of these losses would be attributed to declining purchases of inputs that support dairy cow operations, while 788 would be due to lower household incomes.

Should the Texas dairy cow sector experience a 20 percent labor loss, it is likely the economic losses would be catastrophic for the sector directly and would have substantial negative economic impacts on supporting sectors and industries. These losses would result in closure of the some of the state’s largest and most efficient dairies as economies of scale in milk production decline. Some milk plants would reduce output and might temporarily cease operations or close permanently. It is also likely that feed manufacturers, lending institutions, transportation services, and other input suppliers would face significant economic adjustment. Further, shortages of milk could result in some areas, leading to substantially higher consumer prices.

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