



**A Value Chain Analysis  
of  
Selected California Crops**

---

Appendix A: Top Company Summary Tables  
Appendix B: Full Company Profiles

**Duke University  
July 7, 2008**

## **Appendix A: Top Company Summary Tables**

Top Five Seed Companies in U.S. Market.....	3
Top Five Agrochemical Companies in U.S. Market.....	6
Top Five Fertilizer Companies in U.S. Market.....	11
Top Irrigation Systems Companies.....	16
Top U.S. Farm Equipment Companies.....	21
Top Tomato Marketers, California.....	26
Top U.S. Tomato Remanufacturers.....	29
Top Five U.S. Feed Producers.....	33
Top Five U.S. Poultry Producer Companies.....	38
Top Ethanol Producers, U.S. and California.....	39

## **Appendix B: Full Company Profiles**

Monsanto.....	45
DuPont Agriculture & Nutrition.....	49
The Mosaic Company.....	56
Valmont Industries.....	62
Deere & Company.....	65
Morning Star.....	70
ConAgra Foods, Inc.....	73
Cargill, Inc.....	77
Tyson Foods, Inc.....	81
Poet, LLC.....	87

## Appendix A

CGGC  
5-1-08

### Top Five Seed Companies in U.S. Market, 2007<sup>1</sup>

Company	Annual Revenues	Relevant Market Niche	Services Provided, if applicable	Notes
<p><b>Monsanto</b> Location: St. Louis, MO Chairman: Hugh Grant, CEO. Employees: 18,800. Corp. Family: 212 companies. FY End: 31-Aug-2007 Website: <a href="http://www.monsanto.com">www.monsanto.com</a></p>	<p>Total sales in 2007: \$ Billion 8.563, within which seeds and genomics account for 58%, that is \$ <b>Billion 4.964</b></p>	<p>Genetically modified seeds for corn, soybean and cotton, etc.; biotechnology trait products, and herbicides</p>	<p>Research and Development in the Physical, Engineering, and Life Science</p>	<p>1<sup>st</sup> supplier of genetically modified (GM) seeds in the world. Monsanto's Roundup is the world's No.1 herbicide. After its purchases of many top seeds suppliers, such as <a href="#">Seminis</a> and <a href="#">Emergent Genetics</a> in 2005<sup>2</sup>, and <a href="#">Delta and Pine Land</a> in 2006<sup>3</sup>, and <a href="#">De Ruiter</a> in 2008, Monsanto accounted for over 60% of US cotton seed, 32% of US corn seed in 2007.</p>

<sup>1</sup> We focus on the U.S. seeds market, however many key players in this market are not US-based companies, but multinational corporations, such as Syngenta and Bayer AG. So here we list the top 5 seeds companies in terms of their market shares in the US seed market.

<sup>2</sup> See *Vanity Fair*, May 2008, p.160.


<sup>3</sup> New York Times, August 16, 2006, "Monsanto Buys Delta and Pine Land, Top Supplier of Cotton Seeds in U.S." <http://www.nytimes.com/2006/08/16/business/16seed.html>

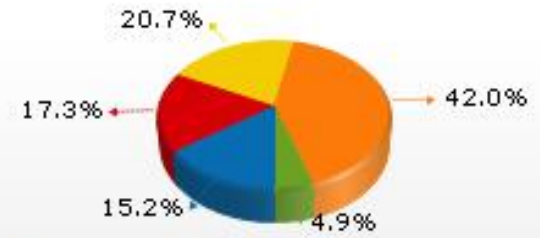
Company	Annual Revenues	Relevant Market Niche	Services Provided, if applicable	Notes
<p><b>Syngenta AG</b> (Switzerland)</p> <p><b>US Subsidiary Location:</b> Wilmington, DE Chairman: J. Martin Taylor Employees: 15,500 Corp. Family: 116 companies. <b>Website:</b> <a href="http://www.syngenta.com">http://www.syngenta.com</a></p>	<p>Sales in 2007: \$ Billion 9.24, within which 3.108 Billion was on NAFTA market; and <b>Billion 1.954</b> was from Seeds, 21% of its global business.</p>	<p>Crop protection products. Seeds for corn and soybean, vegetable and flowers.</p>	<p>International R&amp;D centers at Stein in Switzerland, and Jealott's Hill in the UK. It also set up local Seed Care Institute in developing countries, such as China, to provide technical assistance.</p>	<p>Syngenta is a Switzerland-based corporation and has a branch in the US. It's one of the world's largest agrochemical companies, and a primary competitor of Monsanto. Syngenta purchased a few US agro Companies in 2005 and 2006, acquired <a href="#">Emergent Genetics Vegetable</a>, <a href="#">Conrad Fafard</a>, and joint venture <a href="#">Longreach Plant Breeders</a> ; In 2007 it purchased top flower crop producer, <a href="#">Fischer</a>.</p>
<p><b>Pioneer, Dupont (US)</b> Location: Johnston, IA. Chairman: Dean Oestreich, CEO. Employees: 310 Corp. Family: 368 companies. Website: <a href="http://www.pioneer.com">http://www.pioneer.com</a></p>	<p>Sales in 2007: <b>\$ Billion 1.835</b></p>	<p>Commercial hybrid seeds for corn, soybean, alfalfa, wheat, sorghum, sunflower and canola; it also makes silage, hay inoculants, forage and grain additives</p>	<p>Over 100 R&amp;D centers in 25 countries; supply chain and info. management, and value-added support services to customers</p>	<p>2<sup>nd</sup> in terms of corn seeds production, accounted for 30% US corn seed in 2007.</p>

Company	Annual Revenues	Relevant Market Niche	Services Provided, if applicable	Notes
<p><b>Land O'Lakes Purina Feed LLC</b></p> <p>Location: St. Paul, MN  Chairman: Chris Policinski, CEO  Employees: 8,500  Corp. Family: 116  Website: <a href="http://www.landolakes.com">www.landolakes.com</a></p>	<p>Sales in 2007: \$ Billion 7.102, within which seed business accounts for 11%, which is <b>\$ Million 771.32</b></p>	<p>Dairy-based products; feed, seed, crop nutrients and crop protection products.</p>	<p>From farm to market; provides its members with wholesale fertilizer and crop protection products, seed, and animal feed.</p>	<p>CROPLAN GENETICS is its primary crop seed producer.</p>
<p><b>Bayer CropScience AG (Germany)</b></p> <p><b>US Branch Location:</b> Research Triangle Park, NC.</p> <p>Chairman: William Buckner, CEO and Head of Corp Protection in North America.  Employees: 300  Corp. Family: 269 companies.  <b>Website:</b> <a href="http://www.bayercropscienceus.com/">http://www.bayercropscienceus.com/</a></p>	<p>Sales in 2007: <b>\$ Million 450</b></p>	<p>Insecticides, herbicides, fungicides, nonagricultural applications, plant biotechnology and conventional seeds.</p>	<p>Environmental Science, such as Pest control products for professionals; and Biotechnology, such as Plant biotechnology.</p>	<p>Formed by a merger of Bayer Crop Protection and Aventis CropScience in 2002. Provide products in roughly 120 countries. North America accounts for 21% of its global revenue.</p>

Source: OneSource, Hoovers, and CorpTech.


## Top Five Agrochemical Companies in U.S. Market, 2007

Company	Revenues	Relevant Market Niche	Services Provided, if applicable	Notes																		
<p><b>BASF SE.</b></p> <p>Location: Carl-Bosch-Strasse 38 Ludwigshafen, 67056, Germany Tel: 49-621-600 Fax: 49-621-6042525</p> <p>Employees: 95,175 Company Type: Public Parent Corporate Family: 319 Comps. Traded: Frankfurt Stock Exchange: <a href="#">BAS</a> ADR Traded: NYSE: <a href="#">BF</a> Incorporation Date: 1865 Auditor: KPMG</p> <p>Website: <a href="http://www.basf.com">www.basf.com</a></p>	<p>Total Sales in 2007: <b>\$79.3 billion</b> (OneSource)</p> <p>Within which, <b>Ag. Chemical accounts for 9%</b> (Hoovers), which was <b>\$ 7.1 billion</b></p>	<p>Primary products and %:</p> <ul style="list-style-type: none"> <li>• Chemicals 25%</li> <li>• Plastics 23%</li> <li>• Performance Products 20%</li> <li>• Oil &amp; Gas 18%</li> <li>• Agricultural Products &amp; Nutrition 9%</li> <li>• Other 5%</li> <li>• Total 100%</li> </ul>	<p>N.A.</p>	<p><b>BASF SE global sales in 2007:</b></p>  <table border="1"> <caption>BASF SE Global Sales and Total Assets (USD in millions)</caption> <thead> <tr> <th>Year</th> <th>Sales</th> <th>Total Assets</th> </tr> </thead> <tbody> <tr> <td>2003</td> <td>~38,000</td> <td>~42,000</td> </tr> <tr> <td>2004</td> <td>~48,000</td> <td>~48,000</td> </tr> <tr> <td>2005</td> <td>~55,000</td> <td>~42,000</td> </tr> <tr> <td>2006</td> <td>~65,000</td> <td>~58,000</td> </tr> <tr> <td>2007</td> <td>~75,000</td> <td>~68,000</td> </tr> </tbody> </table>	Year	Sales	Total Assets	2003	~38,000	~42,000	2004	~48,000	~48,000	2005	~55,000	~42,000	2006	~65,000	~58,000	2007	~75,000	~68,000
Year	Sales	Total Assets																				
2003	~38,000	~42,000																				
2004	~48,000	~48,000																				
2005	~55,000	~42,000																				
2006	~65,000	~58,000																				
2007	~75,000	~68,000																				

Company	Revenues	Relevant Market Niche	Services Provided, if applicable	Notes												
				<p style="text-align: center;"><b>Total Revenue</b></p>  <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Region</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Germany</td> <td>42.0%</td> </tr> <tr> <td>North America</td> <td>20.7%</td> </tr> <tr> <td>Other Europe</td> <td>17.3%</td> </tr> <tr> <td>Asia/Pacific</td> <td>15.2%</td> </tr> <tr> <td>Unlabeled</td> <td>4.9%</td> </tr> </tbody> </table> <p style="text-align: right;">more...</p>	Region	Percentage	Germany	42.0%	North America	20.7%	Other Europe	17.3%	Asia/Pacific	15.2%	Unlabeled	4.9%
Region	Percentage															
Germany	42.0%															
North America	20.7%															
Other Europe	17.3%															
Asia/Pacific	15.2%															
Unlabeled	4.9%															

Company	Revenues	Relevant Market Niche	Services Provided, if applicable	Misc. Notes
<p><b>Monsanto (MON)</b></p> <p>St. Louis, MO</p> <p>Employees: 20,237</p> <p>Corporate Family: 210 Companies</p> <p>Incorporation Date: 1901</p>	<p>Company Annual Sales: <b>\$ 8.6 billion</b></p> <p>Global agro chemical sales: <b>\$2.6 billion</b></p>	<p>Two segments:</p> <ul style="list-style-type: none"> <li>• Seeds and Genomics</li> <li>• Agricultural Productivity: herbicides and animal agricultural products</li> </ul>	<p>“Biotech Knowledge Center” is the Monsanto division in charge of spreading information to customers. Farmers and dealers can contact them for any inquiry.</p>	<p>Monsanto produces a great variety of herbicides, the most popular of which is Roundup.</p>



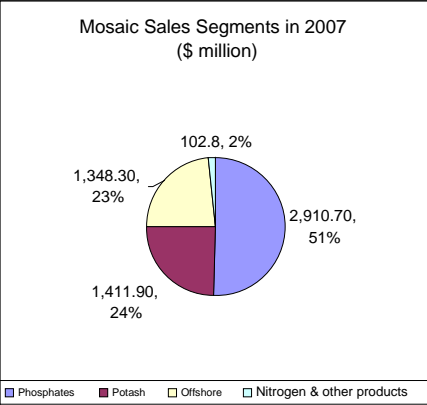

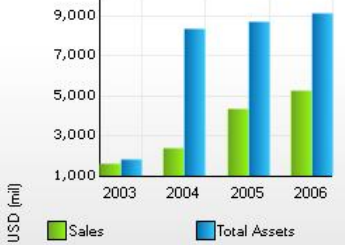
Company	Revenues	Relevant Market Niche	Services Provided, if applicable	Misc. Notes																														
<p><b>Syngenta-US</b></p> <p>Wilmington, DE</p> <p>Employees: 20,000</p> <p>Corp. Family: 163 companies.</p> <p>Private Subsidiary</p> <p>Ultimate Parent: Syngenta AG</p>	<p>Sales in 2007: <b>\$ 6.8 billion (OneSource)</b></p> <p>Within which: Protection <b>\$ 2.2 billion, 71%</b></p> <p>Seeds: <b>\$.92 billion, 29%</b> (Syngenta Annual Report 2007)</p>	<p>Crop protection products.</p> <p>Seeds for corn and soybean, vegetable and flowers.</p>		<p><b>Crop Protection:</b> Sales by regions</p>  <table border="1"> <thead> <tr> <th></th> <th>2007 (\$m)</th> <th>2006 (\$m)</th> <th>Actual %</th> <th>CER<sup>1</sup> %</th> </tr> </thead> <tbody> <tr> <td>EAME</td> <td>2,545</td> <td>2,242</td> <td>+13</td> <td>+5</td> </tr> <tr> <td>APAC</td> <td>1,079</td> <td>981</td> <td>+10</td> <td>+5</td> </tr> <tr> <td>NAFTA</td> <td>2,238</td> <td>2,119</td> <td>+6</td> <td>+6</td> </tr> <tr> <td>LATAM</td> <td>1,423</td> <td>1,036</td> <td>+37</td> <td>+37</td> </tr> <tr> <td>Total</td> <td>7,285</td> <td>6,378</td> <td>+14</td> <td>+11</td> </tr> </tbody> </table> <p>Syngenta's Crop Protection sales growth (2002-2007):</p>		2007 (\$m)	2006 (\$m)	Actual %	CER <sup>1</sup> %	EAME	2,545	2,242	+13	+5	APAC	1,079	981	+10	+5	NAFTA	2,238	2,119	+6	+6	LATAM	1,423	1,036	+37	+37	Total	7,285	6,378	+14	+11
	2007 (\$m)	2006 (\$m)	Actual %	CER <sup>1</sup> %																														
EAME	2,545	2,242	+13	+5																														
APAC	1,079	981	+10	+5																														
NAFTA	2,238	2,119	+6	+6																														
LATAM	1,423	1,036	+37	+37																														
Total	7,285	6,378	+14	+11																														

				<p><b>Crop Protection:</b> New product sales growth \$m</p> <table border="1"> <caption>New product sales growth (\$m)</caption> <thead> <tr> <th>Year</th> <th>Sales (\$m)</th> </tr> </thead> <tbody> <tr> <td>02</td> <td>258</td> </tr> <tr> <td>03</td> <td>457</td> </tr> <tr> <td>04</td> <td>637</td> </tr> <tr> <td>05</td> <td>798</td> </tr> <tr> <td>06</td> <td>985</td> </tr> <tr> <td>07</td> <td>1,206</td> </tr> </tbody> </table>	Year	Sales (\$m)	02	258	03	457	04	637	05	798	06	985	07	1,206
Year	Sales (\$m)																	
02	258																	
03	457																	
04	637																	
05	798																	
06	985																	
07	1,206																	
Company	Revenues	Relevant Market Niche	Services Provided, if applicable	Misc. Notes														
<p><b>Bayer</b> (BAYR Y)</p> <p>HQ: Leverkusen, Germany</p> <p>Company annual sales: \$33.2 billion</p>	<p>Global agrochemical sales: <b>\$ 7.2 billion</b><sup>4</sup></p> <p>N Am agro-chem sales: <b>\$1.4 billion</b></p>	<p>Insecticides, herbicides, fungicides</p>	<p>Service support for agriculture, non-ag applications of Bayer Crop Science products</p>	<p>Company was formed when Bayer Crop Protection acquired <a href="#">Aventis-Schering</a> joint venture <a href="#">Aventis CropScience</a>.</p>														

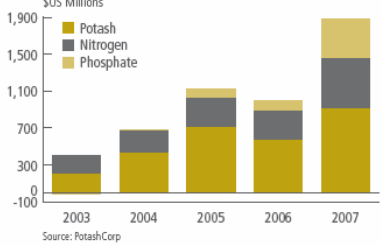
Sources: Company 2007 annual reports, Hoover's OneSource.

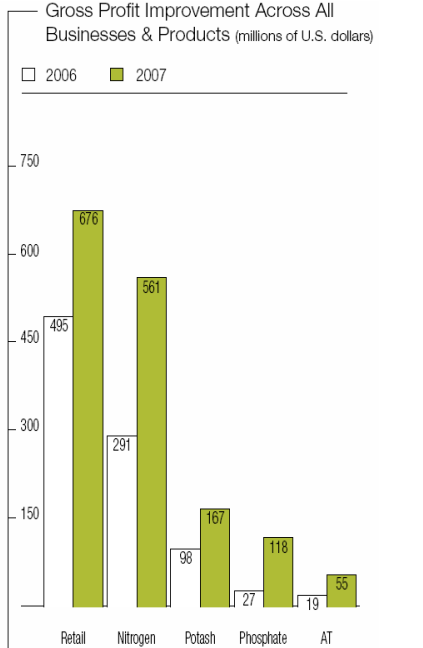
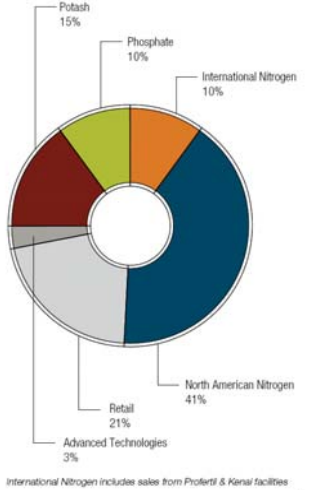
<sup>4</sup> 2007 Annual report




## Top Five Fertilizer Companies in U.S. Market, 2007<sup>5</sup>



Company	Annual Revenues	Relevant Market Niche	Services Provided, if applicable	Notes
<p><b>The Mosaic Company</b> Traded: New York Stock Exchange: <a href="#">MOS</a></p> <p>Location: Plymouth, MN Chairman: James Prokopanko, CEO. Employees: 7,100. Corp. family: 29 companies. Company type: Public parent.</p> <p>Website: <a href="http://www.mosaicco.com">www.mosaicco.com</a></p>	<p>Sales in 2007</p> <p><b>Annual Sales: \$5.8 billion</b> <b>Net Income: \$420 million</b></p> <p>Mosaic market segment in 2007</p>  <p>Legend: Phosphates, Potash, Offshore, Nitrogen &amp; other products</p>	<p>Phosphate and potash combined, as well as nitrogen and animal feed ingredients.</p>	<p>Produce in Florida, Louisiana, Michigan, and New Mexico in the US, as well as in Brazil, Canada, and China.</p> <p>Other Services: AgCollege InSite Information Management System InSite VRN Marketing Managers</p>	<p>More than 20% of global market share for Phosphate, potash, and nitrogen.</p>  <p>Legend: Other Fore..., Canada, Brazil, India, United Sta more...</p>  <p>Legend: Sales, Total Assets</p>

<sup>5</sup> We focus on the U.S. seeds market, however many key players in this market are not US-based companies, but multinational corporations, such as Syngenta and Bayer AG. So here we list the top 5 seeds companies in terms of their market shares in the US seed market.

Company	Annual Revenues	Relevant Market Niche	Services Provided, if applicable	Notes																														
<p><b>Potash Corporation (Canada)</b></p> <p>Location in the US: Northbrook, IL  CEO: William J. Doyle  Employees: 5,199  Corp. family: 29 companies.  Company type: Private Subsidiary</p> <p>Website:  <a href="http://www.potashcorp.com">http://www.potashcorp.com</a></p>	<p>Sales in 2007</p> <p><b>Annual Sales: \$5.2 billion</b>  Growth 39.0%</p> <p><b>Net Income: \$1.1 billion</b>  Growth 69.6%</p> <p><b>Focus on Businesses Earning Highest Margins</b>  Potash First But Record N and P Gross Margins in 2007</p>  <table border="1"> <caption>Revenue Data (Estimated from Chart)</caption> <thead> <tr> <th>Year</th> <th>Potash (\$M)</th> <th>Nitrogen (\$M)</th> <th>Phosphate (\$M)</th> <th>Total (\$M)</th> </tr> </thead> <tbody> <tr> <td>2003</td> <td>~200</td> <td>~100</td> <td>~100</td> <td>~400</td> </tr> <tr> <td>2004</td> <td>~400</td> <td>~200</td> <td>~100</td> <td>~700</td> </tr> <tr> <td>2005</td> <td>~600</td> <td>~300</td> <td>~100</td> <td>~1,000</td> </tr> <tr> <td>2006</td> <td>~500</td> <td>~200</td> <td>~100</td> <td>~800</td> </tr> <tr> <td>2007</td> <td>~900</td> <td>~400</td> <td>~100</td> <td>~1,400</td> </tr> </tbody> </table> <p>Source: PotashCorp</p>	Year	Potash (\$M)	Nitrogen (\$M)	Phosphate (\$M)	Total (\$M)	2003	~200	~100	~100	~400	2004	~400	~200	~100	~700	2005	~600	~300	~100	~1,000	2006	~500	~200	~100	~800	2007	~900	~400	~100	~1,400	<p>Potash, nitrogen, and phosphate (for feed products, food products, and detergents)</p>	<p>Manufacture and sale of solid and liquid phosphate fertilizers, animal feed supplements and industrial acid, which is used in food products and industrial processes.</p>	<p>World's No.1 producer of potash, accounting for 22% of the world's capacity in potash; and, 2% of world's nitrogen, and 6% of world's phosphate. (source: PotashCorp 2007 Financial Review)</p> <p>And the company has about 20 plants in North America, Brazil, Chile, and Trinidad.</p>
Year	Potash (\$M)	Nitrogen (\$M)	Phosphate (\$M)	Total (\$M)																														
2003	~200	~100	~100	~400																														
2004	~400	~200	~100	~700																														
2005	~600	~300	~100	~1,000																														
2006	~500	~200	~100	~800																														
2007	~900	~400	~100	~1,400																														

Company	Annual Revenues	Relevant Market Niche	Services Provided, if applicable	Notes																		
<p><b>Agrium US Inc.</b></p> <p>Location: Denver, CO. CEO: Frank W. Proto Employees: 4,667 Corp. family: 108 companies. Company type: Private parent</p> <p>Website: <a href="http://www.agrium.com">http://www.agrium.com</a></p>	<p>Sales in 2007</p> <p><b>Annual Sales: \$2.8 billion</b></p> <p><b>Net Income: \$441 million</b> (Source: Agrium 2007 Annual Report)</p> <p>Gross Profit Improvement Across All Businesses &amp; Products (millions of U.S. dollars)</p>  <table border="1"> <caption>Gross Profit Improvement Across All Businesses &amp; Products (millions of U.S. dollars)</caption> <thead> <tr> <th>Category</th> <th>2006</th> <th>2007</th> </tr> </thead> <tbody> <tr> <td>Retail</td> <td>495</td> <td>676</td> </tr> <tr> <td>Nitrogen</td> <td>291</td> <td>561</td> </tr> <tr> <td>Potash</td> <td>98</td> <td>167</td> </tr> <tr> <td>Phosphate</td> <td>27</td> <td>118</td> </tr> <tr> <td>AT</td> <td>19</td> <td>55</td> </tr> </tbody> </table>	Category	2006	2007	Retail	495	676	Nitrogen	291	561	Potash	98	167	Phosphate	27	118	AT	19	55	<p>Nitrogen, phosphate and potash as well as controlled-release fertilizers and micronutrients</p>	<p>Retail, Wholesale and Advanced Technologies.</p>	<p>Largest independent direct-to-grower agriculture retailer in the U.S.</p> <p>2007 EBITDA by Business Unit &amp; Product</p>  <p>(Source: Agrium annual report 2007)</p>
Category	2006	2007																				
Retail	495	676																				
Nitrogen	291	561																				
Potash	98	167																				
Phosphate	27	118																				
AT	19	55																				

Company	Annual Revenues	Relevant Market Niche	Services Provided, if applicable	Notes
<p><b>CF Industries Holdings, Inc.</b> (NYSE: CF)</p> <p>Location: Deerfield, IL. CEO: Stephen Wilson Employees: 1,400 Corporate Family: 35 Companies Company Type: Public Parent</p> <p>Website: <a href="http://www.cfindustries.com">http://www.cfindustries.com</a></p>	<p>Sales in 2007</p> <p><b>Annual Sales: \$2.8 billion</b> <b>Net Income: \$373 million</b> (Source: OneSource)</p> <p style="text-align: center;">Segment % Total</p>  <p style="text-align: center;">(Source: OneSource)</p>	<p>Nitrogen, including:</p> <ul style="list-style-type: none"> <li>• Anhydrous Ammonia</li> <li>• Granular Urea</li> <li>• Urea Ammonium Nitrate (UAN) Solution</li> </ul> <p>And phosphate, including:</p> <ul style="list-style-type: none"> <li>• Diammonium Phosphate (DAP)</li> <li>• Monoammonium Phosphate (MAP)</li> </ul>	<p>Provide distribution facilities to customers.</p>	  <p>(Source: OneSource)</p> <p>The company also exports a significant portion of its phosphate output, primarily to Latin and South American markets.</p>

Company	Annual Revenues	Relevant Market Niche	Services Provided, if applicable	Notes																										
<p><b>Terra Industries Inc.</b> (NYSE: TRA)</p> <p>Location: Sioux City, IA. CEO: Michael Bennett Employees: 871 Corp. family: 20 companies. Company Type: Public Parent</p> <p>Website: <a href="http://www.terraindustries.com">http://www.terraindustries.com</a></p>	<p>Sales in 2007</p> <p><b>Annual Sales: \$2.4 billion</b></p> <p><b>Net Income: \$202 million</b></p> <p>Within which,  <b>Nitrogen: 2,293.1, 97%</b>  <b>Methanol: 55.4, 2%</b>  <b>Other products 11.6, 1%</b></p>	<p>Nitrogen and Methanol</p>	<p>The Company principally produces and sells ammonia, AN, urea and UAN in North America.</p>	<p>Terra's UAN (urea ammonium nitrate solution) accounts for about <b>one-third of the company's sales</b>. (Source: Hoovers)</p>  <table border="1"> <caption>Bar Chart Data: Sales vs Total Assets (USD in millions)</caption> <thead> <tr> <th>Year</th> <th>Sales</th> <th>Total Assets</th> </tr> </thead> <tbody> <tr> <td>2003</td> <td>~1,300</td> <td>~1,100</td> </tr> <tr> <td>2004</td> <td>~1,500</td> <td>~1,600</td> </tr> <tr> <td>2005</td> <td>~1,900</td> <td>~1,500</td> </tr> <tr> <td>2006</td> <td>~1,800</td> <td>~1,500</td> </tr> <tr> <td>2007</td> <td>~2,300</td> <td>~1,800</td> </tr> </tbody> </table>  <table border="1"> <caption>Pie Chart Data: Total Revenue by Region</caption> <thead> <tr> <th>Region</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>United States</td> <td>83.5%</td> </tr> <tr> <td>United Kingdom</td> <td>13.5%</td> </tr> <tr> <td>Others</td> <td>3.0%</td> </tr> </tbody> </table> <p>(source: OneSource)</p>	Year	Sales	Total Assets	2003	~1,300	~1,100	2004	~1,500	~1,600	2005	~1,900	~1,500	2006	~1,800	~1,500	2007	~2,300	~1,800	Region	Percentage	United States	83.5%	United Kingdom	13.5%	Others	3.0%
Year	Sales	Total Assets																												
2003	~1,300	~1,100																												
2004	~1,500	~1,600																												
2005	~1,900	~1,500																												
2006	~1,800	~1,500																												
2007	~2,300	~1,800																												
Region	Percentage																													
United States	83.5%																													
United Kingdom	13.5%																													
Others	3.0%																													

Source: OneSource, Hoovers, and CorpTech.

## Top Irrigation Systems Companies, 2007

Sprinkler system					
Company	Scale, in Dollar Measures	Definition of Market	Share of Defined Market	Technical Assistance	Additional Information/ Source
<p><b>Valmont Industries, Inc.</b></p> <p>One Valmont Plaza Omaha, NE 68154 United States Tel: 402-963-1000 Fax: 402-343-0668 Toll Free: 800-825-6668 www.valmont.com</p> <p>Employees: 6,029</p> <p>Company Type: Public Parent</p> <p>Corporate Family: 63 Companies Traded: New York Stock Exchange: VMI</p>	<p><b>U.S.Sales 2007: \$1.5 billion</b></p> <p><b>Irrigation systems sales: \$389 million</b></p>	<p>This company has 5 major businesses.</p> <p>The irrigation systems segment represents 26% of total sales.</p>	<ul style="list-style-type: none"> <li>Leader in Agriculture irrigation systems</li> </ul>	<p>‘Application Solution’ is a Valmont service that helps the customer to select the right package to reduce energy costs and save water.</p> <p>Local dealers also offer technical assistance</p>	<p>One source Annual Report</p>



Company	Scale, in Dollar Measures	Definition of Market	Share of Defined Market	Technical Assistance	Additional Information/Source
<p><b>Lindsay Corporation</b></p> <p>2707 North 108th Street Suite 102  Omaha, NE 68164 United States  Tel: 402-428-2131  Fax: 402-428-7289  Toll Free: 800-829-5300  www.lindsaymanufacturing.com  Employees: 899  Company Type: Public Parent  Corporate Family: 29 Companies  Traded: New York Stock Exchange: LNN  Incorporation Date: 1955</p>	<p>Sales 2007: <b>\$281.9 million</b></p> <p><b>Irrigation Equipment Sales: \$216.5 million</b></p>	<p>This Company has two main segments: Irrigation equipment and infrastructure.</p>	<ul style="list-style-type: none"> <li>Second major company in selling irrigation systems including Greenfield Mini-Pivots, Hard Hose Travelers and Mini-Lateral machines</li> </ul>	<p>Lindsay provides telephone and online customer support. Dealers also offer technical assistance.</p>	<p>One source Annual Report</p>

**Micro irrigation system**  
(Drip, trickle, or low-flow micro sprinklers)

Company	Scale, in Dollar Measures	Definition of Market	Share of Defined Market	Technical Assistance	Additional Information/ Source
<p><b>Netafim</b></p> <p>161 Arlozorov Street Tel Aviv, 64922 Israel Tel: 972 (3) 691 97 77 Fax: 972 (3) 691 19 62 www.netafim.com Employees: 2,200 Company Type: Private Independent</p>	<p>Sales 2007: \$450 million</p>	<p>This company focuses solely on the development and manufacture of irrigation equipment and micro irrigation systems. The product range includes drippers and dripper lines; high-precision sprinklers and micro-sprinklers; computerized irrigation systems, including controllers and filtration systems.</p>	<p>This company is the leader in Drip irrigation in the United States and worldwide.</p> <p>Netafim has 11 manufacturing facilities in nine countries, 32 subsidiaries and distribution presence over 110 countries.</p>	<p>Netafim has a ‘University Irrigation’ whose mission is: “to raise the quantity and quality of yields and sustain vital water resources.” They work with small and large farmers offering their technical expertise through subsidiaries and service centers.</p>	<p>One source Company Profile www.netafim.com</p>

Company	Scale, in Dollar Measures	Definition of Market	Share of Defined Market	Technical Assistance	Additional Information/ Source																														
<p><b>The Toro Company</b>  8111 Lyndale Avenue South  Bloomington, MN 55420  United States  Tel: 952-888-8801  Fax: 952-887-8258  Toll Free: 800-348-2424  www.toro.com  Employees: 5,273  Company Type: Public  Parent  Corporate Family: 27  Companies  Traded: New York Stock  Exchange: TTC  Incorporation Date: 1914</p>	<p>Sales: <b>\$1.9 billion</b>   <b>Irrigation sales 2007: \$381.1 million</b></p>	<p>This firm has two major segments equipment and irrigation.  <b>Irrigation represents 20% of total sales.</b>   The Irrigation segment includes professional and residential end users. In the professional segment there are four subsections: Commercial, sports fields, golf, agriculture.</p>	<p>This company has a strong presence in the Irrigation business.   Agriculture is one of the clients.</p>	<p>Toro offers tutorials and visual aids about different irrigation systems. Dealers are in charge of helping customers to assist in purchasing the right product.</p>	<p><b>Products and Operations</b></p> <p style="text-align: right;">2007 Sales \$ mil. % of total</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 60%;">US</td> <td style="width: 20%;">1,333.3</td> <td style="width: 20%;">71</td> </tr> <tr> <td>Other countries</td> <td>543.6</td> <td>29</td> </tr> <tr> <td><b>Total</b></td> <td><b>1,876.9</b></td> <td><b>100</b></td> </tr> </table> <p style="text-align: right;">2007 Sales \$ mil. % of total</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 60%;">Professional</td> <td style="width: 20%;">1,270.5</td> <td style="width: 20%;">68</td> </tr> <tr> <td>Residential</td> <td>563.5</td> <td>30</td> </tr> <tr> <td>Other</td> <td>42.9</td> <td>2</td> </tr> <tr> <td><b>Total</b></td> <td><b>1,876.9</b></td> <td><b>100</b></td> </tr> </table> <p style="text-align: right;">2007 Sales \$ mil. % of total</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 60%;">Equipment</td> <td style="width: 20%;">1,495.8</td> <td style="width: 20%;">80</td> </tr> <tr> <td>Irrigation</td> <td>381.1</td> <td>20</td> </tr> <tr> <td><b>Total</b></td> <td><b>1,876.9</b></td> <td><b>100</b></td> </tr> </table>	US	1,333.3	71	Other countries	543.6	29	<b>Total</b>	<b>1,876.9</b>	<b>100</b>	Professional	1,270.5	68	Residential	563.5	30	Other	42.9	2	<b>Total</b>	<b>1,876.9</b>	<b>100</b>	Equipment	1,495.8	80	Irrigation	381.1	20	<b>Total</b>	<b>1,876.9</b>	<b>100</b>
US	1,333.3	71																																	
Other countries	543.6	29																																	
<b>Total</b>	<b>1,876.9</b>	<b>100</b>																																	
Professional	1,270.5	68																																	
Residential	563.5	30																																	
Other	42.9	2																																	
<b>Total</b>	<b>1,876.9</b>	<b>100</b>																																	
Equipment	1,495.8	80																																	
Irrigation	381.1	20																																	
<b>Total</b>	<b>1,876.9</b>	<b>100</b>																																	

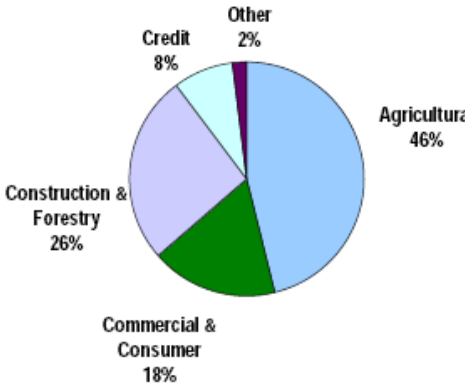
Company	Scale, in Dollar Measures	Definition of Market	Share of Defined Market	Technical Assistance	Additional Information/ Source
<p><b>Rain Bird Sprinkler Manufacturing Co</b></p> <p>145 North Grand Avenue Glendora, CA 91741-2469 United States Tel: 626-963-9311 Fax: 213-963-4287 www.rainbird.com Employees: 700 Company Type: Private Parent Corporate Family: 5 Companies Incorporation Date: 1933</p>	<p><b>Sales: \$125 million</b></p>	<p>Rain Bird offers more than 4,000 products sold internationally (130 Countries) in five markets: agriculture, consumer, contractor, commercial and golf.</p> <p>It maintains manufacturing assembly facilities in the United States, France, Sweden and Mexico</p>	<p>Rain Bird is one of the leading companies in micro irrigation systems.</p>	<p>Rain Bird has a program called ‘The intelligence use of water’ that involves education, partnership, organization of summits and right products leading to use water in a more effective and efficient way.</p> <p>Rain Bird has ‘Academy’ to train its dealers and customers. As well, they provide a vast list of materials in their website to help end users.</p>	<p>One Source Hoovers www.rainbird.com</p>

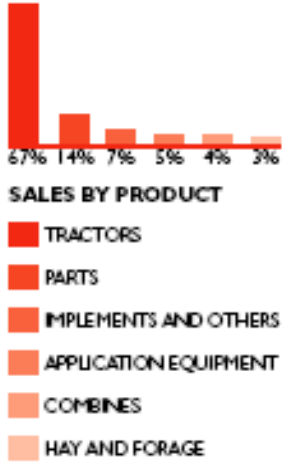
## Top U.S. Farm Equipment Companies, 2007

Company	Scale, in Dollar Measures	Definition of Market	Share of Defined Market	Technical Support	Additional Notes
<p><b>Deere &amp; Company</b></p> <p>Ticker: DE</p> <p>Headquarters: Moline, IL</p> <p>Incorporated in 1958</p> <p>World's largest farm equipment manufacturer</p>	<p><b>Revenue</b> \$24.1 billion</p> <p><b>Employees</b> 52,000</p>	<p>Farm equipment:</p> <p>Tractors, combine harvesters, cotton and sugarcane harvesters; tillage, seeding and soil preparation machinery; sprayers; mowing equipment, hay and forage equipment; integrated agricultural management systems technology; and precision agricultural irrigation equipment</p> <p>Wholesale, retail financing</p>	<p>Deere has more than 50% of the U.S. market for large tractors and combines<sup>6</sup></p>	<p>YES</p> <p>The John Deere Dealer is the first line of customer service.</p> <p>There is an exclusive segment of Deere &amp; Co. for 'Service and Support.'</p>	<p>Public parent of 712 companies</p> <p>John Deere is responding to consolidation in agribusinesses by ending its associations with many of its dealers, in favor of working with the more sophisticated agribusinesses.<sup>7</sup></p>

<sup>6</sup> [CREDIT SUISSE - NORTH AMERICA\(COOK, J., ET AL\), November 27, 2006](#)

<sup>7</sup> The Wall Street Journal Eastern Edition, August 14, 2007

Company	Scale, in Dollar Measures	Definition of Market	Share of Defined Market	Technical Support	Additional Notes
					<p>John Deere Revenue breakdown:</p>  <p>Source: Company data, Credit Suisse estimates</p>
<p><b>CNH Global</b></p> <p>Ticker: CNH</p> <p>Headquarters: Amsterdam, Netherlands</p>	<p><b>Revenue</b> \$13 billion</p> <p><b>Employees</b> 25,300</p>	<p>Agricultural equipment</p> <p>Tractors, combine harvesters, grape, cotton, coffee and sugar cane harvesters, hay and forage equipment, seeding and planting equipment, tillage equipment,</p>	<p>30% of the North American farm equipment market</p>	<p>YES</p> <p>On-line assistance and dealer technical support for farmers.</p>	<p>Two brand families:</p> <ul style="list-style-type: none"> <li>- Case</li> <li>- New Holland</li> </ul>

Company	Scale, in Dollar Measures	Definition of Market	Share of Defined Market	Technical Support	Additional Notes
<p>Has worldwide operations</p> <p>Fiat owns 85% of company (Datamonitor)</p>		<p>sprayers</p> <p>Equipment financing</p>			
<p><b>AGCO Corporation</b></p> <p>Ticker: AGCO</p> <p>Headquarters: Duluth, GA</p> <p>13,000 employees (Hoover's)</p> <p>Has worldwide operations</p> <p>Estab 1990</p>	<p>\$5.8 billion (Hoover's)</p>	<p>Farm equipment: tractors, combines, sprayers, hay tools</p> <p>Retail financing</p>	<p>10% of the North American farm equipment market</p>	<p>YES</p> <p>Dealer is the first line in customer service.</p>	<p>Brand names include, among others:</p> <ul style="list-style-type: none"> <li>- AGCO</li> <li>- Challenger</li> <li>- Massey Ferguson</li> </ul>  <p>Source: Annual report, p. 5</p>

Company	Scale, in Dollar Measures	Definition of Market	Share of Defined Market	Technical Support	Additional Notes
Corporate parent of 44 companies					AGCO provides a variety of precision farming technologies: <ul style="list-style-type: none"> <li>- Fieldstar to gather information</li> <li>- SGIS software to convert agricultural data to application plans</li> <li>- Auto-Guide satellite navigation system<sup>8</sup></li> </ul>

---

<sup>8</sup> OneSource



Company	Scale, in Dollar Measures	Definition of Market	Share of Defined Market	Technical Support
<p><b>Caterpillar, Inc.</b></p> <p>Ticker: CAT Peoria, IL</p>	<p><b>Revenue</b> \$45 billion</p> <p><b>Employees</b> 101,333</p>	<p>World's largest <u>construction</u> equipment manufacturer; mostly non-agricultural heavy equipment</p> <p>Manufactures engines and other components for Challenger equipment (a brand it sold to AGCO in 2002)</p> <p>Cat Financial offers retail financing</p>	<p>YES</p> <p>Dealer is the first line in customer service.</p>	<p>Responding to the boom in agriculture and the slowdown in construction, Caterpillar dealers have been expanding to sell and service Challenger tractors and combines built by AGCO Corp.</p> <p>Selling AGCO's farm equipment (Challenger) helps Caterpillar sell its other construction equipment in rural areas.<sup>9</sup></p> <p>Sales of engines and components to AGCO, along with related licensing fees, generated \$211.3 million in revenue for Cat last year, a 15% increase over 2005 and about 2% of Cat's total engine revenue of \$12.8 billion.</p>

<sup>9</sup> Crain's Chicago Business, October 8, 2007

## Top Tomato Marketers, California, 2007\*

Company	Financial Information	Market Niches	Other Information/Market Share
<b>Morning Star Packing Company</b> Williams, CA  <i>Private Independent</i>  Founded 1970	\$153 million <sup>10</sup>	Paste, diced, services	Owns Liberty Packing  Largest tomato marketer by capacity, three facilities (Morning Star 2007)  Accounts for 40 percent of U.S. supply of tomato paste and diced tomatoes
<b>SK Foods</b> Monterey, CA  <i>Private Parent</i>  Founded 1990	\$162 million (2007) (One Source)	Vegetable processor  Tomatoes: paste, diced, sauces	Two facilities, 2 <sup>nd</sup> largest tomato processor by capacity (Morning Star 2007)
<b>Ingomar Packing Company</b> Los Banos, CA  <i>Private Independent</i>  Founded 1983	\$45 million annual sales (2007) (OneSource)	Paste, diced	Two facilities, 3 <sup>rd</sup> largest marketer by capacity (Morning Star 2007)
<b>Los Gatos Tomato</b>	\$14.7 million	Paste	One facility, 4 <sup>th</sup> largest marketer by capacity (Morning Star 2007)

<sup>10</sup> CGGC estimate

<b>Products</b> Huron, CA  <i>Private Independent</i> Grower-owned, non-cooperative	(2007) (OneSource)		
<b>Company</b>	<b>Financial Information</b>	<b>Market Niches</b>	<b>Other Information/Market Share</b>
<b>Pacific Coast Processors</b> Lodi, CA  <i>Private Independent</i> (grower cooperative)  Founded 1971	\$1.3 billion (2007) (OneSource)	Processed fruits and vegetables (apricots, peaches, pears, tomatoes). Private-label and ingredient distribution only  Tomatoes: diced, solid, paste, sauces	Three production facilities, one headquarters, one ranch. One facility is for tomato products  Private cooperative owned by 160 California growers

\*All sources company Annual Reports and company web sites unless otherwise indicated.

### **References**

Archer Daniels Midland. 2008. "Annual Report, 2007." Available at the corporate web site, accessed April 29, 2008:  
[http://www.admworld.com/pdf/adm\\_2007\\_annual\\_report.pdf](http://www.admworld.com/pdf/adm_2007_annual_report.pdf)

Aventine Renewable Energy, Inc. 2008. "Annual Report, 2007." Available at the corporate web site, accessed April 29, 2008:  
<http://www.aventinere.com/pdfs/2007%2010-K.pdf>

Campbell's Soup. 2007. "Annual Report, 2007." Available at corporate web site, accessed March 12, 2008: [http://files.shareholder.com/downloads/CPB/258436178x0x136540/08f72647-c444-4044-b809-8e016989ad88/Campbell\\_2007\\_AR.pdf](http://files.shareholder.com/downloads/CPB/258436178x0x136540/08f72647-c444-4044-b809-8e016989ad88/Campbell_2007_AR.pdf).

ConAgra Foods. 2008. "Annual Report, 2007." Available at the corporate web site, accessed April 29, 2008: <http://thomson.mobular.net/thomson/7/2480/2791/>

Del Monte. 2007a. "Annual Report, 2007." Available at corporate web site, accessed March 12, 2008: [http://media.corporate-ir.net/media\\_files/irol/86/86259/2007\\_AR/index.html](http://media.corporate-ir.net/media_files/irol/86/86259/2007_AR/index.html).

Del Monte. 2007b. "Investor Fact Sheet, 2007." Available at corporate web site, accessed March 12, 2008: [http://media.corporate-ir.net/media\\_files/irol/86/86259/FactSheet\\_Q2F08.pdf](http://media.corporate-ir.net/media_files/irol/86/86259/FactSheet_Q2F08.pdf)

H.J. Heinz Company. 2008. "Annual Report, 2007." Available at corporate web site, accessed March 12, 2008: <http://www.heinz.com/2007annualreport/pdfs/2007HeinzAR.pdf>.

Hoovers Information Services [online corporate research database]. 2007. Accessed April 29, 2008: <http://www.hoovers.com>

Morning Star Packing Company. 2007. "Industry Data; California Tomato Paste Production Capacity." Online web page, available at company web site, accessed April 29, 2008: [http://www.morningstarco.com/industry/2007\\_paste\\_capacity.htm](http://www.morningstarco.com/industry/2007_paste_capacity.htm)

OneSource Information Services [online corporate research database]. 2007. Accessed April 29, 2008: <http://www.onesource.com>

Pacific Ethanol. 2008. "Annual Report 2007." Available at the corporate web site, accessed April 29, 2008: [http://www.sec.gov/Archives/edgar/data/778164/000101968708001360/paceth\\_10k-123107.htm](http://www.sec.gov/Archives/edgar/data/778164/000101968708001360/paceth_10k-123107.htm)

Renewable Fuels Association. 2008. "Industry Statistics." Online web page, available at the association web site, accessed April 29, 2008: <http://www.ethanolrfa.org/industry/statistics/>

Unilever. 2008. "Annual Report, 2007." Available at the corporate web site, accessed April 29, 2008: <http://annualreview07.unilever.com/>

## Top U.S. Tomato Remanufacturers, 2007

Company	Financial Information	Market Niches	Relevant Brands	Other Information/Market Share Company
<p><b>Campbell Soup Company</b></p> <p>Camden, NJ</p> <p><i>Public Independent</i></p> <p>NYSE: CPB</p> <p>Founded 1922</p>	<p>\$7.9 billion net sales (2007)</p> <p>\$0.85 billion net earnings (2007)</p>	<p>Branded food products, vertically integrated with respect to tomato provision</p>	<p>Campbell's Soup, Swanson broth, Pace sauce, Prego pasta sauce, V8.</p>	<p>U.S. and International Soup, Sauces, and Beverages accounted for 62% of net sales.</p> <p>Uses more than 1 million tons of tomatoes per year.</p> <p>One of the largest tomato processors in CA, all for internal use. 2 facilities (Morning Star 2007)</p>
<p><b>ConAgra Foods Inc.</b></p> <p>Omaha, NE</p> <p><i>Public Independent</i></p> <p>NYSE: CAG</p> <p>Founded 1919</p>	<p>\$12 billion net sales (2007)</p> <p>\$0.8 billion net earnings (2007)</p>	<p>Branded food products, intermediate food products</p>	<p>Hunt's</p>	<p>2 tomato processing facilities in CA (Morning Star 2007)</p>

Company	Financial Information	Market Niches	Relevant Brands	Other Information/Market Share Company
<p><b>Del Monte Foods Company</b></p> <p>San Francisco, CA</p> <p><i>Public Independent</i></p> <p>NYSE: DLM</p> <p>Founded 1886</p>	<p>\$3.4 billion net sales (2007)</p> <p>\$2.1 billion net consumer products sales (2007)</p> <p><b>\$1.5 billion, researcher-estimated sales for fruits, vegetables, and tomatoes (2007)</b></p>	<p>Processed fruits, vegetables, solid tomatoes, branded food products</p>	<p>Del Monte, Contadina, S&amp;W, SunFresh, Fruit Cup, Fruit Naturals, Orchard Select, Tropical Select, College Inn.</p> <p>Also produces private-label products</p>	<p>17 production facilities. 3 located in CA</p> <p>Purchases 1.1 million tons of fresh vegetables, fruit, and tomatoes annually.</p> <p>Solid tomatoes: 17% of net sales.</p> <p>Buys tomatoes from 20 growers, all in California</p> <p>Tomatoes: 1 facility in CA (Morning Star 2007)</p>
<p><b>H. J. Heinz Company</b></p> <p>Public Independent</p> <p>NYSE: HNZ</p> <p>Founded 1869</p> <p>Pittsburgh, PA</p>	<p>\$9 billion net sales</p> <p>Ketchup and sauces are 41% of sales; meals and snacks 45%, the remainder is infant food and other</p>	<p>Branded food products.</p>	<p>Heinz</p>	<p>One of the largest tomato processors. Owns the Heinz Seed Company and Escalon Premier Brands, Inc. (tomato processor).</p>

Company	Financial Information	Market Niches	Relevant Brands	Other Information/Market Share Company
<b>Unilever Best Foods</b>  London, UK and Rotterdam, NE (Int'l)  <i>Private subsidiary</i>  NYSE: UL  Founded 1930	\$153.3 billion sales (parent company, 2007)	Branded food products	Ragu	One CA tomato processing facility (Morning Star 2007)

**References**

Archer Daniels Midland. 2008. "Annual Report, 2007." Available at the corporate web site, accessed April 29, 2008: [http://www.admworld.com/pdf/adm\\_2007\\_annual\\_report.pdf](http://www.admworld.com/pdf/adm_2007_annual_report.pdf)

Aventine Renewable Energy, Inc. 2008. "Annual Report, 2007." Available at the corporate web site, accessed April 29, 2008: <http://www.aventinerai.com/pdfs/2007%2010-K.pdf>

Campbell's Soup. 2007. "Annual Report, 2007." Available at corporate web site, accessed March 12, 2008: [http://files.shareholder.com/downloads/CPB/258436178x0x136540/08f72647-c444-4044-b809-8e016989ad88/Campbell\\_2007\\_AR.pdf](http://files.shareholder.com/downloads/CPB/258436178x0x136540/08f72647-c444-4044-b809-8e016989ad88/Campbell_2007_AR.pdf).

ConAgra Foods. 2008. "Annual Report, 2007." Available at the corporate web site, accessed April 29, 2008: <http://thomson.mobular.net/thomson/7/2480/2791/>

Del Monte. 2007a. "Annual Report, 2007." Available at corporate web site, accessed March 12, 2008: [http://media.corporate-ir.net/media\\_files/irol/86/86259/2007\\_AR/index.html](http://media.corporate-ir.net/media_files/irol/86/86259/2007_AR/index.html).

Del Monte. 2007b. "Investor Fact Sheet, 2007." Available at corporate web site, accessed March 12, 2008: [http://media.corporate-ir.net/media\\_files/irol/86/86259/FactSheet\\_Q2F08.pdf](http://media.corporate-ir.net/media_files/irol/86/86259/FactSheet_Q2F08.pdf))

H.J. Heinz Company. 2008. "Annual Report, 2007." Available at corporate web site, accessed March 12, 2008: <http://www.heinz.com/2007annualreport/pdfs/2007HeinzAR.pdf>.

Hoovers Information Services [online corporate research database]. 2007. Accessed April 29, 2008: <http://www.hoovers.com> [subscription required].

Morning Star Packing Company. 2007. "Industry Data; California Tomato Paste Production Capacity." Online web page, available at company web site, accessed April 29, 2008: [http://www.morningstarco.com/industry/2007\\_paste\\_capacity.htm](http://www.morningstarco.com/industry/2007_paste_capacity.htm)

OneSource Information Services [online corporate research database]. 2007. Accessed April 29, 2008: <http://www.onesource.com> [subscription required].

Pacific Ethanol. 2008. "Annual Report 2007." Available at the corporate web site, accessed April 29, 2008: [http://www.sec.gov/Archives/edgar/data/778164/000101968708001360/paceth\\_10k-123107.htm](http://www.sec.gov/Archives/edgar/data/778164/000101968708001360/paceth_10k-123107.htm)

Renewable Fuels Association. 2008. "Industry Statistics." Online web page, available at the association web site, accessed April 29, 2008: <http://www.ethanolrfa.org/industry/statistics/>

Unilever. 2008. "Annual Report, 2007." Available at the corporate web site, accessed April 29, 2008: <http://annualreview07.unilever.com/>



### Top Five U.S. Feed Producers, 2007\*

Company	Industrial feed production	Relevant Market Niche	Misc. Notes
<p><b>Cargill, Incorporated</b></p> <p>Minneapolis, MN</p> <p>Employees: 141,000</p> <p><i>Private Parent</i></p> <p>Corporate Family: 677 Companies</p> <p>Incorporation Date: 1865</p> <p><b>Annual Sales: \$88.3 billion</b></p>	<p>16.8 million tons/year</p>	<p>Produces and distributes crop nutrients and feed ingredients to farmers, livestock producers and animal feeders.</p>	<p>Cargill is the largest grain exporter in the US and the third largest meat and poultry processor</p>

Company	Industrial feed production	Relevant Market Niche	Misc. Notes
<p><b>Land O'Lakes, Inc.</b></p> <p>North St. Paul, MN</p> <p>Employees: 8,500</p> <p><i>Private Parent</i> Corporate Family: 116 Companies</p> <p>Incorporation Date: 1921</p> <p><b>Annual Sales: \$ 7.1 billion</b></p>	<p>12 million tons/year</p>	<p>Provides variety of food and animal feed ingredients.</p>	<ul style="list-style-type: none"> <li>• Land O'Lakes is one of America's premier farmer-owned cooperatives</li> <li>• This company is the leading marketer of dairy-based products</li> </ul>

Company	Industrial feed production	Relevant Market Niche	Misc. Notes
<p><b>Tyson Foods, Inc.</b></p> <p>Springdale, AR United States</p> <p>Employees: 104,000</p> <p><i>Public Parent</i></p> <p>Corporate Family: 341 Companies</p> <p>Incorporation Date: 1935</p> <p><b>Annual Sales: \$ 26.9 billion</b></p>	<p>10.1 million tons/year</p>	<p>Produces, distributes and markets chicken, beef, pork, prepared foods and related allied products.</p>	<p>Tyson feed is intended to satisfy the company's own production of chickens, beef, and pork.</p>

Company	Industrial feed production	Relevant Market Niche	Misc. Notes
<p><b>Smithfield</b> Smithfield, VA</p> <p>Employees: 53,100</p> <p><i>Public Parent</i> Corporate family: 304 companies</p> <p>Incorporation date: 1936</p> <p><b>Annual Revenue:</b> <b>\$11.9 billion</b></p>	<p>3.6 million tons/year</p>	<p>Smithfield supplies its own extensive animal feeding operations</p>	<p>Smithfield Foods is the world's largest pork processor and hog producer. In the United States it is also the fifth largest beef processor</p>

Company	Industrial feed production	Relevant Market Niche	Misc. Notes
<p><b>ADM Alliance Nutrition, Inc.</b></p> <p>Quincy, IL</p> <p>Employees: 300</p> <p>Parent company incorporation date: 1885</p> <p><i>Public Subsidiary</i> Ultimate Corporate Parent: Archer Daniels Midland</p> <p><b>Annual Sales:</b> <b>\$1.8 billion</b></p>	<p><b>3.2 million tons/year</b></p>	<p>Manufactures prepared poultry and livestock feeds and grain mixing. Products are used for animal feed and pet food, and also for grain and flourmill.</p>	<p>Company supplies ingredients that augment the nutritional value of animal feed.</p>

\*Several of the largest producers of animal feed do not sell their product but rather use it for their own livestock, pork or poultry production; thus we provide production figures rather than sales figures to compare these companies.

**Data sources: OneSource, Hoover's and [www.feedindustry.com](http://www.feedindustry.com)**

## Top Five U.S. Poultry Producer Companies

Company	Annual Revenues in Poultry Production (Source: OneSource)	Relevant Market Niche	Notes
<b>Pilgrim's Pride Corp.</b>	\$7.6 billion	Poultry	20% Market share. Source: IBISWorld, 2007  Pilgrim's Pride became the world largest poultry producer through the hostile takeover of #3 Gold Kist in 2007, surpassing Tyson Foods.
<b>Tyson Foods, Inc.</b>	\$ 26.9 billion  Chicken sales: \$8.2 billion, or 30% of total revenues	Produces, distributes and markets chicken, beef, pork, prepared foods and related allied products	19% Market share. Source: IBISWorld, 2007
<b>Perdue Inc.</b>	\$3.4 billion	Poultry	6% Market share. Source: Simon Shane, 2006
<b>Wayne Farms, LLC.</b>	\$1.8 billion	Poultry	4% Market Share Source: Simon Shane, 2006
<b>Foster Farms</b>	\$1.8 billion	Poultry	3% Market Share Source: Simon Shane, 2006  Foster Farms is the 7 <sup>th</sup> largest poultry producer.
<b>Zacky Farms</b>	\$25 million	Poultry (Turkey)	Zacky Farms Inc. sold its chicken operations to Foster Farms in 2001, now it is a turkey-concentrated company

## Top Ethanol Producers, U.S. and California, 2007

Company	Financial Information	Market Niches	Other Information/Market Share
<p><b>Poet</b></p> <p>Sioux Falls, SD</p> <p><i>Private Independent</i></p> <p>Founded 1983</p>	<p>\$141.2 million annual sales (2007) (OneSource)</p>	<p>Fuel-grade ethanol, corn byproducts, construction services for network members</p>	<p>22 plants, more than 1.3 billion gallon capacity. 5 under construction</p> <p>Largest ethanol producer in US</p>
<p><b>Archer Daniels Midland</b></p> <p>Decatur, IL</p> <p><i>Public Parent</i></p> <p>NYSE: ADM</p> <p>Founded 1902</p>	<p>\$44.018 billion, company total net sales (2007)</p> <p>\$2.2 billion, net earnings</p>	<p>Oilseed products, corn products (intermediate food products, feed additives, ethanol and industrial), services (grain elevators and transportation), wheat and cocoa processing</p>	<p>13 corn processing plants, all in US.</p> <p>Second largest ethanol producer in US.</p>

Company	Financial Information	Market Niches	Other Information/Market Share
<p><b>Aventine Renewable Energy Inc.</b></p> <p>Pekin, IL</p> <p>Public Independent</p> <p>NYSE: AVR</p> <p>Founded 1981 (incorporated 2003)</p>	<p>\$1.572 billion, net sales(2007)</p> <p>\$33.799 million, net earnings</p>	<p>Fuel-grade ethanol, biofuels marketer, corn byproducts</p> <p>Produces roughly 28% of its sold ethanol</p>	<p>3 facilities, 2 under construction.</p> <p>Sold 690 million gallons in 2007.</p> <p>Produced 192 million gallons in 2007. The remainder was sourced from partners or third parties.</p> <p>Contracts with farmers, elevators, and cooperatives for corn. This is likely modal.</p>
<p><b>Hawkeye Energy Holdings</b></p> <p>Ames, IA</p> <p><i>Private Subsidiary</i></p>	<p>\$89.1 million revenue (2005) (Hoovers)</p> <p>\$8.6 million net earnings (2005) (Hoovers)</p>	<p>Fuel-grade ethanol, corn byproducts</p>	<p>2 plants, 2 under construction</p> <p>215 million gallon capacity, 220 million gallon capacity under construction</p>



Company	Financial Information	Market Niches	Other Information/Market Share
<p><b>VeraSun Energy</b></p> <p>Brookings, SD</p> <p><i>Private Independent</i></p> <p>NYSE: VSE</p> <p>Founded 2001</p>	<p>\$848.3 million net sales (2007)</p> <p>\$26.6 million net earnings</p>	<p>Fuel-grade ethanol, corn byproducts</p>	<p>Merged with US BioEnergy</p> <p>5 facilities, 11 under construction</p> <p>560 million gallon capacity, additional 1,080 gallon capacity under construction</p>
<b>California Companies:</b>			
Company	Financial Information	Market Niches	Other Information/Market Share
<p><b><i>Pacific Ethanol</i></b> (2006)</p> <p>Sacramento, CA</p> <p><i>Private Independent</i></p>	<p>\$226.4 million net sales</p> <p><b>-\$0.142 million net earnings</b></p>	<p>Fuel-grade ethanol, corn byproducts</p> <p>Sold 102 million gallons, purchased from third parties 88 million gallons for resale (most of total sold)</p>	<p>2 plants, 4 under construction</p> <p>75 million gallon capacity, 345 million gallon capacity under construction</p> <p>Imports ethanol from Midwest to sell. Imports corn from Midwest for its own operations</p>

Company	Financial Information	Market Niches	Other Information/Market Share
<p><b><i>Phoenix Biofuels</i></b></p> <p>Parent company in Aurora, CO</p> <p><i>Private subsidiary</i></p>	N/A	Fuel-grade ethanol	<p>Owned by Phoenix Consulting Group International</p> <p>Ethanol facility located in Goshan, CA. 25 million gallon capacity</p>

\*All sources company Annual Reports and company web sites unless otherwise indicated.

### ***References***

Archer Daniels Midland. 2008. "Annual Report, 2007." Available at the corporate web site, accessed April 29, 2008:  
[http://www.admworld.com/pdf/adm\\_2007\\_annual\\_report.pdf](http://www.admworld.com/pdf/adm_2007_annual_report.pdf)

Aventine Renewable Energy, Inc. 2008. "Annual Report, 2007." Available at the corporate web site, accessed April 29, 2008:  
<http://www.aventinerei.com/pdfs/2007%2010-K.pdf>

Campbell's Soup. 2007. "Annual Report, 2007." Available at corporate web site, accessed March 12, 2008:  
[http://files.shareholder.com/downloads/CPB/258436178x0x136540/08f72647-c444-4044-b809-8e016989ad88/Campbell\\_2007\\_AR.pdf](http://files.shareholder.com/downloads/CPB/258436178x0x136540/08f72647-c444-4044-b809-8e016989ad88/Campbell_2007_AR.pdf).

ConAgra Foods. 2008. "Annual Report, 2007." Available at the corporate web site, accessed April 29, 2008: <http://thomson.mobular.net/thomson/7/2480/2791/>

Del Monte. 2007a. "Annual Report, 2007." Available at corporate web site, accessed March 12, 2008: [http://media.corporate-ir.net/media\\_files/irol/86/86259/2007\\_AR/index.html](http://media.corporate-ir.net/media_files/irol/86/86259/2007_AR/index.html).

Del Monte. 2007b. "Investor Fact Sheet, 2007." Available at corporate web site, accessed March 12, 2008: [http://media.corporate-ir.net/media\\_files/irol/86/86259/FactSheet\\_Q2F08.pdf](http://media.corporate-ir.net/media_files/irol/86/86259/FactSheet_Q2F08.pdf))

H.J. Heinz Company. 2008. "Annual Report, 2007." Available at corporate web site, accessed March 12, 2008: <http://www.heinz.com/2007annualreport/pdfs/2007HeinzAR.pdf>.

Hoovers Information Services [online corporate research database]. 2007. Accessed April 29, 2008: <http://www.hoovers.com> [subscription required].

Morning Star Packing Company. 2007. "Industry Data; California Tomato Paste Production Capacity." Online web page, available at company web site, accessed April 29, 2008: [http://www.morningstarco.com/industry/2007\\_paste\\_capacity.htm](http://www.morningstarco.com/industry/2007_paste_capacity.htm)

OneSource Information Services [online corporate research database]. 2007. Accessed April 29, 2008: <http://www.onesource.com> [subscription required].

Pacific Ethanol. 2008. "Annual Report 2007." Available at the corporate web site, accessed April 29, 2008: [http://www.sec.gov/Archives/edgar/data/778164/000101968708001360/paceth\\_10k-123107.htm](http://www.sec.gov/Archives/edgar/data/778164/000101968708001360/paceth_10k-123107.htm)

Renewable Fuels Association. 2008. "Industry Statistics." Online web page, available at the association web site, accessed April 29, 2008: <http://www.ethanolrfa.org/industry/statistics/>

Unilever. 2008. "Annual Report, 2007." Available at the corporate web site, accessed April 29, 2008: <http://annualreview07.unilever.com/>.


## **Appendix B: Full Company Profiles**

Monsanto.....	45
DuPont Agriculture & Nutrition.....	49
The Mosaic Company.....	56
Valmont Industries.....	62
Deere & Company.....	65
Morning Star.....	70
ConAgra Foods, Inc.....	73
Cargill, Inc.....	77
Tyson Foods, Inc.....	81
Poet, LLC.....	87


## Appendix B

**Company:** [Monsanto](#)  
**Headquarters:** St. Louis, MO

**Ticker Symbol:** MON  
**Year Established:** 1901

Role in Value Chain		Source <sup>11</sup>
Segment of value chain	Inputs	
Box in value chain	Seeds	
Main activities	<ul style="list-style-type: none"> <li>• <b>Seeds and Genomics:</b> Produces leading seed brands and traits for corn, soybeans, cotton, oilseeds, fruits and vegetables.</li> <li>• <b>Agricultural Productivity:</b> Manufactures Roundup, the leading herbicide</li> </ul> <div style="text-align: center; margin: 10px 0;">  <p>● Seeds and Genomics          ● Agricultural Productivity</p> </div> <ul style="list-style-type: none"> <li>• <b>Seeds and Genomics Segment:</b> \$5 billion  <i>57% - Corn seed and traits</i>  <i>18% Soybean seed and traits</i></li> <li>• <b>Agricultural Productivity Segment</b> \$3.6 billion  <i>71% - Roundup and other glyphosate-based herbicides</i></li> <li>• <b>In March 2005, it finalized the purchase of <a href="#">Seminis Inc</a>, making Monsanto the largest conventional seed company in the world</b></li> </ul>	Google Finance
Primary NAICS code	424910 Farm supplies merchant wholesalers	
SIC code	Farm supplies	

<sup>11</sup> Annual Report 2007 and company web site unless otherwise stated

<b>Size</b>			
Annual revenues		<b>\$ 8.6 billion</b> Monsanto Company	
	<p><b>2007 Fiscal Year Sales by Geographical Region (by percent)</b></p>  <p>● North America ● Latin America ● Europe-Africa ● Asia-Pacific ● Canada</p>		
	Source: Monsanto 2008b		
Net income		\$ 993 million	
Assets		\$ 13 billion	
Market capitalization		\$ 72.19 billion	Marketwatch, April 2008
Employees (worldwide)	18,800 global, 4,800 temporary		
<b>Company Details</b>			
<b>Key brands</b>	DeKalb, Asgrow, D&PL, Deltapine, Seminis, Petoseed (seed). Roundup (herbicide).		
<b>Primary markets</b>	Farm supply merchants, residential applications through retailers, limited interaction with farmers (international). 3 largest distributors represent 14% of global sales, 25% of US sales.	Annual report, Datamonitor	
<b>History and mergers</b>	<p>Monsanto is a relatively new company. It share the name and the history of a company that was founded in 1901, the Monsanto of today is focused on agriculture and supporting farmers around the world in their mission to feed, clothe and fuel our growing world. Monsanto is an agricultural company.</p> <p>Monsanto Company was first incorporated as a subsidiary of Pharmacia in 2000, and then spun off as a separate company in 2002.</p> <ul style="list-style-type: none"> <li>● 1998 – Acquired DeKalb Genetics</li> <li>● 2003 – Monsanto spun off from Pharmacia. Retains</li> </ul>		

	<p>seed and chemical divisions in the new company. Pharmacia becomes subsidiary of Pfizer.</p> <ul style="list-style-type: none"> <li>• 2005 – Acquired Seminis, Inc., which provided it with fruit and vegetable seed capacity.</li> <li>• 2005 – Acquires Stoneville cotton business (NextGen brand)</li> <li>• 2008 – Agreement enacted to acquire De Ruiter Seeds (vegetable seeds) (Monsanto 2008)</li> </ul>	
<b>Main competitors</b>	<ul style="list-style-type: none"> <li>• Pioneer and Syngenta (ethanol)</li> <li>• BASF</li> <li>• Bayer CropScience Limited</li> <li>• Chemtura Corporation</li> <li>• Novartis AG</li> </ul>	Schill (2007), DataMonitor
Last update		5/9/08

### Monsanto Corn Seeds



Source: Monsanto Annual Report, 2007

**Sources:**

- Monsanto Corporation. 2008. "Monsanto Company Announces Agreement to Acquire De Ruiter Seeds." March 31 Investor presentation, located at the Monsanto Corporation web site, accessed April 22, 2008:  
[http://www.monsanto.com/pdf/investors/deruiter\\_seed\\_acquisition.pdf](http://www.monsanto.com/pdf/investors/deruiter_seed_acquisition.pdf)
- Monsanto Corporation. 2008b. "Corporate Profile." Corporate web site, accessed April 22:  
[http://www.monsanto.com/investors/corporate\\_profile.asp](http://www.monsanto.com/investors/corporate_profile.asp)
- Schill, Susanne Retka. 2007. "300-Bushel Corn is Coming." *Ethanol Producer Magazine*, October 2007. Available online, accessed April 18, 2008:  
[http://www.ethanolproducer.com/article.jsp?article\\_id=3330&q=&page=all](http://www.ethanolproducer.com/article.jsp?article_id=3330&q=&page=all)



**Company: DuPont Agriculture & Nutrition**

**Headquarters: Wilmington, DE**

**Year Established: 1802**

Role in Value Chain		Source
<b>Segment of value chain</b>	<b>Agricultural Inputs</b>	
<b>Box in value chain</b>	<b>Agrochemical Companies</b>	
<b>Main activities</b>	<p><b>DuPont is the No.3 US chemical maker (behind <a href="#">Dow</a> and <a href="#">ExxonMobil Chemicals</a>).</b></p> <p>The big corporation has five business units:</p> <ul style="list-style-type: none"> <li>• <b>Crop protection chemicals and genetically modified seeds:</b> DuPont Agriculture &amp; Nutrition is into seed, weed, and feed. Among the largest of DuPont's six business units, DuPont Agriculture &amp; Nutrition contains a number of units, subsidiaries, and joint ventures devoted to plant growth and protection. The division encompasses DuPont Crop Protection (herbicides, fungicides, and insecticides), joint venture Solae (soy-based ingredients with Bunge), and Qualicon (microbial testing). Most of the division's sales occur in the first half of the calendar year. The company has joint ventures based in the UK, Mexico, and Russia. The unit also includes Pioneer Hi-Bred, a producer of genetically modified seeds. <b>Note: Pioneer Hi-Bred International is currently trying to develop dramatically increased nitrogen efficiency in genetically modified corn.</b><sup>12</sup></li> <li>• <b>Coatings (automotive finishes and coatings):</b> DuPont is the world's largest provider of automotive coatings and has large contracts with every US automaker (and many refinishers) to provide them with automotive finishes. DuPont Coatings also leads the world -- ahead of Kemira and Huntsman -- in the manufacture of titanium dioxide (TiO<sub>2</sub> or tioxide), the most-used whitening pigment for plastics and</li> </ul>	<p>Hoovers</p> <p>OneSource</p> <p><a href="http://www.dupont.com">http://www.dupont.com</a></p> <p><a href="http://www.dupont.com/ag">http://www.dupont.com/ag</a></p> <p><a href="http://www.2.dupont.com">http://www.2.dupont.com</a></p>

<sup>12</sup> Jim Downing, "Green' rice on menu: Farmers could profit from carbon offsets," *Sacramento Bee*, February 17, 2008

	<p>paper. The unit has four divisions: Titanium Technologies (TiO<sub>2</sub>), Advanced Coatings (powder coatings), Refinish Systems (for the automotive aftermarket sector), and Automotive Systems (for auto OEMs).</p> <ul style="list-style-type: none"> <li>• <b>Electronic materials (LCDs, sensors, and Fluor chemicals):</b> DuPont offers a broad portfolio of ceramic, flexible and rigid organic circuit materials, materials for semiconductor fabrication and packaging. DuPont also provides a wide range of products targeted to the fast growing display industry, enabling the manufacture of advanced OLED, LCD, PDP displays and more.</li> <li>• <b>Polymers and resins for packaging and other uses:</b> Based in DuPont Science, these solutions feature flexible films, resins, inks and polymers for cutting edge shapes, as well as customized printing plates that give a brand its visual edge.</li> <li>• <b>Safety and security materials (under brand names like Tyvek, Kevlar, and Corian):</b> Pretty countertops, bullet-proof vests, and protective housing wrap are all products of DuPont Safety &amp; Protection, including non-woven sheet structures, ammonia, high density polyethylene, polypropylene, methanol, and polyester fiber. DuPont Safety &amp; Protection accounts for about 20% of its parent's sales.</li> </ul> <p>In this decade, the company has slimmed down, exiting the pharmaceutical business and spinning off its fibers operations, and DuPont is now focusing on biotechnology and safety and protection.</p>	
<b>Primary NAICS code</b>	325320- Pesticide and Other Agricultural Chemical Manufacturing	
<b>SIC code</b>	2879-Agricultural chemicals	

Size	2007	
Annual revenues	\$30.7 billion	OneSource Hoovers
Net Profit	\$3.0 billion	
Assets	\$34.0 billion	
Employees	60,000	

### Net Sales

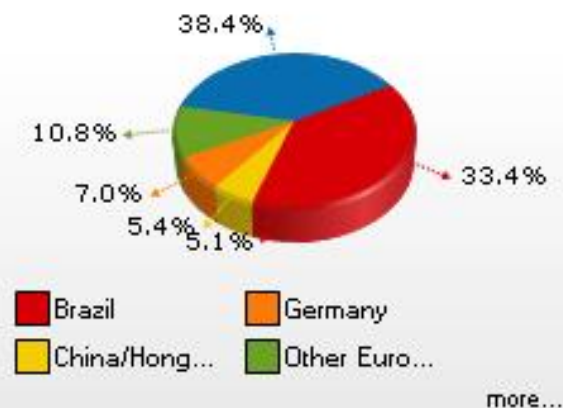
(dollars in billions)



**DuPont's total sales were \$30.653 Billion, and net income was \$ 2.988 Billion in 2007. This was a 5.08% decrease compared with the net income of \$ 3.148 Billion in 2006.**

(Source: DuPont 2007 Annual Review)

### Total Revenue



(Source: OneSource)

<b>Geographic scope</b>	<ul style="list-style-type: none"> <li>• 60,000 employees in 80 countries</li> <li>• Sales worldwide</li> <li>• The corporation has over 200 manufacturing and processing facilities, and has operations in about 80 countries throughout Americas, Europe, and Asia.</li> </ul>	<a href="http://www.dupont.com">www.dupont.com</a>
<b>History and mergers</b>	<ul style="list-style-type: none"> <li>• E.I. du Pont was found in 1802 as a gunpowder plant in Delaware. Within a decade the DuPont plant was the largest of its kind in the US. DuPont added dynamite and nitroglycerine in 1880, guncotton in 1892, and smokeless powder in 1894.</li> <li>• In 1902 three du Pont cousins bought DuPont. By 1906 the company controlled most of the US explosives market, but a 1912 antitrust decision forced it to sell part of the powder business. WWI profits were used to diversify into paints, plastics, and dyes.</li> <li>• DuPont acquired an interest in General Motors in 1917; the stake increased to 37% by 1922 (the company surrendered its stake in 1962 due to antitrust regulations). In the 1920s the firm bought and improved French cellophane technology and began producing rayon. DuPont's inventions include neoprene synthetic rubber (1931), Lucite (1937), nylon (1938), Teflon (1938), and Dacron. The last du Pont to head the company resigned as chairman in 1972. DuPont got into the energy business by acquiring Conoco for \$7.6 billion in 1981.</li> <li>• In 1991 DuPont and Merck created DuPont Merck Pharmaceutical to focus on non-US markets. After record earnings in 1994, DuPont spent \$8.8 billion the next year to buy back shares of the corporation from Seagram. In 1997 DuPont purchased Protein Technologies International (soy proteins) from Ralston Purina and Imperial Chemical's polyester-resins and intermediates operations (1997) and polyester-film business (1998).</li> <li>• DuPont president Chad Holliday became CEO in early 1998. That year DuPont purchased a 20% stake in Pioneer Hi-Bred International (corn seed) for \$1.7 billion and Merck's 50% stake in DuPont Merck Pharmaceutical (now</li> </ul>	Hoovers  DataMonitor

	<p>DuPont Pharmaceuticals) for \$2.6 billion. DuPont's public offering of Conoco in 1998 raised \$4.4 billion, the largest US IPO at the time.</p> <ul style="list-style-type: none"> <li>• In 1999 DuPont bought the Herberts paints and coatings unit from Hoechst. It also bought the remaining 80% of Pioneer Hi-Bred for \$7.7 billion and biotechnology research firm CombiChem for \$95 million. Making a clean break with its oil business, DuPont sold its remaining 70% stake in Conoco.</li> <li>• In late 2001 Bristol-Myers Squibb bought DuPont's pharmaceutical operations (HIV, heart disease, nerve disorder, and cancer drugs) for \$7.8 billion in cash. In early 2002 DuPont initiated a restructuring that included the eventual spin-off of its fibers businesses (now called INVISTA) and the reorganization of its remaining business units into five segments: Electronics &amp; Communication Technologies, Performance Materials, Coatings &amp; Color Technologies, Safety &amp; Protection, and Agriculture &amp; Nutrition.</li> <li>• Later that year DuPont acquired TOTAL's surface protection and fluoroadditives business to become the largest integrated fluorotelomer protectants maker in both Europe and North America. DuPont also acquired semiconductor chemicals maker ChemFirst and packaging company Liqui-Box in 2002.</li> <li>• Excluding the former pharmaceutical operations, DuPont wasn't profitable for the first few years of the new century. Much of its losses were due to employee severance costs and the write-down of assets. In 2003 the company took a large hit from the separation of INVISTA, among other costs. And so despite a 12% increase in sales, the company saw no real profit.</li> <li>• DuPont announced in late 2003 an initiative that it hoped would deliver \$900 million in growth by the end of 2005. In addition to workforce cuts and product consolidation, DuPont also began to shift its focus to emerging markets, by which it meant Asia. The company announced a substantial shift in management in</li> </ul>	
--	---	--

	<p>January 2004 to follow up on the initiative, which included appointing a head of global sales for the first time and rearranging its leadership in Asia. The workforce cuts were announced in April; 3,500 jobs were cut in 2004, mostly in the US and Western Europe.</p> <ul style="list-style-type: none"> <li>• Preparing to separate INVISTA, DuPont reabsorbed DuPont Canada (which had been a separate, public company) into the fold. In early 2004 the company completed the sale of INVISTA; with that, DuPont was completely out of the fibers business.</li> </ul>													
<b>Relevant Information</b> <sup>13</sup>	<ul style="list-style-type: none"> <li>• In 2007, more than 60% of DuPont's sales were from outside the U.S.</li> <li>• DuPont brings to the market more than 1000 new products during the last five years.</li> </ul> <div style="text-align: center;"> <table border="1"> <caption>Annual Sales from New Products Introduced in the Last Five Years</caption> <thead> <tr> <th>Year</th> <th>Sales (\$ billions)</th> </tr> </thead> <tbody> <tr> <td>2003</td> <td>6.2</td> </tr> <tr> <td>2004</td> <td>7.5</td> </tr> <tr> <td>2005</td> <td>8.7</td> </tr> <tr> <td>2006</td> <td>9.5</td> </tr> <tr> <td>2007</td> <td>10.5</td> </tr> </tbody> </table> </div> <ul style="list-style-type: none"> <li>• In 2007, DuPont made \$ 6.8 Billion sales in agricultural and nutrition products.</li> </ul>	Year	Sales (\$ billions)	2003	6.2	2004	7.5	2005	8.7	2006	9.5	2007	10.5	
Year	Sales (\$ billions)													
2003	6.2													
2004	7.5													
2005	8.7													
2006	9.5													
2007	10.5													
<b>Main Competitors in the Agricultural Chemical industry</b>	<ul style="list-style-type: none"> <li>• BASF SE</li> <li>• Bayer AG</li> <li>• Dow Chemical</li> <li>• Monsanto</li> </ul>	Hoovers OneSource												
<b>Date last updated</b>		<b>05/05/2008</b>												

<sup>13</sup> Information from DuPont 2007 Annual Review.

## DuPont Segments and total Sales, 2007

### DuPont Agriculture & Nutrition

**Key Products & Services:**

Seeds | Traits | Crop protection chemicals | Food ingredients | Food quality and safety

**Core Markets:**

Production agriculture | Food processing

**2007 Sales:** \$6.8 billion

### DuPont Coatings & Color Technologies

**Key Products & Services:**

Titanium dioxide | Liquid and powder coatings | Coatings and application services

**Core Markets:**

Automotive OEM | Collision repair | Paper, Industrial coatings | Transportation | Architectural coatings | Plastics

**2007 Sales:** \$6.6 billion

### DuPont Electronic & Communication Technologies

**Key Products & Services:**

Circuit and component materials | Flexographic printing systems | Photovoltaic materials | Refrigerants | Surfacing materials | Semiconductor fabrication and packaging materials | Wire and cable materials

**Core Markets:**

Semiconductors | Printed circuit boards and components | Automotive and industrial electronics | Displays | Packaging and commercial printing | HVAC refrigeration | Chemical processing industries | Electronic data and telecommunications | Alternative energy

**2007 Sales:** \$3.8 billion

### DuPont Performance Materials

**Key Products & Services:**

Engineering polymers | Flexible packaging resins | Industrial resins | Performance elastomers | Performance films

**Core Markets:**

Automotive | Packaging | Electrical/electronics | Construction | Consumer durables

**2007 Sales:** \$6.6 billion

### DuPont Safety & Protection

**Key Products & Services:**

Safety and operational consulting and training | Specialty, performance, and industrial chemicals | DuPont™ Corian® solid surfaces | DuPont™ Kevlar® fiber | DuPont™ Nomex® fiber and paper | DuPont™ Tyvek® protective material and other selective barriers

**Core Markets:**

Construction | Energy | Health care | Military/ Homeland security | Protective apparel | Transportation

**2007 Sales:** \$5.6 billion

**Company: The Mosaic Company**  
**Headquarters: Plymouth, MN**

**Ticker Symbol: MOS**  
**Date Established: 2004**

Role in Value Chain		Source																
<b>Segment of value chain</b>	<b>Inputs</b>																	
<b>Box in value chain</b>	<b>Fertilizers</b>																	
<b>Main activities</b>	<p>The Mosaic Company is the world's leading producer of concentrated phosphate and potash crop nutrients. The company mines, manufactures, markets and distributes fertilizer around the world. It produces all three key fertilizers, including phosphate, potash and nitrogen, but its major products are potash and phosphate crop nutrients, such as K-Mag® and MicroEssentials™ S15. The company has four business segments:</p> <ul style="list-style-type: none"> <li> <b>Mosaic is the world's top producer of phosphates, with an annual effective capacity of about 9.4 million tons</b>, larger than the next three largest producers combined. Its production of 7.9 million tones of phosphate fertilizer for fiscal 2007 <b>accounts for roughly 16% of world output and 57% of U.S. production</b>. Mosaic operates five mines and three concentrates plants in Florida that produce phosphate fertilizer and feed phosphate, as well as a concentrates plant in Louisiana that produces phosphate fertilizer. Approximately one-third of its phosphate product is shipped within North America, with the remainder exported globally. </li> </ul> <p style="text-align: center;"><b>Mosaic Effective Phosphate Capacity By Plant 2008</b></p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="text-align: left;">(Million tonnes per year)</th> <th style="text-align: right;">Processed Phosphate</th> </tr> </thead> <tbody> <tr> <td colspan="2"><b>Florida:</b></td> </tr> <tr> <td>Barlow</td> <td style="text-align: right;">2.0</td> </tr> <tr> <td>New Wales</td> <td style="text-align: right;">3.9</td> </tr> <tr> <td>Riverview</td> <td style="text-align: right;">1.7</td> </tr> <tr> <td colspan="2"><b>Louisiana:</b></td> </tr> <tr> <td>Faustina</td> <td style="text-align: right;">1.8</td> </tr> <tr> <td><b>Total</b></td> <td style="text-align: right;"><b>9.4</b></td> </tr> </tbody> </table>	(Million tonnes per year)	Processed Phosphate	<b>Florida:</b>		Barlow	2.0	New Wales	3.9	Riverview	1.7	<b>Louisiana:</b>		Faustina	1.8	<b>Total</b>	<b>9.4</b>	<p>OneSource Hoovers  <a href="http://www.mosaicco.com">www.mosaicco.com</a>  Mosaic 2007 annual report</p>
(Million tonnes per year)	Processed Phosphate																	
<b>Florida:</b>																		
Barlow	2.0																	
New Wales	3.9																	
Riverview	1.7																	
<b>Louisiana:</b>																		
Faustina	1.8																	
<b>Total</b>	<b>9.4</b>																	



- **Mosaic *potash* production capabilities are the second-largest in the world, with an annual capacity of approximately 10.4 million tons.** Mosaic operates four mines within Saskatchewan, Canada, including the world’s largest potash mine, as well as a mine in New Mexico. North America receives about 56% of our shipments. The remainder is exported to other regions of the world. Mosaic global market share of potash is approximately 15%. Its production of 7.9 million tons of potash for fiscal 2007 accounted for approximately 15% of world production and 40% of North American production.

**Mosaic Potash Capacity By Mine 2008**

(Million tonnes per year)	Annual Capacity <sup>(M)</sup>
<b>Canada:</b>	
Belle Plaine	2.8
Colonsay	1.8
Esterhazy	5.3
<b>United States:</b>	
Carlsbad	1.7
Hersey <sup>(M)</sup>	0.1
<b>Total</b>	<b>11.7</b>
<b>Total (excluding toll production)<sup>(M)</sup></b>	<b>10.4</b>

- Mosaic *offshore* interests form a production and distribution network in key agricultural markets around the world. This network is a competitive differentiator for Mosaic and includes approximately one million tons of storage capacity at 24 facilities worldwide. Assets within this segment include a 20% stake in Fosfertil S.A. in Brazil, which is the largest phosphate producer in Latin America; a 35% equity ownership in a DAP granulation plant in China; and a GSSP plant located near Mosaic’s port facility in Argentina.
- Mosaic interest in *nitrogen* is through a 50% stake in Saskferco Products Inc., an energy-efficient and world-scale plant in Saskatchewan, Canada, with an annual capacity of 1.2 million tons of product. Mosaic has exclusive marketing rights for all of Saskferco’s production.

	<div style="text-align: center;"> <p>% of Net sales</p> <p>offshore 22% nitrogen 2% potash 24% phosphate 52%</p> </div> <p>Source: created based on Mosaic 2007 annual report</p>																																													
<b>Primary NAICS code</b>	325312 Phosphatic Fertilizer Manufacturing	OneSource																																												
<b>SIC code</b>	2874 Phosphatic Fertilizers																																													
<b>Size</b>		<b>2007</b>																																												
Annual revenues		\$5.8 billion																																												
Employees		7,100 persons																																												
Assets		\$9.2 billion																																												
Sales		\$5.8 billion																																												
Net income		\$419.7 million																																												
	<div style="background-color: #c6e0b4; padding: 10px;"> <p><b>2007 Financial Highlights</b> The Mosaic Company</p> <p><i>(In millions, except per share amounts)</i></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: right;">2007</th> <th style="text-align: right;">2006</th> <th></th> </tr> </thead> <tbody> <tr> <td>Net Sales</td> <td style="text-align: right;">\$5,375.7</td> <td style="text-align: right;">\$5,305.8</td> <td>\$4</td> </tr> <tr> <td>Gross Margin</td> <td style="text-align: right;">\$ 926.1</td> <td style="text-align: right;">\$ 637.4</td> <td>\$</td> </tr> <tr> <td>Operating Earnings</td> <td style="text-align: right;">\$ 616.3</td> <td style="text-align: right;">\$ 101.9</td> <td>\$</td> </tr> <tr> <td>Net Earnings (Loss)</td> <td style="text-align: right;">\$ 419.7</td> <td style="text-align: right;">\$ (121.4)</td> <td>\$</td> </tr> <tr> <td>Diluted Net Earnings (Loss) Per Share</td> <td style="text-align: right;">\$ - 0.95</td> <td style="text-align: right;">\$ (0.35)</td> <td>\$</td> </tr> <tr> <td>Diluted Weighted Average Number of Shares Outstanding</td> <td style="text-align: right;">446.3</td> <td style="text-align: right;">382.2</td> <td></td> </tr> <tr> <td>Net Cash Provided by Operating Activities</td> <td style="text-align: right;">\$ 707.9</td> <td style="text-align: right;">\$ 294.4</td> <td>\$</td> </tr> <tr> <td>Total Assets</td> <td style="text-align: right;">\$9,183.6</td> <td style="text-align: right;">\$8,723.0</td> <td>\$8</td> </tr> <tr> <td>Total Long-Term Debt (Including Current Maturities)</td> <td style="text-align: right;">\$2,221.0</td> <td style="text-align: right;">\$2,457.4</td> <td>\$2</td> </tr> <tr> <td>Shareholders' Equity</td> <td style="text-align: right;">\$4,183.9</td> <td style="text-align: right;">\$3,530.8</td> <td>\$3</td> </tr> </tbody> </table> </div>		2007	2006		Net Sales	\$5,375.7	\$5,305.8	\$4	Gross Margin	\$ 926.1	\$ 637.4	\$	Operating Earnings	\$ 616.3	\$ 101.9	\$	Net Earnings (Loss)	\$ 419.7	\$ (121.4)	\$	Diluted Net Earnings (Loss) Per Share	\$ - 0.95	\$ (0.35)	\$	Diluted Weighted Average Number of Shares Outstanding	446.3	382.2		Net Cash Provided by Operating Activities	\$ 707.9	\$ 294.4	\$	Total Assets	\$9,183.6	\$8,723.0	\$8	Total Long-Term Debt (Including Current Maturities)	\$2,221.0	\$2,457.4	\$2	Shareholders' Equity	\$4,183.9	\$3,530.8	\$3	Source: Mosaic Company 2007 annual report
	2007	2006																																												
Net Sales	\$5,375.7	\$5,305.8	\$4																																											
Gross Margin	\$ 926.1	\$ 637.4	\$																																											
Operating Earnings	\$ 616.3	\$ 101.9	\$																																											
Net Earnings (Loss)	\$ 419.7	\$ (121.4)	\$																																											
Diluted Net Earnings (Loss) Per Share	\$ - 0.95	\$ (0.35)	\$																																											
Diluted Weighted Average Number of Shares Outstanding	446.3	382.2																																												
Net Cash Provided by Operating Activities	\$ 707.9	\$ 294.4	\$																																											
Total Assets	\$9,183.6	\$8,723.0	\$8																																											
Total Long-Term Debt (Including Current Maturities)	\$2,221.0	\$2,457.4	\$2																																											
Shareholders' Equity	\$4,183.9	\$3,530.8	\$3																																											

<p><b>Environmental initiatives</b></p>	<p>Mosaic aims to leave the land in as good or better condition than it found it and to safeguard the water and air. These efforts manifest themselves in countless ways:</p> <ul style="list-style-type: none"> <li>• There are formal processes, such as training and educational programs for its employees on all key environmental protection measures to be followed in day-to-day operations.</li> <li>• There are opportunistic moments, such as when two colonies of burrowing owls were found near its Florida operations and for the first time successfully translocated to a nearby, reclaimed pasture.</li> <li>• There are proactive measures exemplified by its reclamation process, where its team of biologists, botanists and environmental engineers transform former mines into newly productive land suitable for agricultural, residential, recreational and commercial use.</li> <li>• There are other measures that ensure water and air associated with its manufacturing operations meet tough government standards to protect employees and neighbors.</li> <li>• In addition, over the past 15 years, its Florida mining operations have become much less dependent on groundwater usage. These processes have evolved to the point where typically <b>over 95% of the water in the mining process is recycled back into the system.</b></li> <li>• Just as important, Mosaic is focusing its efforts to reduce greenhouse gas emissions. For example, by using excess heat in the form of steam from its sulfuric acid processes, it generate green energy to run its plants while also supplying green energy back to local utilities.</li> </ul>	<p><a href="http://www.mosaicco.com">www.mosaicco.com</a> Mosaic 2007 annual report</p>
<p><b>Geographic scope</b></p>	<ul style="list-style-type: none"> <li>• Operates key distribution facilities in 11 countries which serve customers in 45 countries</li> <li>• Operates port terminals, warehouses and blending and bagging facilities in 9 countries</li> <li>• Operates 16 phosphate rock mines and plants, five potash production facilities and one nitrogen production facility</li> <li>• Though China is now an exporter of phosphate, we continue to capitalize on this important market through our interests in two bulk-blending facilities and granulation plants. China also remains the largest</li> </ul>	<p>OneSource Hoovers Mosaic 2007 annual report</p>

	market for potash exports from Canada.	
<b>History and mergers</b>	<p>2006</p> <ul style="list-style-type: none"> <li>• August 2006: 200,000 metric ton Granular Single Super Phosphate (GSSP) plant opens in Quebracho, Argentina</li> <li>• July 2006: Jim Prokopanko named Mosaic Chief Operating Officer</li> <li>• May 2006: Mosaic closes Green Bay and South Pierce phosphate fertilizer production facilities and Fort Green mine in Central Florida</li> <li>• January 2006: Mosaic Esterhazy Mine Fire sets a world-wide example of mining safety when 72 trapped miners are brought safely to surface</li> </ul> <p>2005</p> <ul style="list-style-type: none"> <li>• September 2005: Mosaic Louisiana operations suffer only minor damage after Hurricane Katrina devastates Texas, Louisiana and Mississippi Gulf Coasts. Mosaic donates \$50,000 to the American Red Cross and matches employee donations</li> <li>• September 2005: Mosaic closes Kingsford phosphate mine, Mulberry, Florida</li> <li>• May 2005: Mosaic begins construction on a 200,000 metric ton Granular Single Super Phosphate(GSSP) plant in Quebracho, Argentina</li> <li>• April 2005: Mosaic announces 400,000 ton expansion of Esterhazy, Saskatchewan mine</li> <li>• April 2005: Mosaic corporate office moves to the Atria Corporate Center, 3033 Campus Drive, Plymouth, Minnesota</li> <li>• April 2005: Mosaic opens 50,000 mt/y storage facility with capacity to blend 180,000 ton/yr in Rio Verde, Brazil</li> <li>• March 2005: Mosaic opens 50,000 mt/y storage facility with capacity to blend 180,000 ton/yr in Sorriso, Brazil</li> <li>• January 2005: Mosaic opens 200,000 mt/yr bulk blending and fertilizer facility in Qinghuangdao, China</li> </ul> <p>2004</p> <ul style="list-style-type: none"> <li>• October 2004: The Mosaic Company launches as the world's second largest crop nutrition firm with the combination of Cargill Crop Nutrition and IMC Global, Inc. The Mosaic Company (NYSE:MOS)</li> </ul>	<p><a href="http://www.mosaicco.com">www.mosaicco.com</a> our history</p>

	<p>begins trading as the newest Fortune 500-sized firm on the New York Stock Exchange.</p> <ul style="list-style-type: none"> <li>• June 2004: Mosaic announced as name for newly-formed company</li> <li>• January 2004: IMC Global and Cargill Crop Nutrition enter into definitive agreement</li> </ul>	
<b>Subsidiaries</b>	13 subsidiaries, 15 branches	
<b>Clients</b>	<p><b>Feed Ingredients:</b> <a href="#">Argentina</a>; <a href="#">Australia</a>; <a href="#">Brazil</a>; <a href="#">Canada</a>; <a href="#">Chile</a>; <a href="#">China &amp; Southeast Asia</a>; <a href="#">France</a>; <a href="#">India</a>; <a href="#">Mexico</a>; <a href="#">Russia</a>; <a href="#">Thailand</a>; <a href="#">Ukraine</a>; <a href="#">North America</a>;</p> <p><b>Crop Nutrition:</b> <a href="#">Asia</a>; <a href="#">Australia</a>; <a href="#">Brazil</a>; <a href="#">Canada</a>; <a href="#">Europe</a>; <a href="#">Latin America</a>; <a href="#">Mexico</a>; <a href="#">United States</a></p>	
<b>Main competitors</b>	<ul style="list-style-type: none"> <li>• <a href="#">Agrium</a></li> <li>• <a href="#">PotashCorp</a></li> <li>• <a href="#">Yara</a></li> </ul>	OneSource Hoovers
<b>Date of last update</b>		May 7, 2008

**Company:** Valmont Industries, Inc.  
**Headquarters:** Omaha, NE

**Ticker Symbol:** VMI  
**Year Established:** 1946

Role in Vale Chain		Source
<b>Segment of value chain</b>	Input	
<b>Box in value chain</b>	Irrigation Systems	
<b>Main activities</b>	<p>The company has five business segments:</p> <ol style="list-style-type: none"> <li>1) engineered support structures (metal poles and other structures for the lighting and traffic and wireless communications industries)</li> <li>2) <b>irrigation (equipment designed to conserve water and improve food production)</b></li> <li>3) utility support structures (steel and concrete poles and other structures for the utility industry)</li> <li>4) coatings (galvanizing, anodizing, and other protective coatings for industrial applications)</li> <li>5) light-walled welded steel tubing.</li> </ol> <p><b>Irrigation products:</b></p> <ul style="list-style-type: none"> <li>• Center pivot, a standard mechanized irrigation machine that rotates in a circle.</li> <li>• Corner machine, a center pivot extensions that can irrigate corners of square and rectangular farm fields as well as conform to irregular field boundaries.</li> <li>• Linear machine, irrigate fields by moving up and down the field as opposed to rotating in a circle</li> </ul>	<p>Hoovers</p> <p>Annual Report</p>
<b>Primary NAICS code</b>	332312 : Fabricated Structural Metal Manufacturing	
<b>SIC code</b>	3441: Fabricated structural metal	
<b>Size</b>	<b>2007</b>	Hoovers
Annual revenues	\$1.5 billion.	www.valmont.com
Annual income	\$94.7 million	
Assets	\$1.1 billion	
Employees	6,029	

## Valmont Industries Sales, 2007

### Products and Operations

2007 Sales		
	\$ Mil.	% of Total
US	1,142.6	76
China	111.4	7
France	97.7	7
Other countries	148.1	10
<b>Total</b>	<b>1,499.8</b>	<b>100</b>

2007 Sales		
	\$ Mil.	% of Total
Engineered Support Structures	581.6	39
<b>Irrigation</b>	<b>388.9</b>	<b>26</b>
Utility Support Structures	327.3	22
Coatings	106.5	7
Other	95.6	6
<b>Total</b>	<b>1,499.8</b>	<b>100</b>

Source: Hoovers

DOLLARS IN THOUSANDS, EXCEPT PER SHARE AMOUNTS

	2007	2006	2005	2004
<b>Operating Data</b>				
Net sales	\$ 1,499,834	\$ 1,281,281	\$ 1,108,100	\$ 1,031,475
Operating income	155,626	110,085	82,863	70,112
Cumulative effect of accounting change	-	-	-	-
Net earnings	94,713	61,544	39,079	26,881
Depreciation and amortization	35,176	36,541	39,392	38,460
Capital expenditures	56,610	27,898	35,119	17,182

Source: Valmont Annual Report

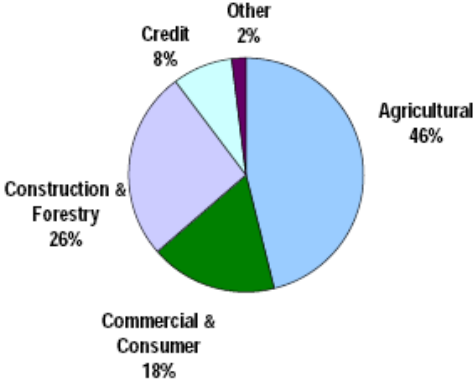
<b>Geographic scope</b>	<p><b>Marketing</b> Valmont markets its products in more than 90 countries around the world.</p> <p><b>Manufacturing</b> Valmont operates 18 plants located in eight countries in North and South America, Europe, and Asia.</p>	www.valmont.com
<b>History and mergers</b>	<p>Previous name: Valley Manufacturing Co. until 22/08/68</p> <p>This Company started in 1946 building farm elevators. Today, Valmont Industries, inc. is a diversified global producer of fabricated metal products, and a producer of metal and concrete pole and tower structures. As well,</p>	Hoovers Annual Report Orbis

	<p>Valmont is a global producer of mechanized irrigation systems.</p> <p>Recent Acquisitions:</p> <p>2004</p> <ul style="list-style-type: none"> <li>• Acquisition of Newmark International, Inc., a manufacturer of concrete and steel pole structures, headquartered in Birmingham, Alabama</li> <li>• Acquisition of a fiberglass pole manufacturer in Commerce City, Colorado</li> <li>• Acquisition of an overhead sign structure manufacturer in Selbyville, Delaware</li> <li>• Purchase of equipment for the manufacture of poles in El Dorado, Kansas</li> </ul> <p>2006</p> <ul style="list-style-type: none"> <li>• Acquisition of remaining 51% of a nonconsolidated steel pole manufacturing business in Monterrey, Mexico</li> </ul> <p>2007</p> <ul style="list-style-type: none"> <li>• Acquisition stake in Tehomet and Tehomet Baltic</li> </ul> <p>2008</p> <ul style="list-style-type: none"> <li>• Acquisition PennSummit Tubular, a manufacturer a manufacturer of steel utility poles.</li> <li>• Acquisition of majority stake in West Coast Engineering Group, a Canadian and United States manufacturer of steel and aluminum structures for the lighting, transportation and wireless communication industries.</li> </ul>	
<b>Future Grow Areas</b>	<ul style="list-style-type: none"> <li>• <b>Replacement of exiting machines.</b> According to Valmont, there are approximately 250,000 machines that have been installed by the irrigation industry in North America alone. Many of these machines are 30 years old and will need to be replaced in the near future.</li> <li>• <b>Water scarcity.</b> In order to use water efficiently, mechanized irrigation equipment must to be purchased. Valmont explains that the potential size of the conversion market in North America is close to the size of their current mechanized irrigation market.</li> </ul>	www.valmont.com
<b>Main competitors</b>	<p>Direct Competitors:</p> <ul style="list-style-type: none"> <li>- Lindsay Manufacturing Co.</li> </ul> <p>Indirect Competitors:</p> <ul style="list-style-type: none"> <li>- Netafim</li> <li>- Toro</li> <li>- Rain Bird</li> </ul>	Hoovers
<b>Date of last update</b>		<b>04/17/2008</b>



**Company: Deere & Co.**  
**Headquarters: Moline, IL**

**Ticker Symbol: DE**  
**Year Established: 1837**  
**(Incorporated in 1958)**

Role in Value Chain		Source
Segment of value chain	Input	
Box in value chain	Farm Equipment	
Main activities	<p>John Deere consists of four major business segments: 1) agricultural equipment, 2) commercial &amp; consumer equipment, 3) construction &amp; forestry and 4) credit</p> <p>John Deere Revenue breakdown:</p>  <p>Source: Company data, Credit Suisse estimates</p> <p>Deere has more than 50% of the U.S. market for large tractors and combines<sup>14</sup></p> <p><b>Deere &amp; Co. is the number 1 in Market Share for farm equipment since 1958 in the U/S. In 1963 Deere became the number 1 worldwide.</b></p> <ul style="list-style-type: none"> <li><b>Agricultural equipment products:</b> combines, cotton harvesting equipment, cutters and shredders, hay and forage equipment, material handling equipment, planting and seeding equipment, scrapers, sprayers, tillage, and tractors.</li> </ul>	<p>www.deere.com  Hoovers</p>

<sup>14</sup> [CREDIT SUISSE - NORTH AMERICA\(COOK, J., ET AL\), November 27, 2006](#)

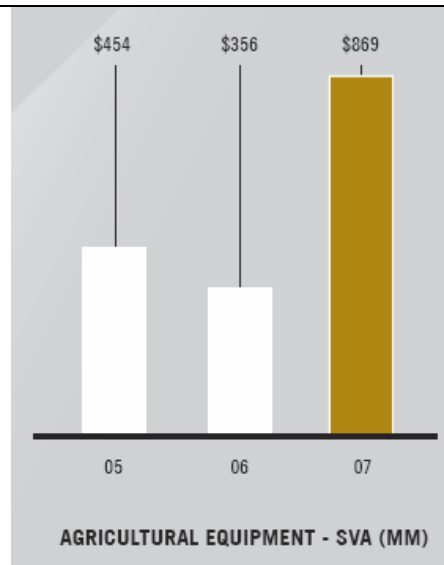
<b>Primary NAICS code</b>	332212 : Hand and Edge Tool Manufacturing	
<b>SIC code</b>	3523:Farm machinery and equipment	
<b>Size</b>		<b>2007</b>
Annual revenues	\$24 billion	Annual Report
Annual income	\$1.8 billion	
Assets	\$35 billion (2006)	
Employees	52,000	

**Deere & Co. 2007 Sales**

	\$ mil.	% of total
<b>US &amp; Canada</b>	15,754	65
<b>Other countries</b>	7,894.0	33
<b>Other sales</b>	434.0	2
<b>Total</b>	24,082	100
<b>2007 Sales</b>		
	\$ mil.	% of total
<b>Agricultural equipment</b>	12,121.0	50
<b>Construction &amp; forestry</b>	5,035.0	21
<b>Commercial &amp; consumer equipment</b>	4,333.0	18
<b>Credit</b>	2,094.0	9
<b>Other</b>	499.0	2
<b>Total</b>	24,082.0	100

Source: Hoovers

<b>Agricultural Equipment</b>	<ul style="list-style-type: none"> <li>• Agricultural equipment has increased and it will continue growing. This segment of the company increased 33% in the last quarter (Q1), contributing to a 142% to the company's operating income. This trend is mainly because of the ethanol boom production worldwide. Sales outside North America were up 37%. The growing markets are Brazil, Russia and Europe.</li> <li>• The stock has gained 175%, or seven times the S&amp;P 500's increase.</li> </ul>	Annual Report SmartMoney The Motley Fool
-------------------------------	--	--



### Growth highlights

- Expanding manufacturing in China, Deere acquires tractor maker Ningbo Benye; gives company more complete tractor-product line in Asia.
- Two newer growth businesses, John Deere Intelligent Mobile Equipment Technologies and John Deere Water Technologies, attract new customers, experience strong sales gains.

### AGRICULTURAL EQUIPMENT

\$MM unless indicated

	05	06	07
Net Sales	10567	10232	12121
Op Profit	970	882	1443
Avg Assets			
With Inventories @ Std Cost	4296	4386	4789
With Inventories @ LIFO	3612	3652	4036
OROA % @ LIFO	26.9	24.2	35.8
Asset Turns (Std Cost)	2.46	2.33	2.53
Op Margin %	x 9.18	x 8.62	x 11.90
<b>OROA % @ Standard Cost</b>	<b>22.6</b>	<b>20.1</b>	<b>30.1</b>

\$MM	05	06	07
Avg Assets @ Std Cost	4296	4386	4789
Op Profit	970	882	1443
Cost of Assets	-516	-526	-574
<b>SVA</b>	<b>454</b>	<b>356</b>	<b>869</b>

Source: Deere & Co. 2007 Annual Report

<p><b>Geographic scope</b></p>	<ul style="list-style-type: none"> <li>• <b>Marketing</b> Sales offices in Argentina, Australia, Brazil, Canada, China, England, Finland, France, Germany, Ireland, Italy, Mexico, Norway, Poland, Russia, Singapore, South Africa, Spain, Switzerland, the United States, and Uruguay.</li> <li>• <b>Manufacturing</b> John Deere factories are located in Argentina, Brazil, Canada, China, Finland, France, Germany, India, Mexico, New Zealand, The Netherlands, Russia, South Africa, Spain, Sweden, and the United States. Affiliated companies produce John Deere products in the United States and South America. (See figure in the appendix section)</li> </ul>	<p>www.deere.com</p>
<p><b>History and mergers</b></p>	<p><b>History</b></p> <ul style="list-style-type: none"> <li>• John Deere set up a blacksmith shop in Grand Detour, Illinois, in 1836.</li> <li>• In 1911 six non-competing farm equipment companies were brought into the Deere organization, establishing the company as a full-line manufacturer of farm equipment</li> <li>• In 1931 Deere opened its first non-US plant in Canada. Deere expanded into Argentina, France, Mexico, and Spain, and it used research and joint ventures abroad (Yanmar, small tractors, 1977; Hitachi, excavators, 1983) to diversify.</li> <li>• In 1956 construction equipment business was created</li> <li>• John Deere Credit Company was launched in 1958.</li> <li>• The organization experienced one of its greatest period of growth from 1955 to 1982. Manufacturing and marketing operations were established worldwide.</li> <li>• In 1989 Deere introduced its largest (at the time) new product offering -- the 9000 series of combines.</li> <li>• In 2004 Deere bought all of the outstanding shares of Nortrax from Credit Suisse First Boston and its affiliated partners. The move made Nortrax a wholly-owned subsidiary of Deere.</li> <li>• In 2005, the company expanded its operations in Pune, India with the opening of a company-owned business processes and engineering center. Later it also opened an assembly facility in Orenburg, Russia</li> </ul>	<p>Hoovers Annual Report Market Line</p>

	<p><b>Acquisitions 2007</b></p> <ul style="list-style-type: none"> <li>• LESCO, Inc. (cost \$150 million) based in Cleveland, Ohio, is a leading supplier of consumable lawn care, landscape, golf course.</li> <li>• Ningbo Benye Tractor &amp; Automobile Manufacturing Co., Ltd. (cost of approximately \$85 million). This business, which is located in Ningbo, China, builds tractors mainly in the 20 to 50 horsepower range and is the largest tractor manufacturer in southern China.</li> </ul>	
<b>Main competitors</b>	<ul style="list-style-type: none"> <li>- CNH Global (Amsterdam, NDL)</li> <li>- AGCO (Duluth GA)</li> </ul> <p>In the US there are around 1,200 companies that manufactures farm equipment with total annual revenue of US\$ 15 billion</p>	Hoovers
<b>Date of last update</b>		<b>05/09/2008</b>

**Company: Morning Star**  
**Headquarters: Woodland, CA**

**Date Established: 1970**

<b>Role in Vale Chain</b>		<b>Year / Source</b>
<b>Segment of value chain</b>	Intermediate Products	
<b>Box in value chain</b>	Marketers	
<b>Main activities</b>	Paste and diced tomato production <ul style="list-style-type: none"> <li>Approximately 95 percent of the tomatoes processed by Morning Star are for the purpose of paste production. The remaining 5 percent go into the production of bulk diced tomatoes</li> </ul>	Morning Star
<b>Primary NAICS code</b>	311999 – All other miscellaneous food manufacturing	OneSource
<b>SIC code</b>	2099 – Food preparations, Not Elsewhere Classified	OneSource
<b>Size</b>		
Annual revenues	\$350 million	Morning Star
Employees	~500	OneSource
Assets	3 plants (Williams, Los Banos, Santa Nella)	Corporate web site
Paste Capacity	1,633 tons per hour, 3 facilities	Morning Star
<b>Rankings</b>		
Tomato processing rank	1	Market Wire
Tomato processing, market share	<ul style="list-style-type: none"> <li><b>Morning Star accounts for over 25% of the California processing tomato production, supplying 40% of the U.S. ingredient tomato paste and diced tomato markets, with sales of approximately \$350 million.</b></li> </ul>	Morning Star
<b>Geographic scope</b>	California	

<b>History and mergers</b>	<ul style="list-style-type: none"> <li>• The Morning Star Company was founded in 1970 by Chris Rufer as a one truck owner operator, hauling tomatoes to other canneries.</li> <li>• In 1982, Chris founded a tomato paste processing plant with three grower investors, and originated and implemented two important innovations in the tomato industry; namely, (1) the dedicated production and marketing of industrial tomato paste and (2) the marketing of tomato paste in the "300 gallon bag-in-box." As tomato paste requirements grew, <b>The Morning Star Packing Company-Los Banos</b> was founded and built in 1990. <b>This facility processes approximately 530 tons of tomatoes (180,000 pounds of tomato paste) per hour.</b></li> <li>• In 1995, The Morning Star Packing Company-Williams was built. The <b>Williams facility</b> combines state of the art technology with economies of scale. <b>This facility processes approximately 630 tons of tomatoes (200,000 pounds of tomato paste) per hour, making it the largest tomato processing facility in California.</b> They also established the California Sun Harvesting Company (Cal-Sun) in a partnership with prominent tomato growers primarily to reduce the cost of tomato harvesting and create efficiencies in the harvesting, trucking and the processing of tomatoes.</li> <li>• In 2002, Morning Star founded Liberty Packing Company, Santa Nella. The original plant was built in 1975, but completely revamped in 2002. Liberty Packing does all the diced processing for Morning Star which has been doing bulk diced products since 1993.</li> </ul>	
<b>Main competitors</b>	<ul style="list-style-type: none"> <li>• SK Foods,</li> <li>• Ingomar</li> </ul>	2007/Morning Star
<b>Date of last update</b>		May 9, 2008

**Sources:**

- Market Wire/Reuters, 2008, “Morning Star Expects to Cut Repair and Maintenance Costs in Half With Cadec’s Fleet Management Software.” April 22, 2008, available online at the Reuters web site, accessed May 5, 2008:  
<http://www.reuters.com/article/pressRelease/idUS176458+22-Apr-2008+MW20080422>
- Morning Star Packing Company. 2007. “Industry Data; California Tomato Paste Production Capacity.” Online web page, available at company web site, accessed April 29, 2008:  
[http://www.morningstarco.com/industry/2007\\_paste\\_capacity.htm](http://www.morningstarco.com/industry/2007_paste_capacity.htm)
- OneSource Information Services [online corporate research database]. 2007. Accessed April 29, 2008: <http://www.onesource.com> [subscription required].



**Company: ConAgra Foods, Inc.**  
**Headquarters: Omaha, NE**

**Ticker Symbol: CAG**  
**Date Established: 1919**

<b>Role in Vale Chain</b>		<b>Source</b>
<b>Segment of value chain</b>	<b>Final Products</b>	
<b>Box in value chain</b>	<b>Processors</b>	
<b>Main activities</b>	Retail foods manufacturer, food services manufacturer	
<b>Key applicable brands and other company brands</b>	Chef Boyardee, Hunt's Egg Beaters, PAM, Reddi-Wip, Orville, Healthy Choice, Slim Jim, Jiffy Pop, La Choy, Peter Pan, Libby's, Orville Redenbacher	2008a / ConAgra
<b>Primary NAICS code</b>	311 – Food Manufacturing (numerous codes)	2008 / OneSource
<b>Other NAICS codes</b>	Significant codes include poultry processing; flour milling; meat packing plants; prepared fresh or frozen seafood; food preparations NEC; and natural, processed, and imitation cheese.	2008 – OneSource
<b>SIC code</b>	Major group 20 – Food and Kindred Products	2008 / OneSource
<b>Size</b>		
Employees	24,500	2008a / ConAgra
Assets	\$11.8 billion 2 tomato processing facilities in CA	2008a / ConAgra 2007 / Morning Star
Tomato capacity (CA)	410 tons/hour	2007 / Morning Star

Annual revenues	<p style="text-align: right;">\$12.028 billion net sales</p> <p>54% - Consumer Foods  29% - Food &amp; Ingredients  12% – Trading and Merchandising  (agricultural and energy commodities)  5% - International Foods (imports)</p> <div style="text-align: center;"> <p><b>ConAgra Net Sales by Division</b></p> <table border="1"> <thead> <tr> <th>Division</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Consumer Foods</td> <td>54%</td> </tr> <tr> <td>Food &amp; Ingredients</td> <td>29%</td> </tr> <tr> <td>Trading and Merchandising</td> <td>12%</td> </tr> <tr> <td>International Foods</td> <td>5%</td> </tr> </tbody> </table> </div>	Division	Percentage	Consumer Foods	54%	Food & Ingredients	29%	Trading and Merchandising	12%	International Foods	5%	
Division	Percentage											
Consumer Foods	54%											
Food & Ingredients	29%											
Trading and Merchandising	12%											
International Foods	5%											
<b>Rankings</b>												
Tomato producer rank	6	2007 / Morning Star										
Processed tomato, market share, not end products	8%	2007 / Morning Star										
Fortune 1000	173	2008 / OneSource										
FT US 500	280											
<b>Environmental initiatives</b>	<ul style="list-style-type: none"> <li>Promotion of Code of Conduct, energy efficiency, transportation efficiency. All efforts aimed at improving plants, transportation between operations, and transportation of final products.</li> </ul>	2008b/Con Agra										
<b>Geographic scope</b>	Nationwide, some international operations											

<p><b>History and mergers</b></p>	<ul style="list-style-type: none"> <li>• ConAgra was founded in 1919 by <a href="#">Frank Little</a> and <a href="#">Alva Kinney</a>, who brought together four grain mills as Nebraska Consolidated Mills. Initially headquartered in <a href="#">Grand Island, Nebraska</a>, it moved to Omaha in 1922. The company ran at a profit until 1936, when Kinney retired. In 1940, the company began producing <a href="#">flour</a> at its own mill, and in 1942 ventured into the livestock feed business. That year president R.S. Dickinson opened the company's first out-of-state facility in <a href="#">Alabama</a> with a flour mill and animal feed plant.</li> <li>• After researching new uses for their flour, Nebraska Consolidated Mills funded the establishment of <a href="#">Duncan Hines</a> in 1951 as a way to market more flour by selling cake mixes. This venture was very successful, leading the company to its current place as the third largest flour miller in the U.S. However, this did not lead Consolidated to consider other food ventures, and instead <b>they sold their assets in Duncan Hines to <a href="#">Procter &amp; Gamble</a> in 1956.</b></li> <li>• <b>In 1971, Consolidated Mills changed its name to ConAgra</b>, a combination of con for consolidated and agra meaning from the earth in Latin.</li> <li>• In 1974, <a href="#">C. Michael Harper</a> ("Mike" Harper), an experienced food industry executive, took over the firm and brought it back from the brink of bankruptcy. Nonetheless, ConAgra's business model left it at the mercy of volatile commodity prices. In response, the company set off on a two-decade-long buying spree, purchasing over one hundred prepared food brands, starting with its 1980 purchase of <a href="#">Banquet Foods</a>. It moved heavily into the frozen food business and the packaged meat industry, and then picked up a selection of other brands from firms like <a href="#">RJR Nabisco</a> and <a href="#">Beatrice Foods</a> among others, as the <a href="#">leveraged buyouts</a> of the 1980s resulted in the divestiture or breakup of many major American consumer product firms.</li> <li>• <b>In 1993 alone it purchased <a href="#">\$500 million</a> in smaller firms, and in 1998 it purchased another <a href="#">\$480 million</a> in brands from <a href="#">Nabisco</a>.</b></li> </ul>	
-----------------------------------	---	--

	<p><b><u>Multivear restructuring effort:</u></b></p> <p>2007 – Divested packaged meats business, packaged cheese business, oat milling business, and refrigerated pizza business.</p> <p>2006 – Divested Cook’s Ham and seafood business</p> <p>2005 – Divested UAP International, minority stake in Swift Foods, cattle feeding assets, specialty meats for foodservice, and Portuguese poultry business.</p> <p>2000 – Acquired International Home Foods (Chef Boyardee, PAM)</p>	
<b>Main competitors</b>	<ul style="list-style-type: none"> <li>• Heinz</li> <li>• Unilever</li> <li>• Kraft Foods</li> <li>• Nestle</li> </ul>	
<b>Date of last update</b>		May 9, 2008

**Sources:**

- ConAgra Foods.. 2008a. “Annual Report, 2007.” Available at the corporate web site, accessed May 6, 2008: [http://media.corporate-ir.net/media\\_files/irol/97/97518/Interactive07/CONAGRA\\_2007\\_AR.pdf](http://media.corporate-ir.net/media_files/irol/97/97518/Interactive07/CONAGRA_2007_AR.pdf)
- ConAgra Foods. 2008b. “ConAgra Foods – Media Relations – Climate Change.” Corporate web page, available online, accessed May 6, 2008: <http://phx.corporate-ir.net/phoenix.zhtml?c=202310&p=climatechange>
- Morning Star Packing Company. 2007. “Industry Data; California Tomato Paste Production Capacity.” Online web page, available at company web site, accessed April 29, 2008: [http://www.morningstarco.com/industry/2007\\_paste\\_capacity.htm](http://www.morningstarco.com/industry/2007_paste_capacity.htm)
- OneSource Information Services [online corporate research database]. 2007. Accessed April 29, 2008: <http://www.onesource.com> [subscription required].

Company: **Cargill, Inc.**

Headquarters: **Minneapolis, MN**

Year Established: **1865**

Role in Value Chain		Source
<b>Segment of value chain</b>	<b>Processing</b>	
<b>Box in value chain</b>	<b>Feed companies</b>	
<b>Main activities</b>	<p><b>Cargill is the world’s largest private company<sup>15</sup>.</b></p> <p>The company has five business segments:</p> <ul style="list-style-type: none"> <li>• <b>Agriculture:</b> Cargill originates processes and distributes grain, oilseeds and other commodities to makers of food and animal nutrition products. It also provides crop and livestock producers with farm services and products. This segment has four distinct business divisions, namely Cargill AgHorizons, Cargill Animal Nutrition, Frontier Agriculture, and Renessen Feed and Processing. Cargill also has a ‘Consulting Services’ department that helps to evaluate and refine operations to maximize performance, productivity and profitability. They serve from mill managers to livestock integrators, to feed companies.</li> <li>• <b>Health:</b> Cargill develops science-based, health promoting ingredients and ingredient systems for makers of food, dietary and pharmaceutical products.</li> <li>• <b>Risk management:</b> Cargill provides agricultural, food, financial and energy customers with risk management and financial solutions in world markets.</li> <li>• <b>Industrial:</b> Cargill serves industrial users of salt, starch and steel products. It also develops and markets sustainable products made from agricultural feedstock.</li> <li>• <b>Food:</b> The company collaborates with food manufacturers, food service companies and food retailers to provide food and beverage ingredients and meat and poultry products.</li> </ul>	<p>Hoovers  <a href="http://www.cargill.com">www.cargill.com</a>            OneSource  <a href="http://www.feedindustry.net">www.feedindustry.net</a>  <a href="http://www.etcgroup.org">www.etcgroup.org</a></p>

<sup>15</sup> [www.etcgroup.org](http://www.etcgroup.org). [http://www.etcgroup.org/en/materials/publications.html?pub\\_id=398](http://www.etcgroup.org/en/materials/publications.html?pub_id=398).

<b>Primary NAICS code</b>	111920 - Cotton Farming																																																							
<b>SIC code</b>	0131 Cotton																																																							
<b>Size</b>		2007																																																						
Annual revenues		\$88.3 billion																																																						
Net Profit		\$2.3 billion																																																						
Assets		\$55.8 billion																																																						
Employees		158,000																																																						
		OneSource <a href="http://www.cargill.com">www.cargill.com</a> DataMonitor																																																						
<p><b>Cargill Financial Highlights 2007 – 2003</b> (in millions)</p> <table border="1"> <thead> <tr> <th></th> <th>2007</th> <th>2006</th> <th>2005</th> <th>2004</th> <th>2003</th> </tr> </thead> <tbody> <tr> <td>Sales &amp; other Revenues</td> <td>88,266</td> <td>75,208</td> <td>71,066</td> <td>62,907</td> <td>54,390</td> </tr> <tr> <td>Net earnings</td> <td>2,343</td> <td>1,537</td> <td>2,103</td> <td>1,331</td> <td>1,290</td> </tr> <tr> <td>Net earnings, excluding special items<sup>1</sup></td> <td>2,343</td> <td>1,727</td> <td>1,525</td> <td>1,331</td> <td>1,290</td> </tr> <tr> <td>Current assets</td> <td>29,048</td> <td>23,263</td> <td>27,848</td> <td>37,154</td> <td>25,957</td> </tr> <tr> <td>Net property &amp; other assets</td> <td>26,747</td> <td>24,074</td> <td>20,275</td> <td>12,542</td> <td>11,579</td> </tr> <tr> <td>Total assets</td> <td>55,795</td> <td>47,337</td> <td>48,123</td> <td>49,696</td> <td>37,536</td> </tr> <tr> <td>Current liabilities</td> <td>22,301</td> <td>17,718</td> <td>21,323</td> <td>30,174</td> <td>20,394</td> </tr> <tr> <td>Net worth</td> <td>16,249</td> <td>13,870</td> <td>12,252</td> <td>10,491</td> <td>9,762</td> </tr> </tbody> </table>				2007	2006	2005	2004	2003	Sales & other Revenues	88,266	75,208	71,066	62,907	54,390	Net earnings	2,343	1,537	2,103	1,331	1,290	Net earnings, excluding special items <sup>1</sup>	2,343	1,727	1,525	1,331	1,290	Current assets	29,048	23,263	27,848	37,154	25,957	Net property & other assets	26,747	24,074	20,275	12,542	11,579	Total assets	55,795	47,337	48,123	49,696	37,536	Current liabilities	22,301	17,718	21,323	30,174	20,394	Net worth	16,249	13,870	12,252	10,491	9,762
	2007	2006	2005	2004	2003																																																			
Sales & other Revenues	88,266	75,208	71,066	62,907	54,390																																																			
Net earnings	2,343	1,537	2,103	1,331	1,290																																																			
Net earnings, excluding special items <sup>1</sup>	2,343	1,727	1,525	1,331	1,290																																																			
Current assets	29,048	23,263	27,848	37,154	25,957																																																			
Net property & other assets	26,747	24,074	20,275	12,542	11,579																																																			
Total assets	55,795	47,337	48,123	49,696	37,536																																																			
Current liabilities	22,301	17,718	21,323	30,174	20,394																																																			
Net worth	16,249	13,870	12,252	10,491	9,762																																																			
<p><b>Cargill's last quarter profits (February, 2008) were \$1.03 billion. This 86% increase due to global food shortages and the expanding biofuels industry.</b></p>																																																								
<b>Geographic scope</b>	<ul style="list-style-type: none"> <li>• 158,000 employees in 66 countries</li> <li>• Sales worldwide</li> </ul>	<a href="http://www.cargill.com">www.cargill.com</a>																																																						
<b>History and mergers</b>	<ul style="list-style-type: none"> <li>• Cargill was founded in 1865, when WW Cargill became the proprietor of a grain flat house in Conover, Iowa. WW Cargill moved the headquarters to La Crosse, Wisconsin in 1875 and started to create more flat houses. By 1889, Cargill also operated a shipbuilding yard in La Crosse. In 1890, the company</li> </ul>	Hoovers <a href="http://www.cargill.com">www.cargill.com</a> DataMonitor																																																						

	<p>had expanded to 71 grain elevators and two flour mills<sup>16</sup>.</p> <ul style="list-style-type: none"> <li>• Cargill, Inc. got serious about the feed business in October, 1945, when the company acquired Nutrena Mills Incorporated, a company that had been in business since 1920 and, at that time, had the capacity to produce a total of 23,000 tons of feed per month in its three feed mills. The purchase price was \$1.6 million. Nutrena Mills was one of the most progressive feed companies at that time<sup>17</sup>.</li> </ul> <p>Last Acquisitions<sup>18</sup>:</p> <ul style="list-style-type: none"> <li>• Cargill acquired one third stakes in the Australian ship vetting company, RightShip in September 2006.</li> <li>• Cargill Animal Nutrition signed a purchase agreement with Eagle Milling, for purchase of certain assets of the feed milling and the pet and animal wholesale products business in October 2006.</li> <li>• Cargill Animal Nutrition signed a purchase agreement with Mountaire Feeds to purchase certain assets of Mountaire's feed milling and animal health business, including its Prime Quality feed brand in January 2007.</li> <li>• In the same month, Cargill announced plans to purchase LNB International Feed, a privately held animal nutrition premix business.</li> <li>• In June 2007, the company finalized agreements with three of Canada's leading food distributors, L.V. Lomas, Nealanders International and Univar Canada to supply products manufactured by Cargill Texturizing Solutions and Cargill Sweetness Solutions.</li> <li>• The company established Cargill Animal Nutrition in the February 2007, a new aqua research facility in Elk River, Minnesota that will increase Cargill's research capabilities to provide nutrient-driven solutions within the feed industry. In the same month, Cargill purchased the assets of Olympic Metals in Loudon, Tennessee, through its steel service center business.</li> <li>• Cargill purchased a 49% stake in the Spring Creek Coal Mine from Solid Energy New Zealand in March</li> </ul>	
--	--	--

<sup>16</sup> Text was taken from Datamonitor

<sup>17</sup> Data taken from www.cargill.com

<sup>18</sup> This material was taken from DataMonitor

	<p>2007.</p> <ul style="list-style-type: none"> <li>• In April 2007, the company's Cargill Japan merged with Toshoku. The company's Specialty Canola oil has signed a long-term lease to open a specialty canola research farm in Aberdeen, Saskatchewan in May 2007.</li> <li>• The company announced the acquisition of Agrograin, one of the leading grain and oilseeds trading and storage companies in Hungary.</li> <li>• The company expanded its ethanol production capacity by 110 million gallons per year at its Eddyville, Iowa, corn-processing complex.</li> </ul>	
<p><b>Relevant Information</b> 19</p>	<ul style="list-style-type: none"> <li>• Cargill is trying to offer higher value-added products and services and not only commodities.</li> <li>• It owns 2/3 of the shares of The Mosaic Company, one of the world's leading producers and marketers of concentrated phosphate and potash crop nutrients.</li> <li>• It is responsible for 25 percent of all United States grain exports.</li> <li>• It supplies approximately 22 percent of the United States domestic meat market.</li> <li>• Company News (10 Jan 2007)<sup>20</sup>:  <b><i>“Cargill subsidiary to develop four ethanol plants”</i></b>  <b>Each plant will use nearly 40 million bushels of corn annually and produce 100 million gallons of ethanol and over 300,000 tons of dry distiller's grains for animal feed each year.</b> Emerald Renewable Energy is a company formed by Cargill to develop and invest in renewable energy projects in the US. Cargill will provide the initial development capital for the projects.  "Emerald Renewable Energy will have access to Cargill's world-class expertise in trading, sourcing corn, plant construction and operations, risk management and bulk commodity transportation," said Scott Portnoy, Cargill corporate vice president with responsibility for its Biofuels and Bioproducts businesses. </li> </ul>	<p><a href="http://www.ft.com">www.ft.com</a>  <a href="http://www.cargill.com">www.cargill.com</a></p>
<p><b>Main Competitors in the feed industry</b></p>	<ul style="list-style-type: none"> <li>• Charoen Pokphand (CP Group), Thailand</li> <li>• Land O'Lakes Purina, U.S.</li> <li>• Tyson Food, Inc.</li> </ul>	<p>Feed industry network.com</p>
<p><b>Date of last update</b></p>		<p><b>05/05/2008</b></p>

<sup>19</sup> [www.ft.com](http://www.ft.com), <http://search.ft.com/nonFtArticle?id=040226009359> and [www.cargill.com](http://www.cargill.com)

<sup>20</sup> News taken from [www.cargill.com](http://www.cargill.com)



**Company:** **Tyson Foods, Inc.**  
**Headquarters:** Springdale, AR

**Ticker Symbol:** TSN  
**Year Established:** 1935

<b>Role in Value Chain</b>		<b>Source</b>
<b>Segment of value chain</b>	<b>Large Purchasers</b>	
<b>Box in value chain</b>	<b>Poultry Producers</b>	
<b>Description</b>	<ul style="list-style-type: none"> <li>• <b>Tyson is now the second largest poultry producer (19% market share).</b> Tyson was the number one poultry producer last year; Pilgrim's Pride at that time was the second largest and acquired Gold Kist, Inc., the third in market share. As a consequence, Pilgrim's Pride is now the largest poultry producer (20% market share)</li> <li>• Tyson Foods is the world's largest meat-processing company and one of the top food production companies in Fortune 500.</li> <li>• Tyson is also the third largest U.S. producer of animal feed, supplying its own livestock, pork and poultry operations (see Appendix A, Top Five Feed Producers).</li> </ul>	www.tyson.com Hoovers OneSource IBISWorld
<b>Key Players in U.S. Broiler Industry, 2007</b>		
Industry segment		Market Share %
Broilers and other meat types chicken production in the US (NAICS 11232)	Pilgrim's Pride	20%
	Tyson Foods	19%
Animal slaughtering and processing in the US (NAICS 31161)	Tyson Foods	14%
	Cargill	9%
	Smithfield Foods	8%
	Pilgrim's Pride	4%
Poultry and poultry production wholesalers in the US (NAICS 42244)*	Tyson Foods	5%
	Pilgrim's Pride	5%
* 2006 Source: IBISWorld		
<b>Main segments</b>	<ul style="list-style-type: none"> <li>• Tyson has four business lines: chicken, beef, pork and prepared foods and related products</li> <li>• The company's chicken operation produces fresh, value-added, frozen, and refrigerated chicken</li> </ul>	

	<p>products. It has a vertically-integrated poultry production process from breeding (done by its subsidiary, Cobb-Vantress), hatching, broiler production, slaughtering, processing, and wholesale. In each of these segments, it is one of the market leaders in the U.S. in terms of market share (see table above).</p>	
--	---	--

**Tyson's Business Segments and Financial Performance**

	Revenue (mil \$)	%	Operating Income	%
Chicken	8,188	30.4	280	45.6
Beef	12,703	47.2	35	5.7
Pork	3,309	12.3	135	22.0
Prepared Foods	2,660	9.9	81	13.2
Total	26,900		614	

Source: OneSource

<b>Primary NAICS code</b>	311615 - Poultry Processing	
<b>SIC code</b>	2015 - Poultry Slaughtering and Processing	
<b>Size</b>		
	2007	OneSource
Annual revenues	\$26.9 billion	
Annual income	\$268 million	
Assets	\$10.2 billion	
Employees	104,000	

<p><b>Geographic scope</b><sup>21</sup></p>	<p><b>Sales Offices:</b> China, England, Japan, Mexico, Puerto Rico, Russia, Singapore, South Korea, Taiwan, and UEA.</p> <p><b>Operations</b></p> <ul style="list-style-type: none"> <li>• Argentina: Cobb-Vantress joint venture</li> <li>• Brazil: Cobb-Vantress subsidiary</li> <li>• Canada: Beef processing plant, pork processing plant, casings processing plant</li> <li>• China chicken processing plant, pork processing plant (part ownership), casings further processing plant (part ownership)</li> <li>• Ireland: Pork further processing plant (part ownership)</li> <li>• Mexico: chicken processing plant</li> <li>• Panama: chicken processing plant</li> <li>• Russia: pork further processing plant (part ownership)</li> </ul>	<p>www.tyson.com</p>
<p><b>History and mergers</b><sup>22</sup></p>	<p>Tyson Foods (Tyson) was promoted by John Tyson in 1935. It was initially engaged in hauling hay, fruit, and chickens for local farmers. The following year, the company undertook hauling trips to Chicago, Illinois poultry markets. By 1937, the company had extended its hauling operations to Cincinnati, Detroit, Cleveland, Memphis and Houston.</p> <ul style="list-style-type: none"> <li>• In 1947, Tyson Feed and Hatchery was incorporated.</li> <li>• In 1957, Tyson built its first processing plant on the north side of Springdale.</li> <li>• The company went public in 1963, and changed its name to Tyson's Foods. Tyson made its first significant acquisition with the purchase of Garrett Poultry Company in Rogers, Arkansas during the same year.</li> <li>• In 1971, the company's name was changed to Tyson Foods. In the early part of 1980's the company acquired Honeybear Foods in Neosho, Missouri.</li> <li>• The company acquired Holly Farms, the third largest poultry firm in the US, in 1989. In the same year Tyson entered into partnership with Trasgo, a Mexico-based poultry company, to create an international partnership with Mexico and Japan called CITRA.</li> <li>• By the end of the 1990s, Tyson strengthened its</li> </ul>	<p>Data Monitor</p>

<sup>21</sup> See maps and tables below.

<sup>22</sup> This text was taken from DataMonitor. (Summary of the text)

	<p>position as the world's largest poultry producer by acquiring its long-time competitor Hudson Foods.</p> <ul style="list-style-type: none"> <li>• In 2001, the company became the world's largest processor and marketer of chicken and red meat, following the acquisition of its rival, IBP.</li> <li>• In January 2007, Tyson has entered into a joint venture with Cactus Feeders, a cattle breeding company in Argentina, to create the first vertically integrated beef operation in the South American country.</li> <li>• In April 2007, <b>ConocoPhillips and Tyson formed a strategic alliance to produce and market the next generation of renewable diesel fuel</b>, which will help supplement the traditional petroleum-based diesel fuel supply. The alliance plans to use beef, pork and poultry by-product fat to create a transportation fuel. This fuel will contribute to America's energy security and help to address climate change concerns.</li> <li>• In June 2007, Tyson joined forces with Syntroleum Corporation, a Tulsa-based synthetic fuels technology company, to form a joint venture, called Dynamic Fuels, which will produce synthetic fuels targeting the renewable diesel, jet, and military fuel markets.</li> </ul>	
<b>Main Competitors</b>	<ul style="list-style-type: none"> <li>• Hormel Food Corporation</li> <li>• Cargill, Inc.</li> <li>• Pilgrim's Pride corporation</li> <li>• Sanderson Farms, Inc.</li> <li>• Perdue, Inc.</li> </ul>	Hoovers
<b>Date of last update</b>		<b>05/05/08</b>

## Tyson's global operations

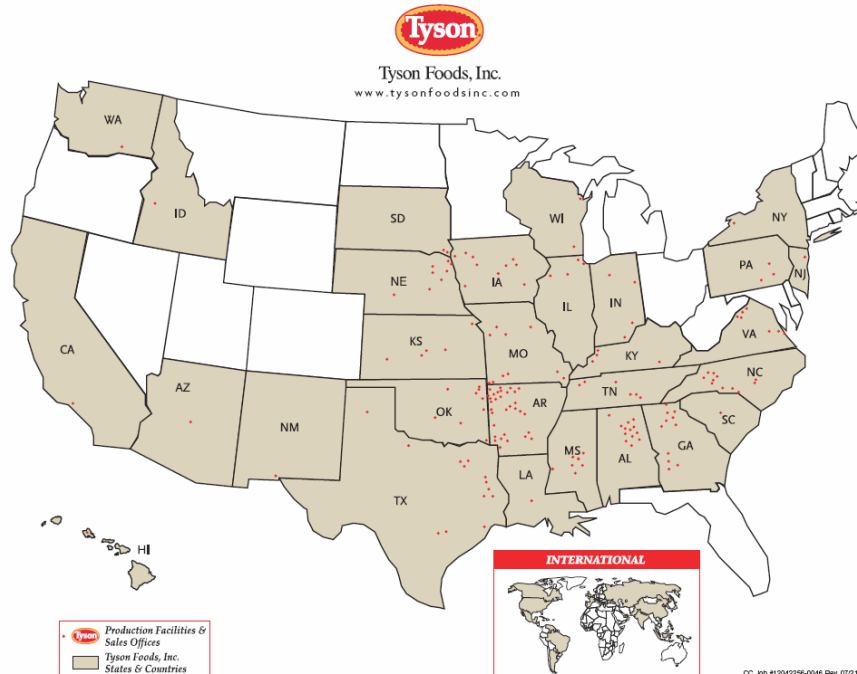
Country	Operations
Argentina	Cobb-Vantress joint venture
Brazil	Cobb-Vantress subsidiary
Canada	Beef processing plant, pork processing plant, casings processing plant, North American Service Centers (2)
China	Sales office (2), chicken processing plant, pork processing plant (part ownership), casings further processing plant (part ownership)
Ireland	Pork further processing plant (part ownership)
Mexico	Sales office (2), chicken processing plant
Panama	Chicken processing plant
Russia	Sales office, pork further processing plant (part ownership)

Note: Tyson has also sales offices in England, Japan, Puerto Rico, Singapore, South Korea, Taiwan, and UAE.

Source: corporate website

(<http://www.tyson.com/Corporate/AboutTyson/Locations/ListPage.aspx>)

## Tyson's US Locations



Source: corporate website (<http://www.tyson.com/Corporate/AboutTyson/Locations/>)

## Tyson's SWOT Analysis

<b>Strengths</b>	<b>Weaknesses</b>
Strong market position	Weak performance of the chicken segment
Strong clients	Weak compliance function
Value-added products	
<b>Opportunities</b>	<b>Threats</b>
Growing Hispanic population in US	Shift to vegetarianism
Operational initiatives	Spread of bird flu
Expanding Mexican market	Slowdown in the US economy
	Laws and regulations

Source: Data Monitor

**Company: Poet, LLC**  
**Headquarters: Sioux Falls, SD**

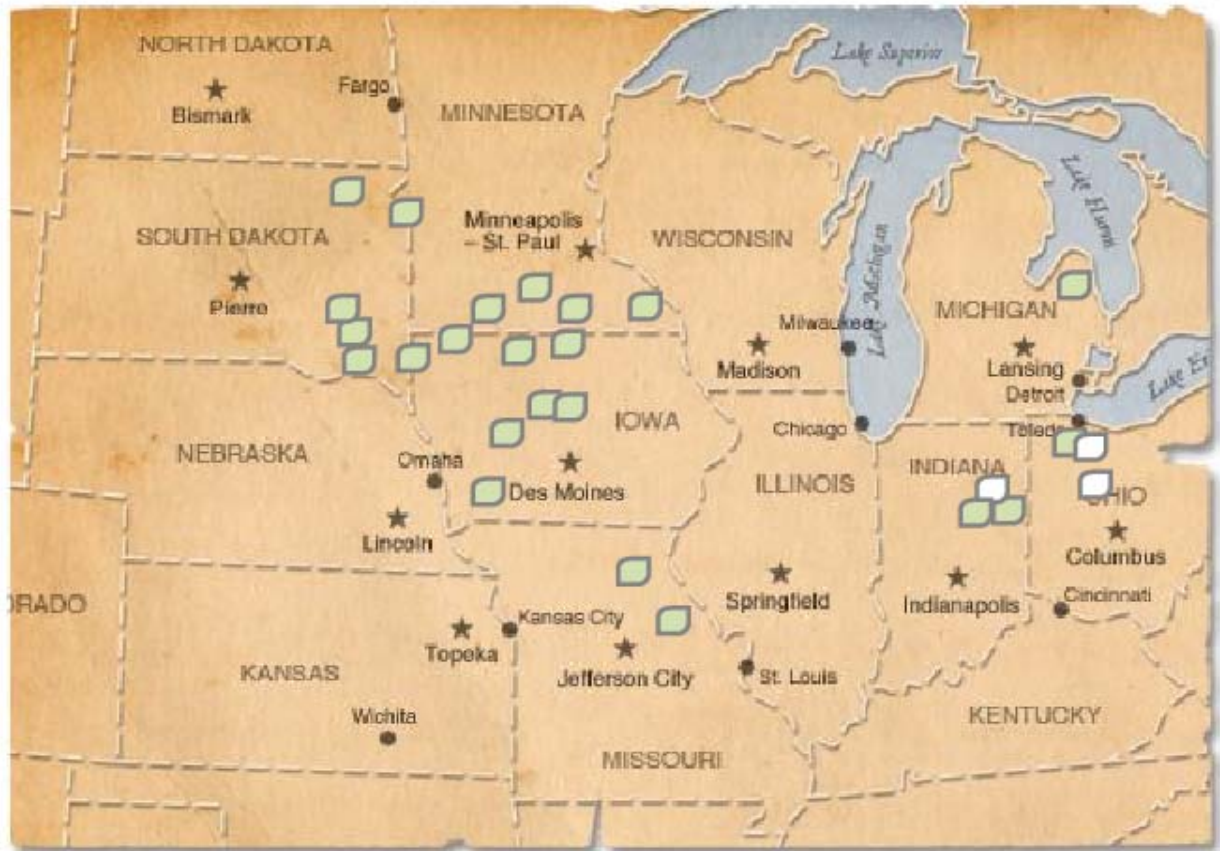
**Date Established: 1983**

<b>Role in Vale Chain</b>		<b>Source</b>
Segment of value chain	Processing	
Box in value chain	Ethanol Refineries	
<b>Main activities</b>	Ethanol production, distillers grains, contracted services for plant design and management	www.poetenergy.com
<b>Primary NAICS code</b>	324110 – Petroleum Refineries	OneSource
<b>Other NAICS codes</b>	711570 – Independent Artists, Writers, and Performers	
<b>SIC code</b>	2911 – Petroleum Refineries; 8999 – Services, NEC	
<b>Size</b>		
Annual revenues	>\$360 million (company does not release this information)	OneSource
Employees	1,300	Poet
Assets	22 plants	Poet
Ethanol Capacity	1.3 billion gallons	
<b>Rankings</b>		Renewable Fuels Association
Ethanol producer rank	1	
Ethanol, market share	<b>14.7% of US production</b>	
<b>Environmental initiatives</b>	<ul style="list-style-type: none"> <li>BPX technology eliminates cooking in ethanol production, reducing energy usage. This is implemented in the North Manchester, IN plant.</li> <li>Constructing “Project Liberty,” a cellulosic ethanol plant in Iowa that will utilize corn cobs as feedstock</li> </ul>	2007b/POET, LLC  2007a/POET, LLC
<b>Geographic scope</b>	South Dakota, Minnesota, Iowa, Missouri, Indiana, Ohio, Michigan	www.poetenergy.com

	<p>Each year, a typical 60 MGPY ethanol plant built and operated by POET will:</p> <ul style="list-style-type: none"> <li>• Consume approximately 21 million bushels of corn</li> <li>• Produce 60 million gallons of ethanol</li> <li>• Produce 178,000 tons of Dakota Gold Enhanced Nutrition Distillers Products™</li> <li>• Create approximately 40 jobs</li> <li>• Provide an annual payroll of about \$1.8 million</li> </ul>	
<b>History and mergers</b>	<ul style="list-style-type: none"> <li>• This company started when the Broins experimented with making ethanol on a small scale in 1983</li> <li>• In 1986 they were ready to take their operation to a commercial level.</li> <li>• In February 2007, <b>the company received an \$80 million grant from the U.S. Department of Energy to expedite the development of project Liberty, the world's first commercially viable cellulosic ethanol plant.</b></li> <li>• <b>In March 2007 – Changed Name from Broin and Associates to POET, LLC</b></li> </ul>	www.poetenergy.com
<b>Affiliates</b>	Teamed up with DuPont on construction of cellulosic ethanol plant in Iowa; teamed with BP to produce new type of fuel	2006/Business Week
<b>Subsidiaries</b>	Poet LLC is divided into six entities: Poet Plant Management, Poet Design and Construction, Poet Research Center, Poet Ethanol Products, Poet Nutrition, and Poet LLC.	www.poetenergy.com
<b>Main competitors</b>	<ul style="list-style-type: none"> <li>• Archer Daniels Midland</li> <li>• Verasun Energy</li> </ul>	2008/Renewable Fuels Association
<b>Other Notes</b>	CEO Jeff Broin is the sole owner.	
<b>Date of last update</b>		<b>05/05/2008</b>



## POET Biorefining Plant Locations



Source: Poetenergy.com

### Sources:

- Carey, John and Adam Aston, "Put a Termite in Your Tank," *Business Week*, December 18, 2006. Available online, accessed May 5, 2008: [http://www.businessweek.com/magazine/content/06\\_51/b4014081.htm?chan=search](http://www.businessweek.com/magazine/content/06_51/b4014081.htm?chan=search)
- OneSource Information Services [online corporate research database]. 2007. Accessed April 29, 2008: <http://www.onesource.com> [subscription required].
- POET, LLC. 2007a. "U.S. Department of Energy and Broin Companies to Jointly Fund a Commercial Cellulosic Ethanol Bio-Refinery." Corporate press release, February 28, available online, accessed May 5, 2008: <http://www.poetenergy.com/news/showRelease.asp?id=13>
- POET, LLC. 2007b. "POET Breaks Ground on Environmentally-Friendly Ethanol Plant near North Manchester, Ind." Corporate press release, July 13, available online, accessed May 5, 2008: <http://www.poetenergy.com/news/showRelease.asp?id=88>
- POET, LLC. 2008. "POET – Corporate Office." Internet web page, accessed May 5, 2008: <http://www.poetenergy.com/about/office.asp>
- Renewable Fuels Association. 2008. "RFA – The Industry – Plant Locations." Internet web page, accessed May 5, 2008: <http://www.ethanolrfa.org/industry/locations/>