

2. Agri-food

The agri-food industry encompasses the production of food, beverage, and tobacco products. In the United States alone, the total value of shipments for this industry exceeded \$660 billion in 2006, and the industry provided more than 1.5 million jobs. The industry is highly fragmented, with thousands of small independent food processors competing for market share with some of the world's largest conglomerates.

a) Representative Operation – Food Processing

The representative operation modeled is a small independent food processor, producing medium-value, non-perishable products, such as packed, dried, or canned foods, or confectionary products. As illustrated in Exhibit 3.6, this operation is characterized by:

- Moderate facility and other initial investment requirements
- A workforce with a relatively high proportion of lesser-skilled employees
- Moderate energy requirements

The business is assumed to operate as a stand-alone profit center.

b) International Results

International results are illustrated in Exhibit 3.7. These results reflect the combined impact of 27 location-sensitive cost components applied to the modeled operation. Detailed results, by key cost component, are presented in Exhibit 3.8.

c) Leading Cities

Exhibit 3.9 profiles results for the leading (lower-cost) cities, by country, from among the 102 cities featured in this report. Results for all other featured cities can be found in Chapter 4, Exhibit 4.10.

EXHIBIT 3.6 – AGRIFOOD	
Food Processing – Summary of Operating Parameters	
Facilities Requirements	
Industrial site purchased	5 acres (2 hectares)
Size of factory built	50,000 ft ² (4,645 m ²)
Other Initial Investment Requirements	
Machinery and equipment – US \$'000	\$4,500
Office equipment – US \$'000	\$300
R&D equipment – US \$'000	–
Inventory – US \$'000	\$1,500
Equity financing - % of project costs	33%
Workforce	
Management	6
Sales and administration	12
Production/non-dedicated product development	
- Professional, technical	7
- Operators	65
- Unskilled laborers	17
Other	3
Total employees	110
Energy requirements	
Electricity monthly consumption/peak demand	370,000 kWh and 1,260 kW
Gas monthly consumption	40,000 CCF (113,314 m ³)
Other Annual Operating Characteristics	
Sales at full production – US \$'000	\$34,000
Materials and other direct costs - % of sales	53%
Other operating costs - % of sales	4%
Investment in tax-eligible R&D - % of sales	–

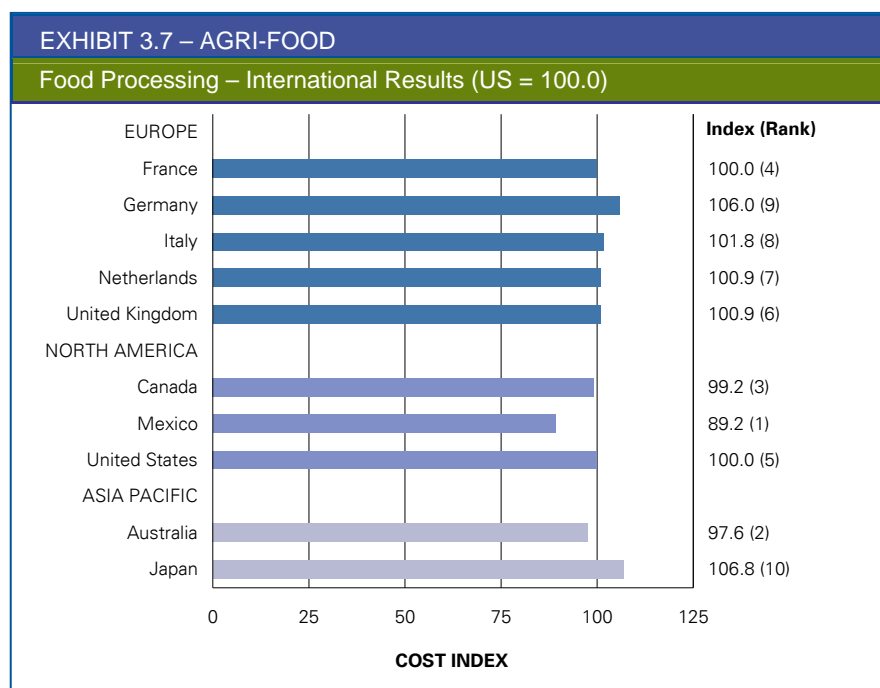


EXHIBIT 3.8 – AGRI-FOOD

Food Processing – Costs, by Major Component, US \$'000

	Europe					North America			Asia Pacific	
	France	Germany	Italy	Netherlands	UK	Canada	Mexico	US	Australia	Japan
Revenues	32,500	32,500	32,500	32,500	32,500	32,500	32,500	32,500	32,500	32,500
Costs										
- Salaries & Wages	4,571	6,962	4,489	6,101	5,456	5,380	2,278	4,893	5,395	6,544
- Statutory Plans	1,947	1,151	1,478	800	660	528	276	660	711	595
- Other Benefits	925	1,361	1,156	1,779	1,713	1,146	559	1,365	1,084	2,193
- Total Labor & Benefits	7,444	9,474	7,123	8,680	7,829	7,055	3,114	6,917	7,191	9,332
- Transportation	927	856	1,433	396	519	1,611	2,666	1,959	665	1,367
- Utilities	1,175	1,627	1,648	1,238	1,258	784	906	700	1,109	1,382
- Interest & Depreciation	893	1,296	994	1,109	1,229	937	(265)	881	710	1,259
- Non-income Taxes	262	104	38	27	373	267	32	247	64	266
- Location-insensitive Costs	18,363	18,363	18,363	18,363	18,363	18,363	18,363	18,363	18,363	18,363
Profit Before Income Tax	3,435	781	2,902	2,687	2,929	3,485	7,685	3,441	4,398	530
- Income Taxes ¹	1,139	295	1,143	670	907	954	2,129	1,140	1,368	285
Effective Rate	33.2%	37.8%	39.4%	24.9%	31.0%	27.4%	27.7%	33.4%	31.1%	53.9%
After-tax Profit	2,296	486	1,759	2,017	2,022	2,531	5,557	2,291	3,030	245
Total Annual Costs	30,203	32,014	30,741	30,483	30,478	29,970	26,944	30,209	29,470	32,255
Index (US=100.0)	100.0	106.0	101.8	100.9	100.9	99.2	89.2	100.0	97.6	106.8
Rank	4	9	8	7	6	3	1	5	2	10

¹ Income taxes may be either positive or negative, irrespective of whether profit before income tax is positive or negative, due to the impact of specific expense deduction rules, minimum taxes, and refundable income tax credits. Effective tax rates are not shown where results are not meaningful because of low profitability.

EXHIBIT 3.9 – AGRI-FOOD

Food Processing – Results for Leading Cities, by Country

Country	City	Index	Rank Among 102 Cities	Country	City	Index	Rank Among 102 Cities
France	Mulhouse	99.8	47	Canada	Sherbrooke	95.8	11
	Toulouse	99.9	51		Waterloo Region	97.5	18
Germany	Halle	104.4	91	Quebec City	97.8	23	
	Frankfurt	106.8	95	Saskatoon	98.2	26	
Italy	Vicenza	100.7	64	Mexico	Reynosa	86.9	1
	Livorno	101.4	74	Aguaascalientes	89.6	2	
Netherlands	Utrecht	100.9	67	United States	Lexington	95.0	6
United Kingdom	Barnsley	99.3	41		Greenville-Spartanburg	95.4	7
	Plymouth	100.1	52		Little Rock	95.7	8
Australia	Adelaide	96.4	14		Charleston	95.8	9
	Melbourne	96.5	15		Shreveport	95.8	9
Japan	Fukuoka	105.4	94		Montgomery	96.0	12
	Yokohama	107.0	97		Nashville	96.2	13
					Atlanta	96.6	16
			Jackson	96.7	17		