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Land O' Lakes

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Abstract

The case begins with an examination of Land O' Lakes' diversified portfolio of businesses. The business had undergone significant changes since 1998 - it dominated market share in butter and deli cheese, had become the largest crop protection, plant nutrient, and feed manufacturer in the US, and was the fourth largest US seed company. Land O'Lakes used mergers, joint ventures, acquisitions of public and private firms, and divestitures/closing of assets to restructure its portfolio to build its portfolio. The main issue was to evaluate its diversified portfolio of businesses and find ways to improve future performance.

Keywords: dairy, agribusiness, portfolio, cooperative

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Land O' Lakes, Inc.

Land O' Lakes had undergone many changes in the past five years as its portfolio of businesses had changed considerably as the cooperative grew from its Midwestern roots to having plants in California and Pennsylvania. Unexpected challenges in recent years had included price declines in the dairy, feed, layers, and swine industries, and increased competitive pressures in the farm input supply industry.

The main issue facing Land O' Lakes was the need to evaluate its diversified portfolio of businesses and find ways to improve future corporate performance. It had become highly leveraged in recent years due to mergers and acquisitions, which had helped Land O' Lakes achieve size and scale in many of its businesses.

As a cooperative, Land O' Lakes was owned by the patrons who used its products and services. These patrons included dairy producers who supplied fluid milk to Land O' Lakes and farmers who use its products such as animal feed and services such as crop nutrient application. More than 11,000 producers and 1,300 local cooperatives owned Land O' Lakes.

Land O' Lakes was governed by 24 directors — the dairy members nominated 12 directors from among the dairy members, and the agricultural services members nominated 12 directors from among the agricultural members. The nomination of directors was conducted within each group by region. The number of directors nominated from each region was based on the total amount of business conducted with the cooperative by that region's members. Directors were elected to four-year terms at the annual meeting by voting members who each had one vote. Membership was divided into eight regions and five agricultural supply regions.

Land O' Lakes' Business Organization

Land O' Lakes was a national food and agricultural cooperative founded in 1921 through the federation of 320 Minnesota cooperative creameries. In its 81 years, the company had grown into one of the largest agri-food companies in the United States with more than $5.8 billion (not including joint ventures) in net sales revenue in 2002. Land O' Lakes was headquartered in Arden Hills, Minnesota, and operated 200 processing, manufacturing, warehousing and distribution facilities throughout the country and employed about 8,000 people.

Land O' Lakes' business was divided into two main segments: Dairy Foods and Agricultural Services. The Dairy Foods group was divided into two broad segments, value added (focusing on retail, deli, specialty products and food service products) and industrial (focusing on procurement and manufacturing activities, along with the sale of bulk cheeses, dried cheese, and whey products (used for processed foods,

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sports drinks, and nutritional supplements) to industrial and high volume customers (i.e., mozzarella sales to large pizza chains and manufacturers).

Dairy Value Added and Dairy Industrial Products accounted for 44% and 56% of dairy product sales, respectively, in 2001. These were broken down into Retail Customers (35%), Fluid Milk (27%), Commodity (19%), Ingredients (10%), and Foodservice (9%). Land O' Lakes had 12 plants manufacturing butter, spreads, non-fat dry milk (NFDM), cheese, and whey plants.

Butter, deli cheese and foodservice offerings remained Land O' Lakes' principal retail products. Deli cheese was sold through the Land O' Lakes, Alpine Lace, and New Yorker brands. Partnering opportunities included providing the butter for certain flavors of General Mills Pop Secret™ popcorn, and the butter flavor for Frito-Lay Rold-Gold™ pretzels. Land O' Lakes and Dean Foods also were partners in a strategic alliance that combined the strength of Dean Foods' position in the dairy case with the strength of the LAND O LAKES brand, which had a 96% brand awareness. The agricultural services business encompassed five principal business units: LOL Farmland Feed LLC, Layers, Swine, Seed and a 50% ownership in Agriliance, LLC.

Land O' Lakes had an International Division that conducted education and training in dairy processing, agribusiness management, and other operations. Employees and producers could volunteer for these programs that were operating in more than a dozen countries in 2003. Land O' Lakes sold products overseas in more than 50 countries and had licensing agreements in other countries. Internal sales were very small but providing opportunities for its members and employees to work in a developing country for a few weeks was unique.

Business Environment Facing Land O' Lakes' U.S. Dairy Operations

Consumer preferences had shifted over time due to increasing awareness about the relationship between diet and health. The implications of this shift for dairy products depended on consumer perceptions about their impacts on health. Dairy products were typically grouped into several broad groups: beverages (milk and milk-based beverages), hard and frozen products (ice cream and frozen yogurt), butter and cheese, and soft products (yogurt and fluid cream). Hard and frozen and soft products tended to be demand driven while butter and cheese tended to be supply driven because they were made from the residual butterfat from fluid milk.

The U.S. dairy processing industry had undergone significant structural changes over the last two decades. The shifts had occurred in both the number of plants and the location distribution of plants. The total number of plants processing cheese decreased by almost 49% from 737 in 1980 to 376 in 1999 (Blayney). A similar trend was seen for plants processing butter, which fell by 68% over the same time

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period, and NFDM fell by 58%. There was only a 16% reduction in the number of plants making processed cheese, decreasing from 62 to 52 plants between 1980 and 1999.

Milk Processing Industry

The location of plants also changed while the number of plants was declining. For example, California's share of butter and cheese plants increased by 55% and 183%, respectively, over the 1980 to 1999 time period, while Wisconsin's share decreased by 2% and 26%, respectively. There were slight increases in plant numbers in New York and Pennsylvania over this period.

The reduction in plant numbers was a result of consolidation of processing capacity and, in the case of cheese, an expansion in production capacity. Total cheese production increased by about 107%, from 4 billion pounds to about 8.3 billion pounds between 1980 and 2000 (Southard). Butter production, however, increased by only 10% within the same period. This reflected the differences in increased demand for cheese and the decreased supply of butterfat available for butter.

The annual volatility in wholesale prices for butter and cheese had increased over the years but wholesale prices for butter had declined 19% while cheese prices had increased 14% between 1986 and 2001 (Jesse, Barham, and Jones). The price volatility had increased due to market-driven forces and changes in agricultural policy beginning in 1995. The 1996 Farm Bill Act consolidated and reformed federal milk marketing orders. The act established 11 federal milk marketing orders (reduced from 33 in 1996), introduced new methods for determining class prices, and made language of the orders more uniform. It also reduced the price supports on milk.

Although milk was produced in all 50 states in the United States, the distribution of production was concentrated in five states including California, Wisconsin, New York, Pennsylvania and Minnesota, which accounted for about 53% of total U.S. milk production in 2002. In absolute terms, California was the leader in growth. Total milk production increased by 30% from 128.4 billion pounds in 1980 to 167.6 billion pounds in 2000. The average production per milking cow in the United States also increased by 53% between 1980 and 2000, from 11,891 pounds to 18,201 pounds. These productivity improvements had resulted from better genetics and herd management skills.

Wisconsin and Minnesota had many advantages in dairy production. There was a large infrastructure of many cheese plants, university research and outreach programs, ideal locations for grain and forage production, state government programs, and historically strong support for dairy production. These states, however, also had disadvantages including small average herd size, lower milk

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production per cow, declining supply of labor, lack of consistent quality forage (i.e., lack of consistent protein for use in total mixed rations), and lack of equity capital to expand production to take advantage of economies of size (Dobson and Christ).

Greater competition between processors for milk in Wisconsin due to excess cheese plant capacity in recent years, and declining milk production coupled with marketing orders and other factors, meant that Wisconsin producers received premiums for their milk relative to dairy producers in California and other states. Cheese processors such as Land O' Lakes needed to reduce their costs or face capacity rationalization.

Given the consumption trend and plant consolidation trends at the processing level, it was obvious that similar consolidation trends had occurred at the milk production level of the U.S. dairy supply chain. However, this high attrition level had been compensated by increases in both size of operations and cow productivity. The share of these larger herds in the industry had increased rapidly. For example, 200 or more head operations accounted for 31.8% of milking cows in 1993 and 79.3% of operations by 2000. That is, 10.2% of operations accounted for 79.3% of milking cows in 2000. Size was not the only issue. Productivity as measured by pounds of milk per cow per annum was also greater on these large dairies. For example, in 1996 the average pounds of milk per cow in California, New York, and Wisconsin were 19,161; 16,396; and 15,442. In 2001, these were 17,527; 17,182; and 20,913.

Industrial Organization in the Dairy Industry

Two types of firms operated in the U.S. dairy industry: proprietary or investor-oriented companies and cooperatives or patron-oriented companies. There were fewer proprietary companies and cooperatives today than in the past and the size of these firms, on average, had increased. Proprietary companies have moved toward the fluid milk, cheese, and frozen products, while cooperatives have taken on major roles in processing butter and cheese products. Cooperatives also were mainly responsible for the assembly and marketing of raw bulk milk to other processors. Cooperatives were the first handlers of about 87% of the raw milk in 2000.

There were two types of dairy cooperatives: bargaining-only and manufacturing/processing. The bargaining-only cooperatives negotiated prices and terms of trade for their members' milk and did not handle, own or process the milk. They required less capital to operate and handled relatively smaller volumes of milk. Manufacturing/processing cooperatives arranged prices and marketed some of their members' milk through their own processing and manufacturing facilities. These firms assembled milk, processed products and bargained for prices too. Due to larger marketing expenses and higher capital requirements, members might see lower prices than those in the bargaining-only cooperative. However, members also

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might see higher patronage refunds than those received by bargaining-only cooperatives.

Land O' Lakes' Major Competitors in the Dairy Industry

Competition had greatly changed in recent years as several firms had become large firms that competed in various markets in the United States. Historically, the dairy processing industry was fragmented due to issues related to local supply of milk. One reason often cited for the consolidation was the response to similar consolidation at retail supermarkets that might prefer to deal with the same supplier. There were at least six national dairy processors including Suiza Foods, Dean Foods, Land O' Lakes, Dairy Farmers of America (DFA), Kraft, and Leprino Foods.

Land O' Lakes operated in many different segments and faced a variety of competitors in those segments. For example, in retail non-butter spreads, Land O' Lakes competed against large food processors such as Unilever and Con Agra. In the retail cheese segment, Kraft was a direct competitor. Furthermore, store brands or private label brands were also competitors in every retail dairy foods segment. Food service competitors included Kraft and Schreiber Foods. Foremost Farms, DFA, Leprino, and the Canadian-based Saputo were competitors in industrial cheese.

Business Environment facing Land O' Lakes' U.S. Agricultural Services Operations

Land O' Lakes had businesses in feed, swine production, layers, seed, and agronomy.

Feed Manufacturing

Feed historically was the largest purchased item for U.S. farmers. The U.S. Department of Agriculture's Economic Research Service estimates showed that it accounted for 48.1% of total expenditures on farm inputs in 2001, excluding livestock (Baker, Allen, and Chambers). The purchase of Purina Mills in 2001 elevated Land O' Lakes to first position in the U.S. feed manufacturing industry that produced 55.74 million pounds of feed in 2001. It also provided significant market share in lifestyle (i.e., horses) feed products where margins were significantly higher than in commercial animal production.

LOL Farmland Feed LLC was formed in 2000 as a joint venture between Land O' Lakes and Farmland Industries. Land O' Lakes brought its former farm feed and supply businesses and joint ventures to the LOL Farmland Feed initiative, and owned 69% of the new company upon formation and had 100 feed mills across the

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United States. Purina Mills was merged into LOL Farmland Feed, increasing its expected annual sales to $2.5 billion with a capacity of 16 million tons. Land O' Lakes now owned 100% of the feed venture with two popular brands, Land O' Lakes and Purina.

LOL Farmland Feed produced complete feeds that were a balanced mixture of grains, proteins, nutrients and vitamins sold as ground meal, in pellets or in extruded pieces. The lifestyle animal feed was sold as a complete feed through the trademarked Purina, Chow and the "Checkerboard" Nine Square Logo. Supplements also were used by commercial livestock producers, typically mixed together with homegrown grain for livestock rations. Premixes were concentrated additives for use in combination with bulk grain and a protein source, such as soybean meal, and were sold to commercial animal producers and to other feed mill operators for mixing with bulk grains and proteins. Milk replacers were sold to commercial livestock producers to meet the nutritional needs of young animals. Finally, ingredient merchandising was performed that had led to significant cost savings for its feed mills and cooperatives.

Barriers to entry in U.S. feed manufacturing were low and the industry was very fragmented. Lifestyle animal products were typically purchased on trademarked names and Land O' Lakes employed production specialists that helped make recommendations about feed selection and nutrition. These specialists were important sources of information and served as a link between the producer, the local cooperative, and Land O' Lakes.

Swine Production

Land O' Lakes had a relatively small swine business unit that owned approximately 65,000 sows at owned and leased facilities. In comparison, the leader, Smithfield Foods owned about 744,000 sows and there were almost six million sows in the United States. The dramatic volatility in the live hog market in 1998, 1999, and 2000, where selling prices were well below production costs, resulted in large losses.

Layers (MoArk LLC)

In January 2000, Land O' Lakes formed MoArk LLC, a joint venture of which it owned 50%, with Osborne Investments, LLC, to produce and market eggs and egg products. MoArk produced and marketed shell eggs and egg products that were sold at retail and wholesale level for consumer and industrial use throughout the United States. In 2002, MoArk marketed and produced about 740 million dozen eggs annually, which made it a top-three company. The United States produced 7.2 billion dozen eggs in 2002. MoArk recently launched a high quality, all natural shell egg product marketed under the LAND O LAKES brand name in a Northeast market.

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Seed Division

The Seed division of Land O' Lakes marketed the proprietary Croplan Genetics brand, along with third party and private label offerings. It was the fourth largest seed company in the United States. With the seed industry, Land O' Lakes' principal competitors were the top companies in the industry: DuPont (Pioneer), Monsanto and Syngenta. DuPont, clearly the leader, had sales of $2.029 billion in 2002. Monsanto was the second largest company in the industry with almost $1.6 billion in sales in 2002 followed by Syngenta with $937 million in 2002 seed sales. Land O' Lakes had $407 million in seed sales in 2002. Because of the intense concentration in the industry, Land O' Lakes was among the top four seed companies in the United States, ranking first in market share of alfalfa genetics seed. A significant distinguishing factor was that Land O' Lakes and Pioneer were the only two major seed companies that provided agronomic services to producers.

Many of the crops (e.g., corn and soybeans) planted by Land O' Lakes members had been bioengineered for tolerance to certain herbicides and pesticides. Croplan's agreements with Monsanto and Syngenta enabled it to have access to these input traits. Many of Land O' Lakes' members used their crops such as alfalfa and corn as feed inputs into dairy and meat production. Thus, Croplan's research and development focused on developing output traits that would improve a crop's feed value.

Agronomy

Agriliance was primarily a marketing and distribution alliance between Land O' Lakes and United Country Brands (owned by CHS, Inc.), and was the leading crop input marketing organization in the United States. Land O' Lakes held 50% ownership of Agriliance. It provided crop protection including herbicides and pesticides, and crop nutrients such as fertilizers and micronutrients.

Agriliance held nearly 26% of the U.S. market for crop nutrients and 19% of the market for crop protection products. Agriliance had warehouses and distribution facilities located throughout the United States with retail units in the Southeast. The company provided various services including soil testing, adjuvant and herbicide formulation, and application.

Its primary competitors were national crop nutrient distributors, such as Cargill, IMC, PCS, Agrium and Royster Clark, national crop protection product distributors, such as UAP, Helena and Wilbur-Ellis, and regional brokers and distributors. Consolidation was underway as distributors sought to expand capabilities and increase efficiencies. Wholesale agronomy customers tended to purchase products

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based upon a distributor's ability to provide ready access to product at critical times prior to, and during the growing season.
Agriliance had a distribution network that enabled it to efficiently distribute product to customers and access trained agronomists who provided advice to farmers on both agronomy and crop seed products to optimize their crop production. Agriliance's trained agronomists were a critical strength for Land O' Lakes. These individuals worked closely with the local cooperative agronomy operations and were a critical link between Land O' Lakes, the local cooperative, and its members. A goal was to build close relationships with producers that could result in new long term business for Land O' Lakes products. In addition, the agronomist provided technology advice on topics such as precision agriculture in much the way that land grant university county extension agents do for producers.

The Building of Land O' Lakes' Business Portfolio

Table 1 (dairy business) and Table 2 (agricultural supply and services business) show that mergers, acquisitions, and joint ventures played an important role in the growth of Land O' Lakes. Divestures are shown in Table 3. These strategic moves had a direct impact on the changes in Land O' Lakes' financial performance.

Land O' Lakes had collaborated with Dean Foods on several ventures. For example, they formed Dairy Marketing Alliance in 2000 with Dean Foods taking Land O' Lakes' fluid milk operations and creating value-added fluid and cultured dairy products. Land O' Lakes sold five milk-processing plants to Dean Foods. In exchange, Dean Foods gained the licensing rights to market milk, yogurt, sour cream and cottage cheese under the Land O' Lakes brand. The two firms also formed a joint venture to develop and sell convenience-oriented dairy products,

Table 1: Mergers, Acquisitions, and Joint Ventures Made by Land O' Lakes in Dairy Manufacturing, 1981 to 2001

Year	Merger, Acquisition, or Joint Venture
1981	Lake to Lake Dairy Cooperative – merger (Wisconsin)
1986	Lakeside Dairy – acquisition (South Dakota)
1997	Atlantic Dairy Cooperative – merger (Pennsylvania)
1997	Alpine Lace – acquisition
1998	Dairyman's Cooperative Creamery Association – merger (California)
1999	Swiss Valley Farms – joint venture (Iowa, Illinois)
2000	Beatrice cheese plant (California) – acquisition
2000	Madison Dairy produce Company (acquisition), $59.3 million
2001	Kraft Foods cheese plant (Melrose, MN) – acquisition
2001	Alto Dairy Cooperative – joint venture

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Table 2: Mergers, Acquisitions, and Joint Ventures Made by Land O' Lakes in Farm Supply (Feed, Seed, and Agronomy Products), 1970 to 2001

Year	Merger, Acquisition, or Joint Venture
1970	Farmers Regional Cooperative (Felco) – merger (Iowa, Minnesota)
1982	Midland Cooperatives – merger (Wisconsin, Minnesota)
1987	Cenex (now CHS Cooperatives) – agronomy joint venture
1998	Countrymark Co-op – acquisition (Indiana)
1998	GROWMARK – joint venture (Illinois, Wisconsin)
1999	CHS Cooperatives and Farmland Feed– joint venture, $91.7 million
1999	Terra, acquisition of eastern US assets, $70.7 million
2000	Agro Distribution, joint venture with CHS Cooperatives to acquire additional Terra assets, $50 million
2000	Advanta Seeds, and AgriBioTech (seed company acquisitions)
2001	Purina Mills – acquisition, $540.5 million
2001	Agriliance – joint venture (with United Country Brands), $79.5 million
2001	Novartis – joint venture (specialty seeds)

Table 3: Recent Divestitures of Assets by Land O' Lakes, 2000 to 2002

Year	Divestiture
2000	Fluid dairy assets (to Dean Foods), $112.2 million
2000	Swine business (North Carolina)
2002	Seed coating business (Idaho)
2002	Seed inoculation business (Brazil)
2002	Dairy operations (Poland)
2002	Feed operations in Mexico

including the Grip n' Go line of single-serve milk bottles. The Cheese and Protein International LLC was formed with Mitsui & Co. of Japan and included a mozzarella and whey plant in Tulare, California.

The Dairy Marketing Alliance was dissolved in July 2002 with the expansion of the relationship between Dean Foods and Land O' Lakes in which Dean Foods used Land O' Lakes' brand name nationally on a range of value-added fluid milk and cultured dairy products, and on all basic fluid dairy products. The new agreement granted perpetual, royalty-bearing national licensing rights of the Land O' Lakes brand directly to Dean Foods, and expanded the qualifying products to include value-added products such as fortified nutritional milks, aseptic products, infant formula and soy beverages.

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In 2000, Land O' Lakes completed acquisitions that totaled $101.4 million in cash outlays and divested assets that totaled $184.1 million. In 2001, Land O' Lakes acquired Purina Mills, Inc. in a $359 million cash transaction (net of cash acquired) that included $247 million for stock and acquisition costs and $112 million in debt retirement. In 2002, Land O' Lakes divested assets that totaled $22.4 million. Land O' Lakes incurred restructuring and impairment costs due to consolidation and closing of facilities that totaled $54.2 million in 2000; $3.7 million in 2001; and $31.4 million in 2002.

Financial Performance

The mergers, acquisitions and joint ventures had stretched Land O' Lakes' balance sheet in recent years (see Table 4). The Purina acquisition that had been made in part using debt also contributed to the stress.

Table 4: Summary of Financial Measures for Land O' Lakes (Land O' Lakes), 1993 to 2002

($ millions)	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Operations:										
Net sales	2,733	2,859	3,014	3,486	4,195	5,174	5,616	5,673	5,865	5,847
Net earnings	47	75	121	119	95	69	21	103	71	99
Allocated patronage refunds	41	66	104	101	84	76	35	142	71	97
Cash returned to members	40	41	46	53	59	40	49	54	47	38
Tax expense (benefit)						1.5	0.1	-12.9	-5.4	-2.2
Financial Position:										
Working capital	151	151	185	199	228	305	362	324	445	209
Investments	129	152	184	240	242	397	460	466	568	546
Plant and equipment	165	180	205	218	283	450	462	489	675	686
Total assets	866	943	1,149	1,235	1,566	2,292	2,700	2,473	3,091	3,246
Long-term debt (including capital securities)	160	155	180	212	297	547	683	663	1,147	1,007
Equities	326	353	417	480	539	781	769	805	837	912

The Current Situation

Land O' Lakes had been badly hurt by downturns in its swine and fertilizer segments. Similar downturns had contributed to the bankruptcy of two other large regional cooperatives, Farmland Industries and Agway. In September 2002, the financial community pointed out that Land O' Lakes' debt was trading below par shortly after it released its quarterly earning report in July 2002. The markets judged the company's performance/outlook as neutral to not good.

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There was agreement among industry watchers that both the dairy and agricultural services businesses were going to remain under considerable pressure. Land O' Lakes was faced with the challenge of managing its debt load, sustaining growth and maintaining member enthusiasm.

Given the strong competitive threat in the dairy products market from Kraft and other players, it appeared Land O' Lakes needed to assess the growth arenas for Dean Foods as it worked on the relationship. Land O' Lakes had just opened a cheese and dairy protein ingredient plant in Tulare, California, a joint venture with Mitsui & Co. For now, it seemed that its production-base assets would allow it to grow through such joint venture initiatives.

Like other food companies such as General Mills, Land O' Lakes had restructured its portfolio by relying heavily on debt. Future profitability was tied to the cost savings that were forecasted by achieving size and scale.

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Other Information

Land O' Lakes also has a consumer website (www.landolakes.com) and a corporate website (www.landolakesinc.com) with links to its businesses and has more information on the company.

Three web links that contain useful information on cooperatives include the U.S. Department of Agriculture's Rural Business Cooperative Services (http://www.rurdev.usda.gov/rbs/pub/newpub.htm), the National Cooperative Business Association (http://www.ncba.org), and the University of Wisconsin Center for Cooperatives (http://www.wisc.edu/uwcc).

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