Organizational Innovation in Agribusiness:
Case Study Series

The Cenex – Land O' Lakes Joint Venture

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Abstract

The Cenex-Land O'Lakes joint venture is used in this case study as a model to illustrate strategic alliances among agribusiness cooperatives. The case analyzes the history of Cenex and LOL and how these two cooperatives came together to form a partnership during a period in which it was not common for cooperatives to cooperate among themselves. The formation, structure, evolution, and outlook of this joint venture are examined in order to understand the theory behind definitions and classifications of alliances, reasons why alliances are formed, and elements that make a strategic alliance successful.

THE CENEX-LAND O'LAKES JOINT VENTURE

In one form or another, speculative or reflective interest in co-operation is as old as human thought. Some of the most ancient proverbs and legends embody man's realization not only of the importance but also of the elements of cooperation.[1]

I felt small. The room was spacious. The big chairs were so comfortable that I could sleep in one of them. The aroma of coffee engulfed the bright and colorful board room and vanished through the ceiling. It made me reflect for a moment. It was hard to believe that this huge building was owned by a group of small and medium sized farmers. I was sitting in Cenex's board of directors' room waiting for Mr. David Johnson. Dave Johnson has been the president of the Cenex-Land O'Lakes (LOL) joint venture since its formation. Previously, he worked as the senior vice-president of operations for Cenex. I was happy to be able to interview him before he retired. It has been thirteen years since this alliance started and he takes considerable pride in having been part of the team that put it together.

As Dave comes in he grabs his coffee and sits down. Staring out the window he asks if I am familiar with Cenex and LOL. At the time I knew very little about the two organizations. The extent of my knowledge started and ended with the fact that they were both federated cooperatives[2] headquartered in the Twin Cities in the state of Minnesota. I respond with a tentative negative and ask him to share some of the history, culture, and purpose of the corporate parents of the joint venture.

Cenex History (1931-1986) [3]

The partnership formed by your cooperative system has grown over the years. It has changed when change was needed; it has met and overcome enormous challenges. And through it all, the bonds of this partnership have become even stronger.[4]

As Dave starts his narration he asks me to envision myself as a small Upper Midwest farmer in the early 1930s. "Putting yourself in a farmer's shoes 70 years ago is the best way to understand the evolution of Cenex"(Exhibit 1). These were tough times for agriculture and for the economy as a whole.

The economic devastation brought to rural America by the agricultural depression of the 1920s was one of the important forces that Congress considered when passing the Capper-Volstead Act in 1922.[5] With its enactment U.S. farmers were finally allowed to act collectively

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[1] Nisbet, Robert A. "Co-operation." *International Encyclopedia of Social Sciences.* Vol. 1,1968, p. 384. Cited in: Craig, John G. *The Nature of Cooperation.* New York: Black Rose, 1993, p. 23.

[2] A federated or regional cooperative is owned by smaller local multipurpose cooperatives in a specific region, these local cooperatives (first tier) are the member-owners of the federated regional cooperatives (second tier).

[3] Rickertsen, Leo N. *To Gather Together: Cenex, the First Fifty Years*. Minneapolis, Minnesota: Cooperative Printing Association, 1980; *Cenex Harvest States'* web page: http://www.cenexharveststates.com, 2000.

[4] Cenex Annual Report 1989, p. 2.

[5] The Capper-Volstead Act allowed farmers to act collectively in order to process, market, bargain, and handle their products and thus gave cooperatives limited immunity from anti-trust laws.

to gain more economic strength. Across the Upper Midwest, as oil prices continued to rise and agricultural prices could not cover farm expenses, the Farmers Union[6] stressed the importance of producer collective action and cooperatives. On January 1931, 21 local cooperatives from this trade association realized that it was time to formalize their relationship. With a total of five hundred and twenty-five dollars "Farmers Union Central Exchange, Incorporated" (later known as Cenex) was founded in St. Paul, Minnesota.

In the beginning, the main income source of Cenex was the petroleum retail business, accounting for 75 percent of sales. In spite of many obstacles created by competitors and an uninformed media, Cenex's number of owners grew to 172 affiliated companies by 1933, serving nearly 50,000 farmers in Montana, North Dakota, Wisconsin, and Minnesota. While private oil retailers and wholesalers were interested in farmers' business, Cenex focused on their unique problems and needs. This made a difference to producers who in turn spurred the cooperative's dramatic growth.

In the early forties, World War II brought increased demand for agricultural outputs and its consequent derived demand for petroleum products. During the decade of the 1940s and early 1950s, the cooperative continued to improve and augment the operations in which it had gained expertise – particularly in the petroleum business. In 1955, Cenex gained new members from the state of Washington by merging with other cooperatives in the state. By the late fifties Cenex's investments were spread through seven interregional cooperatives.[7] Scale economies advantages of these interregionals provided Cenex's members greater access to markets and services in fertilizer manufacturing, oil refining, petroleum distribution, financial assistance for farmers, and others.

As Cenex prepared to enter the tumultuous 1980s it reached $1 billion in sales. In the early 1980s, when U.S. agriculture entered the second major agricultural depression of the 20th century, not only did demand for agricultural products and supplies decrease throughout the sector, but also for Cenex. Many farmers and local cooperatives suffered financial distress. As a result, Cenex's financial situation weakened (Refer to Exhibit 2). Annual reports at the time would include statements such as,

The cooperative system is still the farmer's most reliable partner in tough economic times - the kind of times we faced when Cenex was born, and the kind of times we are facing today.[8]

By 1985 the leadership of Cenex realized it was time to consider strategic and perhaps structural changes if it wanted to remain a successful cooperative business. As the leaders examined changes, it became clear from its evolution the company's strength resided within the petroleum business unit.

[6] A trade association whose membership consisted mostly of small farmers.
[7] Interregional cooperatives (also known as third tier organizations) are specialized product or service providers owned by regional cooperatives (second tier cooperatives).
[8] Cenex Annual Report 1985, p. 2.

Land O'Lakes History (1921-1986)[9]

In many ways, LOL can be likened to a road, for it, too, is a link in the chain of passage and a connector of distant places. It binds peoples and communities together through commerce and cooperation, and it has earned a reputation for leading the way toward new frontiers.[10]

The story of Land O'Lakes (LOL) is quite different from Cenex's (Exhibit 3). LOL began as a marketer of creamery output. LOL's origin was not related to a trade association, as was the case with Farmers Union and Cenex. In the early 1900s, dairy creameries established throughout the state of Minnesota to produce butter, began to suffer financially as the United States entered a period of agricultural depression in the early 1920s. Between 1915 and 1920 the quality of cooperative creamery butter increasingly deteriorated relative to the butter of the emerging "centralizers."[11] In addition, the creameries confronted hold-up situations from dealers in the United States' East Coast and faced competitive threats of imported butter and butter substitutes.

On June 7, 1921, 350 dairy farmers - representing 320 of the 622 Minnesota cooperative creameries - came to St. Paul to attend an organizational meeting. Along with farmers, the governor of Minnesota and U.S. Department of Agriculture representatives were present to offer their support. They argued cooperation was needed among creameries to standardize and improve butter quality. The Minnesota Cooperative Creamery Association (later known as LOL) was created to achieve the production of standardized butter from the milk purchased from its members.

The leaders of the newly organized federated cooperative decided to concentrate on quality production and aggressive marketing of "sweet cream" butter - butter made from cream before it soured. Although sweet cream butter was more costly to manufacture and not as familiar to the public, it tasted better and lasted longer. The manufacturing of sweet butter made LOL a pioneer since competitors did not manufacture this type of butter at the time. The venture was perceived as a risky one by other companies because the manufacturing process was more complicated. In addition, the cost of educating the consumer about the new, higher quality butter was uncertain.

In the late twenties, LOL diversified its dairy business. As part of this strategic program, the company entered the agricultural supply business by establishing feed, seed, and other supplies departments. Diversification helped the company during the 1930s depression years, when dairy production and butter prices decreased significantly.

Like Cenex, LOL grew during the 1940s and the 1950s due to extraordinary demand during World War II and the post war expansion. In 1964, the company became a member of Central Farmers Fertilizer[12] - a large interregional phosphate and nitrogen manufacturing cooperative - and consequently, expanded its agricultural supplies business. In 1970 LOL

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9 Ruble, Kenneth D. *Farmers Make it Happen*. Chicago, IL: R. R. Donnelley & Sons Co., 1973; Ruble, Kenneth D. *Men to Remember*. Chicago, IL: R. R. Donnelley & Sons Co., 1947; *Land O' Lakes, Inc.* Web page: http://www.landolakesinc.com, 2000.

10 LOL Annual Report 1989, cover page.

11 The *centralizers* accepted cream from near and far and made it into butter at a big central factory. They came into existence after a new invention -the *hand separator*- created favorable conditions for large scale butter manufacturing. Meanwhile, small cooperative creameries were forced to accept any the butter , no matter what the quality, if they wanted to keep their members.

12 Known today as CF Industries. Cenex was also a member of this interregional cooperative.

merged with the federated Farmers Regional Cooperative (known as Felco) of Fort Dodge, Iowa. With this merger LOL became a significant provider of agricultural supplies and services in the Upper Midwest. One of its major competitors was Cenex.

But, as was the case with Cenex the agricultural recession of the early and mid 1980s also affected LOL (Exhibit 4). The 1983 Annual Report's introduction read,

It is truth not well understood nor fully appreciated outside the food production system that when agriculture is suffering, the entire nation suffers. This has always been the case, but it has become much more significant in the last decade.[13]

According to LOL's executives, the dairy operations, however, did not suffer as badly as the agricultural supplies division (known as Ag-Services). As farmers demanded fewer plant food inputs because of farmer asset liquidation and supply reducing government programs, cooperative revenues from farm inputs decreased. Many regional cooperatives found this a very challenging time and LOL also started to consider options to implement some changes in its Ag-Services division.

As Dave Johnson pointed out earlier, Cenex and LOL had fostered two distinct cooperative cultures. LOL started as a dairy cooperative and it only became an important player in the agricultural supply industry after joining CF Industries and merging with Felco. Cenex, on the other hand, started out exclusively as an input supplier with particular emphasis in petroleum. By 1980 both companies were supplying feed, seed, petroleum, pesticides, and fertilizers to local cooperatives with overlapping memberships. The next five years would lead to complex challenges and multiple interfaces. Dave suggested we focus on understanding the phosphate fertilizer manufacturing, wholesaling, and retailing industries as an example of how the next years would evolve.

The Phosphate Fertilizer Chain

Three commercial fertilizers - nitrogen, phosphate and potash - are the major source of applied plant nutrients in agricultural production. Phosphate's main role is to increase crop yields. Phosphate fertilizer production requires three individual processes: mining and crushing of phosphate rock, manufacturing and blending of phosphate fertilizer materials, and manufacturing of mixed fertilizers (Exhibit 3). Since its origin, the sub-sector has been highly concentrated with a few large companies controlling most of the first stages in the supply chain. Cenex and LOL - wholesalers of phosphate fertilizers - were integrated backwards by being member-owners of CF Industries, one of the main manufacturers of fertilizers in the U.S. Farmland Industries and Cargill, Inc. were the other two main wholesale and retail competitors in the Upper Midwest, both vertically integrated backward into manufacturing.

More than 1,000 agricultural input supply retailers existed in Minnesota and Wisconsin in the mid-eighties. These retailers had high fixed assets - about 40 percent of total investments - allocated to their fertilizer operations. Fertilizers also represented a large portion of their purchases - between 30 and 34 percent. In addition, they usually owned shares in more than one regional cooperative. Therefore, Cenex, LOL, and their rivals had to compete either by offering the lowest prices or offering the best services, and sometimes both.

[13] LOL Annual Report 1983, p. 1.

Vertically integrated wholesalers, such as Cenex and LOL, also had made large investments in fixed assets, some of which were highly specific. Capital investments were highest at the mining level decreasing with each successive stage in the chain. The diverse locations of basic raw materials forced companies to develop superior distribution systems in order to generate volume and profits from their operations. Over 70 percent of the phosphate rock mining and manufacturing, for example, was done in Florida. In order for phosphate fertilizer to reach the Upper Midwest, a combination of truck, rail, and barge transportation was used. This complex logistics system included warehouses and other shipping, handling, and storage costs. CF Industries, for instance, had considerable resources invested in its distribution system, which allowed the company to be able to compete in the wholesale industry. Companies which did not invest in the distribution system lagged behind and as they lost competitive advantage they exited the industry.

Fertilizer consumption from 1960 to 1981 increased by 217 percent (Exhibit 6). During this period of growth, incumbent companies like CF Industries invested heavily and others eagerly entered this profitable industry. As agriculture entered a recession in the early eighties, the demand for phosphate fertilizer began to shrink. Between 1981 and 1983, phosphate fertilizer consumption dropped by almost 25 percent before leveling off and then dropping again in 1987 to its lowest level of the decade.

This decrease in phosphate demand in the United States was caused mainly by three government programs: the Payment in Kind Program (PIK), the Conservation Reserve Program (CRP), and the Acreage Reduction Plan (ARP). Millions of crop acres were idled based on these programs. From 1980 to 1988, commercial fertilizer demand had a negative annual growth rate of 1.5 percent resulting from these federal programs and the agricultural recession. Consequently, all levels in the phosphate fertilizer chain faced excess capacity.

The saturated domestic market made companies turn their focus to export markets. World demand was expanding and the U.S. phosphate manufacturing industry took advantage of this by increasing its world market share from 37 percent in 1975 to 57 percent in 1982. But as Russia and Morocco expanded their phosphate production, world markets also experienced excess supply by the mid-eighties. Decreased demand in the domestic market and excess supply in domestic and foreign markets resulted in strong rivalry among manufacturing and wholesale companies such as Cenex, LOL, Farmland Industries, and Cargill.

Cenex-Land O'Lakes Formation

Dave stares at the ceiling as if being inspired by something. This was the story he really wanted to share with me - the formation of the Cenex-LOL joint venture. Farmers usually favor cooperation more strongly during tough economic times. Periods of farm distress also put pressure on cooperatives, which brought Cenex and LOL together as partners in the joint venture. Joint ventures were still not popular among cooperatives during the early eighties. In fact, after this alliance was formed Dave was invited to speak about the Cenex-LOL joint venture at numerous seminars involving strategy and structure. The slogan of the Cenex-LOL joint venture - *A new spirit of cooperation* - was beginning to spread to other agricultural cooperatives. The Cenex-LOL joint venture did not just teach the benefits of cooperation to its parent companies. It also taught cooperatives in general that it was time for cooperatives to cooperate.

Cenex and LOL had been competitors for a long time. Both companies were also owners of the interregional cooperative, CF Industries - a manufacturer of fertilizers. Duane Halverson, vice-president of the LOL's ag-services division (Exhibit 7), and David Johnson, senior vice-president for Cenex's agronomy division (Exhibit 8), sat on the board of directors of CF Industries. As Cenex struggled during the 1980s it seriously considered forming some type of cooperative agreement with LOL. Dave thought his personal relationship with Duane would be crucial in the deal with LOL. As Dave mentioned, "you need to have faith, trust, and confidence in one another if you want to develop any type of cooperation."

Duane recognized that in order for LOL's Ag-Services division to remain competitive, some type of restructuring needed to be implemented. At the same time, the member-owners were putting pressure on both regional cooperatives to initiate more constructive relationships. Local cooperatives realized that both sides were spending too many resources competing against each other, which led to compressed margins. Cenex and LOL operated mainly in the Upper Midwest and had overlapping trading territories primarily in Minnesota and Wisconsin.

When Cenex finally approached LOL in 1985, the two companies discussed three different types of cooperative agreements. The first alternative was a merger, which was favored by LOL. However, Cenex opposed this option for two reasons: concerns about its petroleum business and conflicts arising from their cultural differences. Cenex feared that if a merger were to occur, its petroleum operations would lose priority. This fear was based on the assumption that LOL would control most management positions due to its larger size. Furthermore, Cenex members came from a small farm - policy oriented - background and they were not familiar with the more politically independent and pragmatic LOL. There also appeared to be little chemistry among the two boards of directors.

The second alternative considered was a buy-sell agreement. Cenex would buy the petroleum and possibly the agronomy businesses and sell its feed and seed businesses to LOL. It was clear to both companies that Cenex possessed a competitive advantage in the petroleum business and that LOL was stronger in the feed and seed businesses. Furthermore, the transfer of the petroleum and feed and seed divisions among the two would allow each company to get similar- sized businesses. However, both companies were similar in size and strength in the agronomy operations, which created mutual hesitation. Neither Cenex nor LOL wanted to hand its agronomy operations to the other. This resistance was mainly the result of tensions created by a high degree of rivalry in previous years among the two cooperatives.

The third analyzed option was to form a joint venture primarily in agronomy. This alternative was chosen. In April 1986, Cenex and LOL finally began to hold formal meetings. At that time, LOL was also in merger talks with Farmland Industries. However, Cenex succeeded in proving to LOL that a partnership with them made more economic sense than a merger with Farmland.

The Cenex-LOL's Structure

Everything should be made as simple as possible, but not simpler.
Albert Einstein

The two chief executive officers - Ralph Hofstad (LOL) and Darrell Moseson (Cenex) - were not personally involved in the negotiations. Nevertheless, they both supported the idea of forming a joint venture. A negotiating team was set up to study the economic feasibility of this new enterprise consisting of Noel Estenson and David Johnson, both vice-presidents for Cenex, and Jack Gherty and Duane Halverson, both vice-presidents for LOL. Maury Miller (Cenex) and Jim Wahrenbrock (LOL) were also involved as facilitators. The role of these facilitators was critical because they helped in deciding the top positions, which had to be assigned to the other four negotiators. It was crucial that top managers were satisfied with their new positions or else the deal would face an uphill battle. Once this was done, the group worked hard towards developing relationships among themselves. They learned to work as a team and value the positives of cooperation.

The structure of the joint venture was prepared by Jack Gherty and Maury Miller. The structure was quite simple but mutually attractive. Their proposal was based on the cross-leasing of assets. Since Cenex had the expertise in the petroleum business, Cenex leased LOL's petroleum business. Noel Estenson was named head of this division. Later he would become Cenex's president and CEO after Darrel Moseson retired. On the other hand, LOL with its expertise in feed and seed, leased Cenex's feed and seed businesses. Duane Halverson from LOL led the feed and seed division under the supervision of LOL's president, Ralph Hofstad, who upon retirement was succeeded by Jack Gherty. A new entity - the Cenex-LOL Agronomy Company - was responsible for the fertilizer and chemical operations. This entity was owned 50 percent by LOL and 50 percent by Cenex. Dave Johnson was named president and CEO (Exhibit 9).

The feed and seed assets were valued on a percentage of activity basis. The value of petroleum activities were more difficult to measure in a simple percentage basis, so Cenex agreed to offer a fixed rate in the petroleum lease. A three-year transition period was established. After this period, Cenex would buy LOL's assets in petroleum and LOL would buy Cenex's assets in feed and seed. Therefore, in 1990, all members in feed and seed became affiliated with LOL and every association in petroleum became sole members of Cenex. During the cross-leasing period, patronage refunds[14] came from the leasing parent company.

A non-compete clause was added to the contract, which prevented either company from competing in the same business in the same geographic area covered by the joint venture. A termination clause was also included, if one company wanted to buy the other's part it had to first establish a bidding price. This price automatically became the one the company willing to buy should accept as the price to sell its part. In addition, if one company wanted to leave the joint venture, it had to first offer its part to the other partner. This termination clause was meticulously prepared to prevent the dissolution of the partnership.

From a local cooperative operating point of view, every ton of fertilizer or pound of pesticide purchased was bought half from Cenex and half from LOL. Member-owners received half their patronage from each cooperative, which meant that their membership was evenly split between Cenex and LOL. The ownership in CF Industries was also divided evenly among the two cooperatives. During the first year, any reductions in costs were equally shared among both companies. In this way the operating managers had every incentive to rapidly eliminate unnecessary assets and improve coordination from the very beginning.

The Cenex-LOL Agronomy Company had its own board of directors and was referred to as an executive management council. The two presidents and the two chief financial officers from the parent companies served on this four-member board. The position of chairman was

[14] Patronage refunds are the allocations from a cooperative's earnings that are distributed to the member-owners based on each member's usage in the cooperative. The refunds are either made in cash or are allocated under each member's account for future payment.

alternated on an annual basis between the two presidents. Additionally, although not written down, it was understood that any capital investment had to be approved by the two presidents and their respective board of directors first.

Communications with Members and Employees

Communicate, communicate, communicate, and then communicate some more.[15]

This complex joint venture structure affected many stakeholders. Communicating with them was determined to be of critical importance. The marketing and communications division of Cenex - headed by Maury Miller - was charged with overall coordination of this undertaking. There were 1,200 affiliated cooperatives at the time the joint venture formed. Communications with member associations began before the voting took place. Even though from an operating standpoint the three divisions - agronomy, petroleum, and feed and seed - were independent entities, the member owners thought Cenex and LOL were merging. The marketing department attempted to portray a unified image with a team approach to the country. This unified image was enhanced once joint publications began in November of 1987.

Many meetings of employees and member-owners were organized. When communicating with members, there was a concentrated effort to decrease employees' uncertainty in the transition period. Memos and letters were constantly distributed to keep everyone informed.

It was agreed that the Cenex-LOL agronomy company would move into the Cenex building, which was only 30 percent occupied. When employees from LOL moved into the new office for the first time, small details had been taken care of. Dave felt enthusiastic about discussing these details. The sign outside the building already read: *Cenex-Land O'Lakes*. There were pins and pens placed on the desks of the employees that also read *Cenex-Land O'Lakes*. Numerous individual and group personnel meetings were again held to review information and training procedures. There was a strong commitment to help employees feel comfortable. The CEO of Cenex personally welcomed each employee as they arrived at the building on the first morning.

Employees

The first difficult hurdle is to shift from negotiation to collaboration.[16]

With overlapping operations layoffs were inevitable. Combining corporate staff alone would create a seven million dollar incremental savings per year. Almost half the people in the agricultural supply operations were laid off. Employees offered employment in the new venture were identified during the negotiations period and those that left did so within the first six months. The negotiators were concerned about the decrease in productivity caused by employees' anxiety and uncertainty during the period of adaptation. Therefore they decide to move fast.

For the people whose skills were no longer needed or were duplicated, fair severance plans were offered. Employees who were close to retirement opted for early retirement benefits.

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[15] GE Capital's philosophy used for their successful mergers and acquisitions.

[16] Doz, Yves L. and Gary Hamel. *Alliance Advantage: The Art of Creating Value through Partnering.* Boston, Massachusetts: Harvard Business School Press, 1998, p. 162.

Employees who left the companies, regardless of which parent company they came from, were all laid off under a consistent plan. There was also an outplacement counseling service available.

Before the joint venture, Cenex and LOL had two different benefit plans. A new benefit plan was developed and adopted in 1988 for the joint venture employees. This plan attempted to combine the positive aspects from both companies' previous arrangements.

Employees from the petroleum and feed and seed operations were treated differently due to the cross-lease agreement among Cenex and LOL. In petroleum, LOL's employees were leased to Cenex for the first three years during the cross-lease agreement. After the transition period, these employees became Cenex's employees. The same mechanism was used for the feed and seed operation employees who were leased from Cenex to LOL.

January 1, 1987 was a historical day. According to the negotiators, a similar spirit of cooperation that brought farmers together in the early 1900s seemed present when the alliance was formalized. The Cenex-LOL joint venture was finally a reality. A reality that set a new example for farmers as well as agricultural cooperatives.

Cenex-LOL Evolution

The key to longevity and accident avoidance, is learning and adjustment, first to each other, then to changed circumstances, if required.[17]

According to Dave, it was the negotiators' intention to make the joint venture a long-term commitment. They strongly believed in the potential success of this alliance and became deeply involved. They did not just commit their companies, but themselves. A strong sense of teamwork was developed in those few intense negotiating months. The success of this deal was seen by each as a personal achievement and responsibility. They wanted to make things right for the farmers and their members associations.

Soon after the joint venture was established the two CEOs retired. Noel Estenson assumed the CEO position at Cenex replacing Darrell Mosesson and Jack Gherty replaced Ralph Holfstad as CEO of LOL. Meanwhile, their personal relationship helped increase the level of trust among the two partner companies. I could perceive the personal commitment Dave was talking about as he narrated this whole story. It was somehow visible through his words.

Once the joint venture was initiated, it was clear that the two companies were culturally different in many organizational aspects. In addition, both cooperatives came from different ideological backgrounds. However, even though the structural and cultural factors among Cenex and LOL differed, the two federated cooperatives were alike in one important aspect. They both wanted to offer the best services to their member-customers (Exhibit 10). This similarity served as a bridge in blending the cultures and different operating practices of the two companies.

Cenex and LOL were not directly involved in the operations of the new agronomy company. Cenex-LOL actually developed its own culture and its own identity through time. The executive management council met once a month with executives from each division. These meetings were not for policy purposes, but to share the advances and challenges in the joint venture. Seldom did anyone miss these meetings.

Dave considered the first year a real success. More than $17 million in savings were realized - well above the projected $10 million. Additionally, substantial gains were made in market share. In fertilizer, for example, although industry demand was down by five percent,

[17] Doz and Hamel, 1998, p. 170.

Cenex-LOL was able to increase its market share by one percent to 23.4 percent. Crop protection market share grew by 3 percent to 25.4 percent. Increasing market share was one of the major purposes of forming the partnership. As the two companies combined operations and eliminated excess duplication, the result was increased operational efficiency. In addition, the unification of operations in agronomy gave Cenex-LOL a 38 percent ownership in CF Industries. Increased control in CF Industries, a wholesaler of fertilizers, expanded Cenex and LOL's influence in the supply chain as retail players. Furthermore, local cooperatives, which put pressure on Cenex and LOL on forming the joint venture, were motivated to aggressively increase sales in the country and ensure the success of the alliance.

The feed, seed, and petroleum businesses also performed well during the first three years when the cross-leasing agreement was in effect. Sales revenues grew in each of these areas. In 1990, Cenex bought all of LOL's assets in petroleum and LOL bought all of Cenex's assets in feed and seed. The joint venture then legally became the Cenex-LOL Agronomy Company.

Several advances took place in agronomy during the company's evolution. For example, in 1987, Ag Agency - an insurance joint venture with Cenex-LOL and Mutual Service Insurance that provided low cost insurance to members - was created. In 1988, the Crop Production Specialist Program (CPS) was installed. The Agri Source information system was established in early 1988. By 1990, Cenex-LOL was the dominant supplier in its trade area. With increased environmental regulations, the company also focused on environmental stewardship by introducing training programs for the safe handling of crop protection products and plant food. In the nineties, the company embraced precision agriculture and declared it the key to future success. The company continued to expand throughout the decade. In 1995, the grand opening of Imperial Inc.- a state of the art formulator of crop protection products in Hampton, Iowa - took place. Throughout the late eighties and into the nineties, the agronomy company performed above industry averages in terms of sales and net earnings.

Ten years after the joint venture was consummated accumulated sales totaled $38 billion, net earnings $917 million, and cash returns to members $ 495.5 million. Crop protection product movement had tripled and plant food volume reached five million tons for the first time since the joint venture's origin.

In recent years Cenex-LOL has displayed an aggressive growth strategy. The addition of Countrymark - an Eastern Corn-belt federated regional cooperative - was followed by the acquisition in 1999 of Terra Industries, Inc. from Sioux City, Iowa. In this acquisition, Cenex-LOL gained control of an expansive network of farm supply businesses, which included 400 farm supply retail facilities and a seed and chemical distribution system that covered 31 states in the U.S. and Canada. The acquisition also brought $1 billion in annual crop protection sales, $100 million in seed sales, and 2.5 million tons sold per year of fertilizer. These additions coincided with an increase in ownership of CF Industries to 55 percent.[18]

The year 2000 started with another major change in the joint venture. On February 3, 2000 Cenex-LOL as a legal entity was terminated. A new organization - Agriliance, LLC - was created by Cenex Harvest States, LOL, and Farmland Industries to replace the previous partnership. This new strategic alliance is owned 50 percent by LOL and 50 percent by Cenex Harvest States - Farmland, LLC.[19]

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[18] Membership size in a cooperative is proportional to usage.

[19] Farmland Industries and Cenex Harvest States each own 25 percent through a limited liability company (LLC) established among these two cooperatives. Farmland entered the alliance in anticipation of a proposed merger with Cenex Harvest States in 1999, which was not consummated.

The agronomy marketing joint venture sales offices are located in St. Paul, Minnesota and Kansas City, Missouri. The joint venture markets crop nutrients, crop protection products, seed, information management, and crop technical services to farmers and ranchers in 50 U.S. states, Canada, and Mexico.[20] The new joint venture is headed by co-presidents Stan Riemann, from Farmland, and Al Giese, president of Cenex-LOL. The board of directors – a management board set up using the same structure as the previous one - is made up of four members, two from LOL, one from Farmland Industries and one from Cenex-Harvest States. Representation in the board of directors is therefore based on the ownership held by the three parent companies.

With Farmland's addition, the new joint venture becomes the largest North American crop input provider, marketing approximately 15 million tons of crop nutrients, $1.7 billion sales of crop protection products, and $300 million of Croplan Genetics seed through a joint venture between WILFARM[21] and LOL.

Outlook for a Cooperative-Cooperative Joint Venture

A successful alliance is one in which partners achieve their expected goals. Cenex and LOL formed the joint venture in order to increase their competitive advantage in the Upper Midwest region as suppliers of local cooperatives. Sales and investments in Cenex-LOL consistently grew throughout its evolution (Exhibit 11). The agronomy company increased its market share in the region and became the major player. The net profit margin however varied throughout the evolution of the joint venture. Net earnings as a percentage of sales peaked in 1995 and then decreased.

Cenex-LOL is a joint venture among cooperatives. As a cooperative-cooperative alliance its goal goes beyond increasing the company's own financial performance. Cenex-LOL had a broad scope for optimization - to maximize the overall performance of its farm-cooperative system. The alliance's main purpose was to improve the profitability of the farms in the Upper Midwest by offering the competitive services and contributing power through a horizontally and vertically coordinated system to its member-owners. Therefore, the strength of this partnership was built on the parent companies agreement regarding members' satisfaction. The fact that Cenex and LOL continuously invested in the joint venture throughout its evolution, illustrates their belief in the alliance achieving members' gratification.

One consistent issue of disagreement between Cenex and LOL was the strategic appropriateness and value of merging the two companies. LOL viewed a merger with Cenex after the joint venture was formed as potentially valuable and saw the alliance as a transition towards unification. However, Cenex's strategic direction was best served by limiting their relationship to the joint venture.

In 1998, Cenex merged with Harvest States, a Farmers Union in origin grain cooperative. That same year, Cenex also formed a joint venture in petroleum, Country Energy LLC, with Farmland Industries - Cenex-LOL's long time competitor (Exhibit 1). LOL proceeded with its growth strategy by merging with Dairyman's Cooperative Creamery Association and acquiring Countrymark Co-op that same year (Exhibit 2). These changes created some uncertainty in the relationship between the partners.

[20] In the U.S. most of the business is concentrated in the Midwest and in the western states. In Canada the businesses are run by Agro Distribution of Canada, which was part of former Terra Industries retail facilities.
[21] WILFARM is a joint venture between Farmland Industries and Wilbur-Ellis that distributes ag-chemicals.

As time passed, the partners developed different strategies. Furthermore, the U.S. farm economy was hit by a new recession in the late nineties. Consequently, cooperatives are forced to move fast and create critical mass in order to compete in this new environment. As Dave reflected on the joint venture's successful evolution he wondered how his successors would meet the needs of their members.

Questions

1. Is the Cenex-LOL joint venture a strategic alliance? If so, what type?
2. Why was the Cenex-LOL joint venture formed?
3. Why/how was this joint venture a successful alliance?

Appendix

Exhibits

Exhibit 1

Evolution of Cenex's Growth

Years	Mergers and Acquisitions	Interregionals	Alliances	Other	Exits
1931/1940		• National Cooperatives (later named Universal Cooperatives) organized. Cenex becomes stockholder in this interregional.		•Rural delivery of oil products begin. •Farm Machinery Dept. is added. Cenex shares with National Cooperatives the responsibility and distribution of the CO-OP tractor, which outdated all existing designs. •Cenex Finance Association is established. •The Cenex Agency is formed.	
1941/1950	· **South Dakota cooperators join Cenex, extending the Cenex's** influence to 5 states. • The Farmers Union Transportation Company is added to Cenex. •An oil refinery at Laurel, Montana is purchased.	•The Globe Refinery at McPherson, Kansas, is purchased by the National Cooperative Refinery Association (NCRA). Cenex owns one-third of NCRA. •The National Farm Machinery Cooperative, an interregional cooperative in hardware, is created by Cenex and other regionals. •Cenex enters the cedar shingle business by forming an interregional with other cooperatives, the International Lumbering Association, Ltd. of Vancouver, British Columbia. •Cenex enters the feed, plant food, and seed business through the Northwest Cooperative Mills interregional coop. •Central Farmers Fertilizer (CF Industries) is formed. Cenex becomes major stockholder.		•Cenex begins drilling for oil in Wyoming.	•The CO-OP tractor production is stopped. •Grocery Dept. established in 1942 is liquidated in 1949. •The International Lumber Association and cedar shingle business is liquidated.
1951/1960	•Members from the state of Washington join Cenex.			•Cenex Service Company is established. •Cenex builds new four-story office building in St. Paul, MN. •A 424-mile petroleum products pipeline is completed.	•Cenex writes off its investment in the National Farm Machinery Coop. Other investments in oil also terminated.

Evolution of Cenex's Growth (cont.)

Years	Mergers and Acquisitions	Interregionals	Alliances	Other	Exits
1961/1970	•Cenex purchases 7 seed plants in Sioux Fall, South Dakota.			•Cenex opens feed mill in Columbus, Wisconsin.	
1971/1980	•Sixty local cooperatives in the Pacific Northwest joins Cenex. •Cenex acquires Northern Cooperative Services of Wadena, Minnesota, a transportation company. •Utah Cooperative Association (13 local coops) join Cenex. •Pacific Supply Coops (67 local coops from Washington, Oregon and Idaho) join Cenex			•Centrol, a new computerized management service is introduced.	
1981/1990	•Solar Gas is purchased. Puts Cenex among top 10 propane suppliers in US. •Cenex purchases Idah –Best, a regional supply coop based in Twin Falls, Idaho. •Cenex acquires Western Farmers Association, based in Seattle, Washington and becomes largest coop supplier in the Pacific Northwest.		•Cenex and LOL form the Cenex-LOL agronomy joint venture.		
1991/2001	•Cenex merges with Harvest States. New name adopted: Cenex Harvest States (CHS). · **Cenex-LOL Agronomy company acquires Terra Distribution.** •CHS aquires Sparta Foods from New Brighton, Minnesota and Phoenix, Arizona, a regional market leader in production and distribution of tortillas and value-added tortilla products. •CHS acquires Bec-Lin of Perham, Inc. a privately owned Minnesota based company in the tortilla and lefse businesses. •CHS acquires Rodriguez Festive Foods, Inc., a Fort Worth, Texas.	•Farmland Industries and the National Cooperative Refinery Association, of which CHS owns 75 percent, form the Cooperative Refining, LLC.	•Cenex forms Triton Tire and Battery, LLC with Farmland and Universal Cooperatives. •CHS forms Country Energy, LLC with Farmland Industries. •Agriliance, LLC, the largest North America's crop input supplier, is formed between CHS, LOL and Farmland Industries. •CHS forms an alliance with Cargill and Dupont, Rooster.com, a comprehensive web-based marketplace. •Pradium.com, an alliance by CHS, ADM, Cargill, DuPont, and Louis Dreyfus formed. •Rooster.com and Pradium.com announce merger.		•Cooperative Refining, LLC is terminated in 2000.

Exhibit 2

Cenex's Financial Highlights before Forming the Joint Venture

(All in million dollars except ratios)

	1979	1980	1981	1982	1983	1984	1985	1986
Gross Sales	1,044	1,210	1,326	1,471	1,409	1,488	1,376	1,093
Net Income (loss) before taxes and before patronage refunds	34	33	29	16	(3)	6	1	(12)
Working Capital	132	174	169	138	126	115	94	87
Net Profit Margin [1] (%)	3.3	2.8	3.6	1.1	-	.4	< .01	-
Return on Equity [2] (%)	12.2	12.29	10.11	5.2	(.2)	2	.4	(4.13)

1. Net Profit Margin represents the net income as a percentage of sales.
   Net profit margin = Net Income before taxes and patronage refunds / Gross Sales
   Note: this ratio is not calculated when there is a loss
2. Return on Equity = Net Income before taxes and patronage refunds / Annual Average Equity

Exhibit 3
Evolution of LOL's Growth

Years	Mergers and Acquisitions	Interregionals	Alliances	Other	Exits
1921/1940	•LOL's launches first major effort to grade and market cheese by merging with 3 large cheese coops that operate 95 cheese factories			• LOL diversifies into egg and poultry businesses. •The Agricultural Services Division is established to provide supplies to farmers. •LOL opens first milk drying plant.	
1941/1950				•LOL becomes US's largest producer of dried milk powder. •LOL enters ice cream and fluid milk markets. •LOL develops world's first successful milk replacement, a dry meal for nursing calves.	
1951/1960	•LOL develops ice cream line by acquiring Bridgeman Creameries, a chain of soda-grills in Minnesota and Wisconsin, and the operator of fluid milk businesses in North Dakota and Minnesota.			•Expansion into three turkey processing plants takes place. •Many dairy farmers become direct members of LOL as the coop expands role from butter marketer to butter manufacturer.	
1961/1970	•LOL purchases Dairy Belt Cheese and Butter Co. and Spencer Milk Products Co. to increase cheese production in Wisconsin. •LOL merges with Dairy Maid Products Coop of Eau Claire, Wisconsin - one of its largest dairy mergers up to date. •LOL increases supply operations by merging with Felco, a regional coop from Iowa.	•LOL becomes a member of Central Farmers Fertilizer Co (CF Industries).			
1971/1980	•LOL enters red meat business by acquiring Spencer Beef, US's 17th largest meatpacker.		•LOL begins soybean processing in conjunction with Dawson Mills. •The Cenex-LOL joint venture is formed.	•LOL enters margarine business. •Answer Farm, a 535-acre agricultural research facility, opens near fort Dodge, Iowa.	

Evolution of LOL's Growth (cont)

Years	Mergers and Acquisitions	Interregionals	Alliances	Other	Exits
1981/1990	•LOL merges with Lake to Lake Coop, a Wisconsin-based cheese coop with strong consumer presence in California. •LOL merges with Midland Coop, a Minneapolis ag-supply coop. •LOL acquires Lakeside Dairy from Sioux Falls, South Dakota.			•LOL moves to new corporate offices in Arden Hills, Minnesota with facilities for research, testing, sales and training.	•LOL exits turkey and value-added meat businesses.
1991/2001	•LOL merges with Atlantic Dairy Coop of Carlisle, Pennsylvania. •LOL purchases Alpine Lace, a popular low-fat deli cheese marketer. •LOL merges with Dairyman's Coop Creamery Association of Tulare, California. •LOL acquires Elm Grove Dairy, which manufactures private label and branded yogurt and sour cream products in the Upper Midwest. •LOL acquires Countrymark, a regional ag-supply and grain marketing coop in Indiana. •Cenex-LOL Agronomy company acquires Terra Distribution •LOL acquires Madison Dairy Produce Co., the largest butter production facility in the Midwest located in Wisconsin. •LOL's seed division acquires Hytest crop brand from AgriBioTech to become part of LOL's Cropland Genetics. •LOL acquires cheese plant in Gustine, California from the Beatrice Group.		•LOL forms a feed and petroleum joint venture with Growmark, a regional coop from Illinois. •LOL and E-Markets form SOAR21, an internet-based seed ordering system alliance. •LOL forms alliance in the egg business with Moark, LLC, US's 7th largest egg producer/marketer. •LOL establishes a dairy foods joint venture with Mitsui and Co, Ltd. based in Tokyo, in California's Central Valley. •LOL forms SOYGENETICS, LLC, a new soybean research company in Indiana, with Limagrain Genetics and FFR Coop. •Agriliance, LLC is formed between CHS, LOL and Farmland, North America's largest crop input supplier. •LOL forms supply chain alliance with General Mills to engage in joint purchasing and refrigerated distribution activities utilizing web-based technologies. •LOL forms alliance with General Mills, The Pillsbury Co, Graphic Packaging Corp., and Fort James Corp., creating an internet-based freight and logistics exchange. •LOL and Dean Foods Co. form joint venture to market and license	•First overseas manufacturing in Poland begins.	

			certain value-added fluid and cultured dairy products. •LOL and Farmland establish the LOL-Farmland, LLC, a 50-50 joint venture consolidating the feed businesses of both companies. •Dairy.com, an online vertical exchange company serving the entire US dairy segment is formed between LOL, Dairy Farmers of America, The Dannon Co., Dreyer's Grand Ice Cream, Kraft Foods, Leprino Foods, Schreiber Foods, and Suiza Foods. •Dairy.com merges with INCZinc Technologies Corporation forming Momentx, to establish a business-to-business replenishment e-market and supply chain solution for the food and beverage industry. •LOL forms joint venture with Bongrain S.A. in aseptic (sterile-packaged) products. •LOL and Dairy Farmers of America form Melrose Dairy Proteins, LLC, a joint venture that will own and operate a cheese plant in Melrose, Minnesota. •LOL forms Marketing Agency in Common (MAC), a cheese marketing joint venture, with Alto Dairy Coop.		

Exhibit 4

LOL's Financial Highlights before Forming the Joint Venture

(All in million dollars except ratios)

	1979	1980	1981	1982	1983	1984	1985	1986
Gross Sales	1,415	1,641	1,940	2,253	2,283	2,277	2,267	2,215
Net Income (loss) before taxes and before patronage refunds	35	43	(4)	(19)	10	11	12	11
Working Capital	80	92	80	104	86	74	75	71
Net Profit Margin [1] (%)	2.47	2.62	-	-	.44	.48	.53	.50
Return on Equity [2] (%)	17	22	8	1	-	4	6	8

1. Net Profit Margin represents the net income as a percentage of sales.
   Net profit margin = Net Income before taxes and patronage refunds / Gross Sales
   Note: this ratio is not calculated when there is a loss.
2. Return on Equity = Income from continuing Operations / Annual Average Equity
   Note: income from continuing operations is the net income before taxes and patronage refunds, which does not include losses accounted from discontinued operations.

Exhibit 5

Phosphate Fertilizer Supply Chain

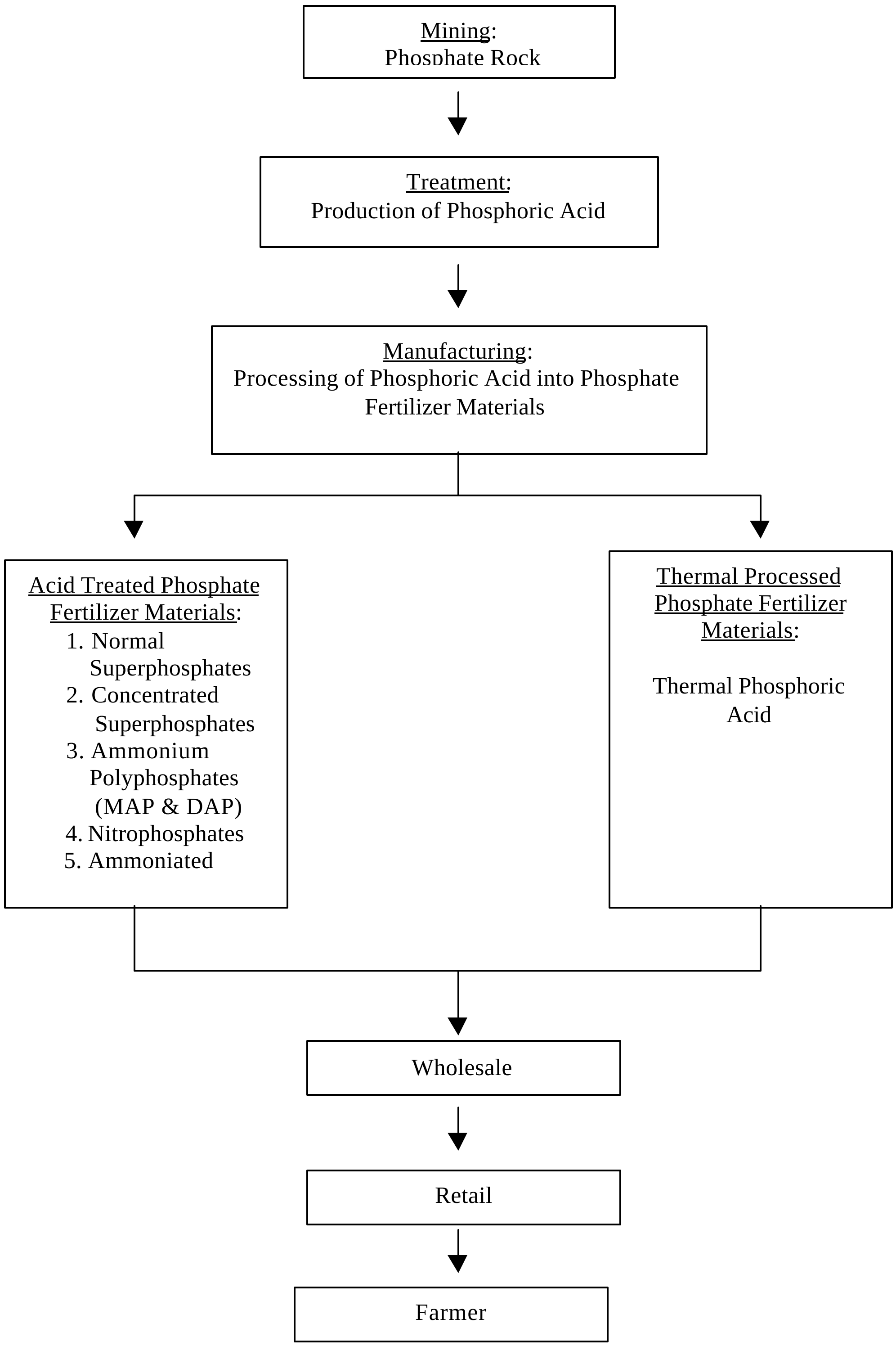

Exhibit 6

U.S. Phosphate Fertilizer Consumption, 1960-88
(Million tons)

Year	**Phosphate Use**
1960	2.6
1961	2.6
1962	2.8
1963	3.1
1964	3.4
1965	3.5
1966	3.9
1967	4.3
1968	4.5
1969	4.7
1970	4.6
1971	4.8
1972	4.9
1973	5.1
1974	5.1
1975	4.5
1976	5.2
1977	5.6
1978	5.1
1979	5.6
1980	5.4
1981	5.4
1982	4.8
1983	4.1
1984	4.9
1985	4.7
1986	4.2
1987	4.0
1988	4.1

Source: The Fertilizer Institute. *US Fertilizer Nutrient Consumption 1960-97*.
Web page: http://www.tfi.org/nutcons.htm, 2001.

Exhibit 7
LOL Governance Structure 1986

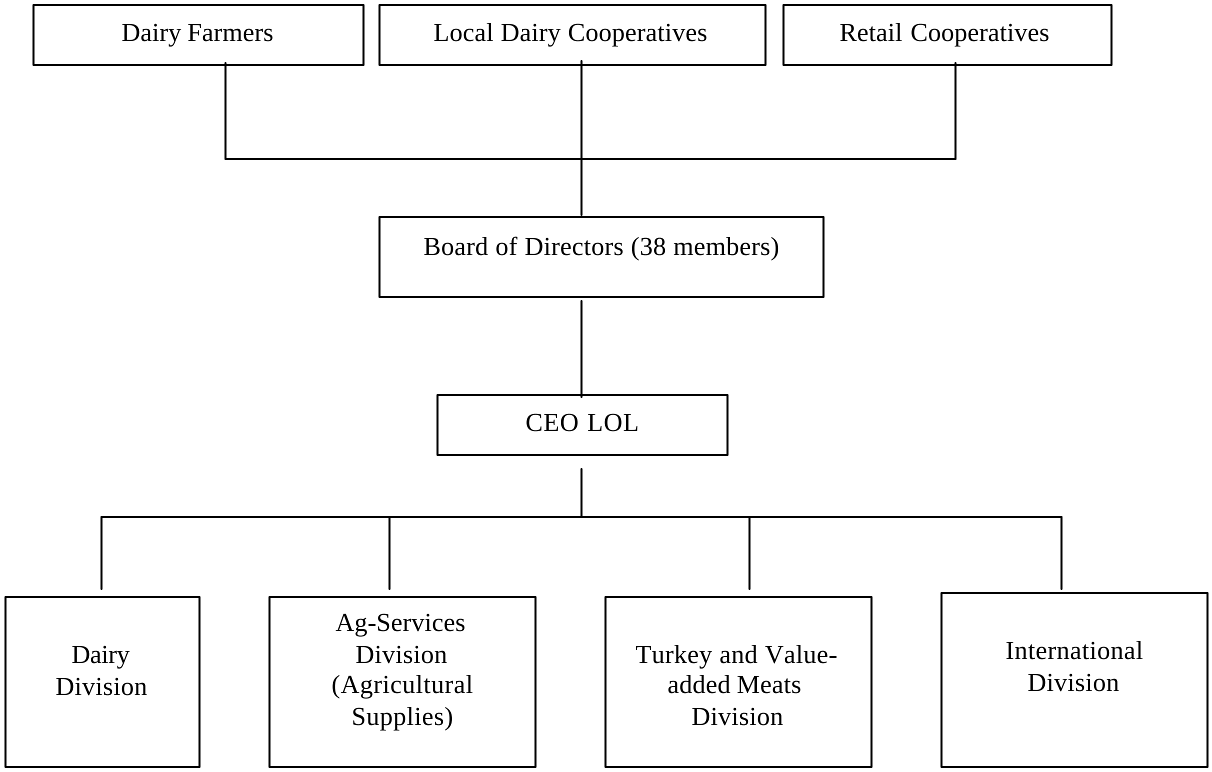

Exhibit 8
Cenex Governance Structure 1986

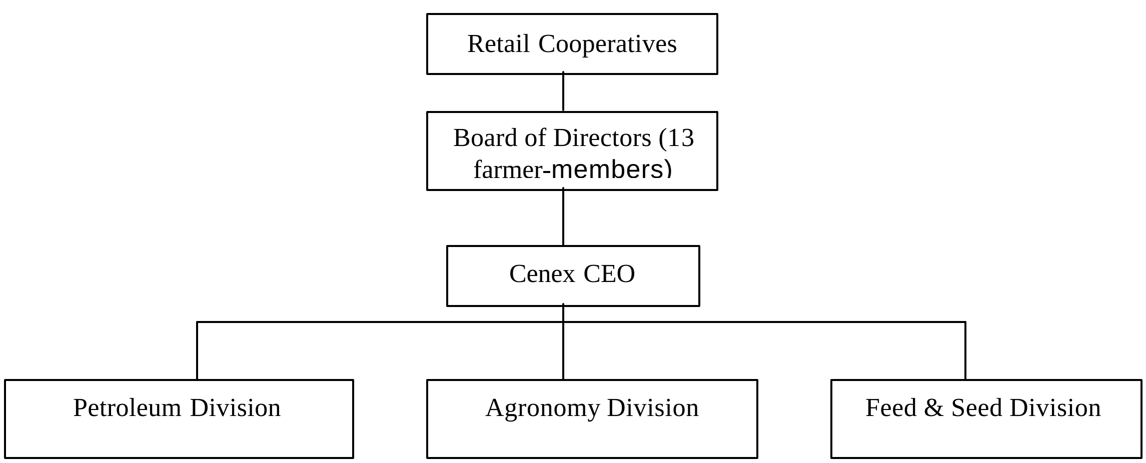

Exhibit 9

Cenex-LOL Joint Venture Structure 1987

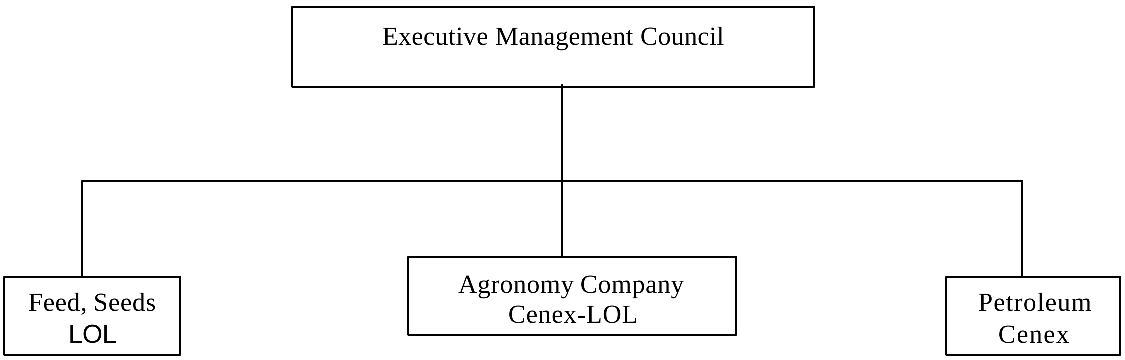

Exhibit 10

Services Provided by Cenex-Land O'Lakes During its First Three Years

Participants	Name and Description
Dairy Farmers	Q/QM (Quality/Quantity Milk): Livestock specialists trained by Ag Services and Dairy Products Division of LOL provide non-fee advice on improving quality and volume of milk. Participants must buy Ag Service specialty feeds and sell milk to LOL. "Q/QM II" provides sophisticated farm management services for milk marketing members for a fee.
Hog Producers	Swine Risk Sharing: Participating hog producers produce on contract. Ag Services provides feed, supervises production and markets hogs. Combination Weaning: product that helps prevent post-weaning lag and boosts the nursery weight of baby pigs.
Livestock Producers	Proware Feedlot Ration Manager and Monitoring Program: Software, which helps feedlot managers determine feed costs, as well as cost per pound of gain and breakeven levels. Separate versions available for dairy, hog, and cattle producers.
Crop Producers	AgriSource Information System: Provides local cooperatives with specific data on correct use of agronomic products seed information, soil testing, and the use of C-SAR (corn, soybeans, alfalfa recommendations), a crop production management software. SOILECTION System, plant food and chemical rates can be adjusted on the go, in accordance with soil types. Centrol consultants and Croplan agronomists, applicators, and specialists: Specialists stationed at local cooperatives provide expert advice on optimal combination of crop inputs for a fee. Members are also given access to electronic mail.

	Private-label brands: Including Confidence, a private-label alachlor; CLASS Herbicide line; SURE Alfalfa, a solid yielder with multiple disease resistance, among others.
Local Cooperatives	Answer Farm in Fort Dodge, Iowa: Research facilities. New swine starter line developed. Work on health-related milk replacer products. Identification of superior soybean, corn, and forage varieties. New technologies in feeds and nutrition management for dairy, beef, swine, and poultry producers. “Vista”, a joint research organization with Cal West, is one of the leading alfalfa research companies in the U.S.
Local Cooperatives	Pump24, Compass, and Cardtrol: High-tech petroleum delivery systems provide members access to fuel 24 hours. Computer system controlled by Ag Services. SCADA (Supervisory Control and Data Acquisition): Provides effective remote monitoring of pipeline operations improving efficiency and reducing costs. Gas Check Program helps local cooperatives provide safety service to customers. Custom tailored products: products such Superlube XL lubricant, designed specifically to meet grueling field conditions.
Local Cooperatives	TBA: Sale of tires, batteries, and accessories. CENCARE: Provides service training on car and truck maintenance.
Local Cooperatives	Transportation Division: Over 250 leased and owned tractors, 400 pressurized units, 300 non-pressurized units, and 75 dry vans. Movement of fertilizer, refined fuels, propane, and dry freight, which includes lubricants, feed, and seed.
Local Cooperatives	Member Services: Provides training and educational programs and seminars. Publishes Preview, Partners, Vision –three publications keeping members and cooperative managers informed. Services provided include assistance with mergers, selection, and training of management and selection and training of board of directors among local cooperatives. MAP service, which helps local cooperatives determine market share and sales potential for inputs they sell. “Centrak”, a computerized business management service, distributes software which performs accounting and logistics management functions for local cooperatives
Local Cooperatives	Local Mixing Program: Ag Services franchises feed to local cooperatives. Ag Services develops the product, supplies feed supplements and performs quality inspection. Local cooperatives purchase feed proteins and produce and distribute feed.
Local Cooperatives	Ag Agency: Joint venture between Ag Service and Mutual Service Insurance. Provides insurance to local cooperatives.
Local Cooperatives	LOL Finance Company: Lends to local cooperatives. Cenex Finance Association: Lends to local cooperatives.

Sources: Cenex and LOL Annual Reports; “Merger Negotiations Between Farmland, Cenex, and LOL,” 1989 HBS Case No. N9-590-003.

Exhibit 11

<u>Cenex-LOL Agronomy Company Sales, Profits, and Investments Evolution</u>

Year	**Sales (million dollars)**	**Net Earnings Before Taxes (million dollars)**	**Net Profit Margin[1] (%)**	**Investments (million dollars)**
1988	363	8.6	2.37	16.77
1989	377	3.5	0.93	15.86
1990	403	10.9	2.70	16.41
1991	416	16.7	4.01	15.69
1992	430	20.4	4.74	18.01
1993	478	13.5	2.82	22.00
1994	576	35.9	6.23	29.99
1995	628	76.5	12.22	37.39
1996	725	73.5	10.14	45.97
1997	787	50.4	6.42	57.61
1998	775	20.9	2.70	66.69
1999	1,023	12.4	1.21	68.57
2000[3]	857	(29.5)[4]	(3.44)[4]	N/A

1. Net Profit Margin = Net Earnings Before Taxes / Sales
2. Excess capacity in the fertilizer industry began again in the mid-nineties, which could explain the decrease in the net profit margin after 1995.
3. Numbers for the year 2000 are for Agriliance.
4. Numbers for the year 2000 may be negative because this was the year Agriliance was formed.

Sources: Cenex and LOL Annual Reports for years 1988 – 2000