



The Rocky Mountain Sugar Growers Cooperative: "Sweet" or "Sugar-Coated" Visions of the Future?

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Introduction

On a crisp, bright, late-September morning, Rick Dorn is harvesting sugarbeets near Hardin, Montana. Rick frowns as he punches the "End" button on his cell phone and tosses it to the side. His concern does not involve the skill needed to operate his John Deere tractor, nor the complicated feat of keeping his trailing, six-row sugarbeet harvester "in-the-row" while simultaneously coordinating "on-the-go" loading of the tandem-axle truck that is currently moving beside the harvester. After many years of performing this delicate balancing act, he enjoys the harvesting operations unique to sugarbeet production. Even his neck and shoulders are used to the demands of alternatively looking backward, sideways, and forward so that the harvester is properly operated. Furthermore, he has been pleased that the "early harvest" portion of this season has gone smoothly. Yields have been reasonable, and the current dry, cool conditions have made for an enjoyable start to this critical three-week harvest season.

His concern involves the just-completed cell phone call that has brought distressing news from a term-debt lender. In the aftermath of the September 11 terrorist attacks that have increased the riskiness of many venture-capital investment portfolios, the lender has informed him that they will not be able to meet their verbal commitment to supply financing to the fledgling Rocky Mountain Sugar Growers Cooperative. The financing is critical for sugarbeet producers in the Rocky Mountain states to form a cooperative and purchase the sugarbeet processing assets of The Western Sugar Company being offered for sale by Tate & Lyle North American Sugars, Inc. After more than a year of work, negotiations, number-crunching, frustration, and soul-searching, the imminent purchase has been dismantled by a five-minute phone call.

As he motions to the truck driver indicating the truck is full, he muses about the way sugarbeets are harvested. Sugarbeet harvesters are pulled by tractors that also supply hydraulic, electrical, and mechanical power. Adjustments to each of these factors are frequently required as the harvester moves through a field. The harvester operator must also orchestrate the position of trucks as they are loaded "on-the-go." In addition, the harvester operator spends more time looking backwards at the six-row "digger" (so that horizontal and vertical hydraulic adjustments

can be made to avoid slicing beets and, thus, leaving them in the field) than looking forward. He wonders if sugarbeet producers in the Rocky Mountain region, and perhaps potential term-debt lenders, are similarly spending too much time looking backward -- and, given his recent cell phone call, if it is worth spending any additional time looking ahead.

The U.S. Sugar Industry

Sugar, or sucrose, is a carbohydrate that occurs naturally in every fruit and vegetable. It is the major product of photosynthesis, the process by which plants transform solar energy into food. Sugarbeets and sugarcane are two plants that photosynthesize significant quantities of sugar. Although refined sugar from each of these plants is indistinguishable, there are important and dramatic differences in the production of sugar from these two sources.

Sugarbeet Production

Sugarbeets are similar to red beets in shape, but have a larger white root and are inedible when harvested. Approximately 35 percent of world sugar production is produced from sugarbeets. As illustrated in Exhibit 1, sugarbeet production in the United States occurs primarily in the Upper Midwest (Minnesota and North Dakota), northern Great Plains (Colorado, Montana, Nebraska, and Wyoming), Great Lakes (Michigan and Ohio), and the Far West (California, Idaho, Oregon, and Washington). More than 25 million tons of sugarbeets are produced annually. The production cycle for sugarbeets generally begins with land preparation during late summer or early fall of the previous year. Moldboard plowing or heavy disking of land that had been planted to a non-sugarbeet crop (usually malting barley, wheat, or corn) for the previous two years usually occurs at this time. Roller harrowing, land leveling, and fertilizing are typical fall tillage practices. Many irrigated producers also ridge the soil in the fall in preparation for spring planting. Sugarbeets are generally planted in early April. The selection of seed variety and fertilizer application rates is critical in determining yields and beet quality.

Throughout the spring, several mechanical cultivation passes and as many as six chemical applications are used to control weeds. Some producers hire workers to pull weeds from fields. Additional fertilizer and chemical applications are used to provide nutrients and control insects and disease. Most sugarbeet acreage in the West is flood irrigated using either open ditches and siphon tubes or gated pipe. Some production occurs under center-pivot sprinklers. Each field is irrigated five to eight times. Irrigation is not used in the Upper Midwest region. Harvest begins either in late-September or early-October.

After harvest is completed, the land is generally disked or plowed in preparation for planting a non-sugarbeet crop the following spring. Because sugarbeet production is a labor, machinery, and input intensive process, variable production costs may exceed \$500/acre. Landlords who rent land to sugarbeet producers on a crop-share basis generally receive between 20 and 25 percent of gross crop value from tenants.

Sugarcane Production

Sugarcane is a tropical grass native to Asia that grows in warm climates. Sugar is obtained from the stalks of the plants. Because of climatic conditions, U.S. production occurs in Florida, Louisiana, Texas, and Hawaii. Sugarcane planting occurs from late August through January. Sugarcane is harvested from October through March. Unless frost occurs, sugar yields are highest after January 1. However, some fields must be harvested before reaching maximum

sugar yields to accommodate cane milling schedules. Harvesting sugarcane requires that fields be burned to remove dead leaves that would otherwise impede harvest, interfere with milling machinery, and absorb sugar during the extraction process. In the past, most sugarcane was cut by hand using cane knives. Improvements in mechanical harvesters have resulted in a complete movement away from hand harvesting.

Machine-cut cane stalks are deposited directly into wagons by the harvester. Four-wheel drive tractors haul 16 tons of cane from fields with each four-wagon load. Using special ramps near cane fields, sugarcane is dumped from the wagons into truck trailers or rail cars for transport to mills. Rail cars carry 25 to 30 tons each and truck trailers carry 20 tons per load.

After a field has been harvested, weeds need to be controlled. A second crop of stalks, called ratoons, grow from the old plant stubble. The second crop is harvested about one year after the first harvest. Usually, about three annual crops are taken from one field before replanting. When production declines to an unacceptable level due to insect, disease, or mechanical damage, the old-growth cane plants are plowed under after harvest, and the land is prepared for replanting.

Sugar Processing

Sugar extraction rates and sucrose contents of both cane and beets are critical determinants of processing profitability. Sugarcane and sugarbeets have similar raw material yields per acre, but sugarcane has a slightly lower extraction rate. Technology has helped increase extraction rates in recent years.

Once sugarcane and sugarbeets are harvested, the sugar content of sugarcane stalks and sugarbeet roots deteriorate. Thus, it is important to process the raw material as quickly as possible. Sugarbeets are harvested in the fall prior to the soil freezing and are stored in open piles. As long as temperatures remain below freezing and beets have been piled with relatively small amounts of residual mud, dirt, and vegetation, the sugar content of piled beets declines relatively slowly. However, unusually warm winters or early springs causes significant "pile losses." Thus, a typical processing plant operates between 180 and 240 days per year.

Sugarcane processing plants also operate seasonally. However, sugarcane is harvested "as needed" by processing plants because the temperate climates of sugarcane producing regions makes it unnecessary to inventory cane stalks. Rather, harvests are coordinated so harvested sugarcane is quickly processed and cane factories can continually operate during the harvest season.

During the refining process, sugar stored in cane stalks or beet roots is separated from the rest of the plant material. For sugarcane, this is accomplished by grinding cane stalks to extract juices, boiling extracted juice until a syrup is created and crystallized, and spinning the crystals in a centrifuge to produce brown raw sugar crystals. Raw sugar is shipped to separate refineries to be washed and filtered to produce white sugar. The "clean" material is then crystallized, dried, and packaged as granulated white sugar.

Sugarbeet processing occurs within a single processing plant. Sugarbeets are washed, sliced, and soaked in hot water to remove sugar-containing juices. The juice is purified, filtered,

concentrated, and dried in a series of steps similar to sugarcane processing. By-products created by this process include molasses and beet pulp, which is used as livestock feed. Sugar produced from sugarbeets and sugarcane is called refined sugar.

Industry Structure

The largest sugarcane refining companies include Imperial Holly (38 percent market share), Tate & Lyle (36 percent), C&H (16 percent), and Refined Sugars (8 percent). The top four sugarbeet processing firms are Snake River Growers (24 percent market share), Tate & Lyle (23 percent), American Crystal Sugar Company (21 percent), and Imperial Holly (16 percent).

Pricing. Pricing is extremely competitive in the sugar industry. Production costs differ among regions, and sugarcane has production cost advantages over sugarbeets. U.S. domestic sugar prices have been supported above world prices through the use of import quotas and other trade policy measures. Nonetheless, sugar is difficult to differentiate. Hence, the ability to market sugar to domestic users at prices below other competitors is a huge competitive advantage.

Customers. There are two primary markets for refined sugar: industrial and non-industrial users. Industrial market segments include bakery and cereal, confectionery (candy), other food uses, dairy (primarily ice cream), beverage, and other non-food uses. This market has grown slowly over time. Non-industrial market segments include wholesalers, retailers, hotels, restaurants, and institutions. Similar to the industrial market, this market has grown slowly over time. Sugar quality is an important factor for customers in both market segments.

Suppliers. Many, but not all, sugarbeet processing firms are vertically integrated. Both producer-owned cooperatives and private firms own sugarbeet processing facilities. Private firms control most sugarcane production and processing assets. The percentage of sugar in sugarcane or sugarbeets is important for profitability, but varies from year to year depending upon weather, fertilizer applications, and choice of seed varieties.

Principal Market Segments

Grocery Sales. Sugar is sold in granulated white, brown, and powdered forms through grocery stores in packages ranging from 1-pound boxes to 25-pound bags. Private-label packaged sugar is generally sold at prices lower than branded sugar.

Foodservice Sales (Including Sales of Non-Sugar Products). Numerous products are sold to foodservice customers and healthcare institutions. These products range from 50-pound bags of sugar to individual packets of sugar, salt, pepper, non-dairy creamer and plastic cutlery, nutritional dry mixes, sauces, seasonings, drink mixes, desserts and diet kits (packets of plastic cutlery with seasonings and other items). Foodservice is one of the most rapidly growing segments of the domestic food industry.

Industrial Sales. Refined sugar, molasses, and other ingredients are sold to industrial customers such as food manufacturers in bulk, packaged, or liquid form. Food manufacturers primarily purchase sugar for use in the preparation of confections, baked products, frozen desserts, canned goods and various other food products. Industrial sales generally provide lower margins than grocery or foodservice sales.

Specialty Product Sales. Specialty sugar is sold to grocery, foodservice, and industrial customers. Specialty sugar products include premium-priced, free-flowing brown sugar marketed primarily to industrial customers; liquid flavorings; edible molasses; syrups; sugar produced from organically grown sugarcane; and specialty sugars used in confections, fondants and icings.

Industry Trends

Several major trends have emerged in the sugar industry including: (1) increased demands for products obtained from corn sweeteners; (2) trade liberalization agreements with Mexico and Canada; (3) corn and sugarbeet acreage increases due to the 1996 Federal Agricultural Improvement and Reform Act; (4) consolidation of beet and cane sugar companies with corn sweetener firms; and (5) the U.S. Customs Service interpretation of rules governing "stuffed molasses" imports from Canada.

Consumption. The United States Department of Agriculture estimates that the most popular high fructose corn syrup segment, (HFCS-55), grew approximately 4 to 4.5 percent annually since 1975. Soft drink beverage companies drove much of this growth. Thus, corn sweetener production has steadily increased over time. By 1985, U.S. soft drink manufacturers had completely switched from sugar to HFCS.

HFCS Trade with Mexico. The Mexican market offers opportunities for dramatic volume growth because of trade liberalization and the potential to substitute HFCS for sugar in beverages. Mexico is a large producer of sugarcane, but has only a small HFCS industry. Under NAFTA, Mexico's import tariff on United States HFCS fell to 9 percent in 1997, and was scheduled to decrease by 1.5 percent each year thereafter until 2003, at which time the tariff would be eliminated. This represents a potentially huge growth opportunity for HFCS producers -- especially if real consumer incomes increase in Mexico. Exports of HFCS from the United States increased after the signing of NAFTA. It was expected that HFCS would displace some sugar consumption in Mexico.

U.S. Farm Policy. Production of corn and sugarbeets increased in the 1990s as legislation provided farmers with increased planting flexibility. Corn production replaced wheat production in some parts of the Upper Midwest. With the elimination of marketing allotments, sugarbeet production increased as producers substituted away from lesser-valued crops. Sugarcane acreage also expanded for similar reasons and yields increased due to varietal improvements.

Consolidation. Since the 1980s, consolidation has occurred among sugarcane and sugarbeet processing companies. The rationale for consolidation was that production and price risk caused by regional weather patterns could be better managed if a company owned both sugarbeet and sugarcane processing assets. For example, Imperial Sugar, a sugarcane company based in Texas, acquired the Holly Sugar Corporation, a sugarbeet processor with factories in California, Texas, Wyoming, and Montana. It then acquired Savannah Foods and Spreckels in 1998. British-based Tate & Lyle owned sugarbeet factories in the EU and other parts of the world. It also owned A.E. Staley, which was one of the largest HFCS companies in the United States. Tate & Lyle acquired Domino Sugar Company, a sugarcane processor that refines U.S. sugarcane and imported raw sugar, and Western Sugar, a sugarbeet company with factories in Nebraska, Wyoming, Montana, and Colorado.

Stuffed Molasses. Over the past several years, a loophole in U.S. Customs rules enabled U.S. firms to import molasses syrup from Canada that had been "stuffed" with Brazilian sugar. The imported syrup was approximately 95 percent sugar and five percent molasses. U.S. firms extracted sugar from the molasses and then shipped the syrup back to Canada to be "restuffed" with additional sugar. This process accounted for about 125,000 metric tons of sugar imports annually. The loophole occurred because molasses was not classified as sugar by U.S. Customs. Although the intent of U.S. sugar policy regarding imports was being violated, the practice has only recently been stopped.

Molasses Desugarization. Because sugarbeet molasses is a low-value by-product, the extraction of additional sugar from molasses provides an opportunity to improve competitiveness. Remaining molasses and by-products obtained from molasses desugarization are marketed primarily to yeast manufacturers and feedlot operators.

The Western Sugar Company

The Western Sugar Company was formed in 1985 by Tate & Lyle, PLC, and is a wholly-owned subsidiary of Tate & Lyle. The Western Sugar Company is one of the largest sugar refining and processing companies in the United States. Western's annual sugar production is approximately 1 billion pounds, all of which is produced from sugarbeets. Sugar and sugar processing by-products are produced in Western's six factories located in Montana (Billings), Wyoming (Lovell), Colorado (Greeley and Fort Morgan), and Nebraska (Scottsbluff and Bayard). The Scottsbluff plant includes a desugarization unit.

Each plant was constructed between 1906 and 1917. In general, each factory contains pulp dryers and uses both coal and gas boilers. In addition, each has both silo and flat storage capacities and is located on functioning rail lines. Daily sugarbeet slicing capacity varies somewhat among the factories (Bayard, 2,900 tons; Lovell, 3,050 tons; Greeley, 4,000 tons; Billings, 4,600 tons; Scottsbluff, 4,700 tons; Fort Morgan, 5,800 tons). The company owns storage facilities in Colorado at Longmont, Sterling, and Rocky Ford, and in Nebraska at Mitchell and Gering. These facilities provide Western with 1.9 million hundredweight of silo storage in addition to that which exists at each factory.

Western's total slicing capacity is over 25,000 tons of sugarbeets per day with a total annual slicing capacity of more than 3.4 million tons. Western employs approximately 600 workers year-round and another 1,100 during the processing campaign. During the 2000-2001 season, Western contracted for delivery of approximately 186,000 acres of sugarbeets.

Western sells sugar primarily in the Rocky Mountain and Midwest regions of the United States. Approximately 26 percent of Western's sugar production is sold to wholesalers, distributors, or retailers. The remaining 74 percent is sold to industrial users (i.e., major food manufacturers). Refined sugar is sold in several forms: (1) consumer products such as powdered, brown, and granulated sugar, (2) food service products (primarily single-serve packets), (3) industrial packages (e.g., 50 and 100 pound bags of granulated, baker's special, and powdered sugar), and (4) bulk sugar (railcar, bulk truck, and tote bags). Western also produces by-products of sugar processing including beet pulp, beet pulp pellets, beet molasses, and molasses desugarization solubles -- all of which are used for livestock feed. These feed inputs are generally sold to local livestock and dairy operators in areas surrounding each factory.

Sugarbeet producers receive payment for sugarbeets based on both quantity and quality of beets produced. Samples are taken from every other truckload delivered by each grower on each parcel of contracted land as beets are piled at receiving stations. These samples are used to determine the quantity of "clean" weight beets being piled and the average sugar content of those beets. Growers generally receive four payments for sugarbeets throughout the year. In general, the first installment of approximately 70 percent of the expected total payment is received in November. Normally, another three installments are received throughout the subsequent 10-month period. The total amount received for each sugarbeet crop is not known until just before the harvesting of the next crop. Total payments are determined by total sugar revenues received by Western Sugar net of marketing costs. Growers also share in "pile losses," and each grower's total payment per ton is adjusted for quality. In general, a 1 percentage point increase in sugar content is worth approximately \$3.00/ton. Unaudited financial statements are presented in Exhibits 2 and 3. Exhibit 4 presents detailed production information for the Western Sugar Company.

The Rocky Mountain Sugar Growers Cooperative

The Rocky Mountain Sugar Growers Cooperative is a cooperative corporation formed in June 2000 for the purpose of acquiring the Western Sugar Company. Cooperatives are business organizations whose members/owners are also users of the cooperative's business or services. Cooperatives may be able to avoid corporate income tax liabilities if profits are appropriately distributed to members. In recent years, cooperatives have often organized as "new generation" cooperatives. That is, once established, these cooperatives are closed to membership by others. Essentially, new members must purchase stock from existing members if they want to participate in the cooperative. New generation cooperatives have formed to reward investors who incur the greatest risk (generally, initial investors). This is an important factor for generating equity capital.

The owners of new generation cooperatives are voting members who control the cooperative, provide equity capital, and are patrons who receive the benefits of the cooperative including: (1) a market or buyer for their products, and (2) a share of the profits based on use or patronage. In the case of the Rocky Mountain Sugar Growers Cooperative, profits or net income would likely be distributed in the form of patronage refunds per ton of delivered sugarbeets.

The Rocky Mountain Sugar Growers Cooperative has negotiated with Tate & Lyle North America Sugars, Inc. to purchase their six sugarbeet factories and associated storage facilities. The Cooperative has agreed to purchase Western for \$78 million contingent upon the acquisition of debt financing. The final amount could increase by as much as \$25 million if the average bulk Midwest sugar price exceeds 21.75 cents/lb during the next three years. The Cooperative expects to raise approximately \$34.335 million through equity investments by its members and approximately \$50 million in term loan funds. In addition, it needs to secure an operating line of credit of between \$50 million and \$80 million. The Cooperative's financial projections are based upon the generation of annual gross profits of \$16 million. Nonetheless, it has been difficult to attract term-debt financing at competitive rates because of the risk involved in the investment.

The Rocky Mountain Sugar Growers Cooperative is offering Common Stock and Patron Preferred Stock to sugarbeet farm operators. A prospective member may purchase Patron

Preferred Stock for \$185/acre, which represents one share. In addition, each prospective member must purchase one share of Common Stock for \$100, which represents a membership fee. Ownership of Common Stock entitles a member to one vote for the purposes of managing the cooperative. The Cooperative is authorized to offer 2,000 shares of Common Stock, each with a par value of \$1, and 300,000 shares of Patron Preferred Stock, each with a par value of \$100 per share. Stock can only be sold to those actually engaged in the production of agricultural products or to other cooperative associations. Landlords who lease land to tenants on a crop share basis are considered to be engaged in the production of agricultural products. Holders of Patron Preferred Stock are entitled and obligated to deliver the sugarbeets produced on one acre of land per share. If a holder of Patron Preferred Stock is unable to deliver sugarbeets from the subscribed acreage, that owner must arrange for another member to do so.

Rick Dorn is listed as the incorporator of the Cooperative and is the current Chairman of the Board. Nine other producers, with at least two directors of producer marketing associations from each of four states, constitute the rest of the Board of Directors. It is anticipated that the Board would retain Western Sugar's existing management personnel.

Sugarbeet Producer Concerns

As Rick continues his harvesting operations, other producers are beginning preparations for October 2, which is the start of the "general" harvest season. Near Laurel, Montana, a sugarbeet producer is pulling his harvesting equipment out of a machine shed and performing scheduled maintenance. Kelly Brester is a typical sugarbeet producer in that he, along with his father, produces approximately 250 acres of sugarbeets per year. He is also one of 13 directors of the Mountain States Beet Growers Association of Montana, which is the bargaining association for sugarbeet producers living in an 80 mile radius of the Billings, Montana Western Sugar factory. Historically, the Association has represented growers in contract negotiations with Western Sugar and its predecessors.

Kelly is 47 and has been farming and producing sugarbeets since he was 18. Like many young farmers, Kelly started by working with his father and renting land on a crop share basis. He continues to rent land, but he has also been able to buy one farm and is currently making mortgage payments on a second farm. The replacement value of his investments in specialized sugarbeet equipment is approximately \$150,000, although book and salvage values of these investments are quite low. He produces approximately 400 acres of malting barley as a rotation crop. His malting barley acreage is contracted annually with Busch Agricultural Resources, Inc. All of his land is flood irrigated either through the use of siphon tubes or gated pipe. In addition to family labor, he hires two or three men to drive trucks during the malting barley and sugarbeet harvest seasons.

At various times throughout Kelly's farming career, the future of sugarbeet production has been uncertain. For example, in 1984, the Mountain States Beet Growers Association was unable to secure a contract with the pre-Tate & Lyle owners of Western Sugar. That was the only year in the past 28 in which Kelly has not raised sugarbeets (and the only year in the past 60 that his father had not raised beets). Recently, this uncertainty has increased. Over the past two years, it has been apparent that Tate & Lyle has wanted to exit the industry. The opportunity for producers to buy their processing assets has surfaced during the past year.

Kelly has spent several months evaluating his options. Quantitative evaluations of cropping alternatives paint a relatively bleak picture. A decision based solely on a quantitative assessment hinges critically on selected discount rates and net income projections of the cooperative. If the combination of future sugarbeet prices and patronage refunds results in total sugarbeet prices similar to 1996-2000 average prices, then his investment will be worthwhile. Nonetheless, an investment in the cooperative adds risk to an already risky business. Based upon his quantitative assessments and a large dose of "hunch", Kelly decided to buy shares in the fledgling cooperative. However, not a day goes by that he doesn't worry about the investment. Nonetheless, he recognizes the importance of sugarbeet production on his ability to meet mortgage payments and generate enough net farm income to support his family. He does not see many options available to him at this time. Nonetheless, most agricultural producers are heavily invested in fixed costs. Owning shares in a seasonal processing plant increases those fixed costs and business risk.

As Kelly begins replacing a roller chain sprocket, he contemplates his farming alternatives in the event that sugarbeets are not grown next year. Although sugarbeets have been raised in southcentral Montana since World War I, crop production alternatives are generally limited in this area. Malting barley can be a good cash crop if it is contracted with a malting company. However, it appears that such companies are not interested in large expansions of contracted malt barley acreage. Alfalfa hay is an alternative crop that could be profitable in some years. However, large investments in equipment would be required. In addition, alfalfa hay is best grown under sprinkler irrigation rather than flood irrigation. Dry edible beans, corn for grain, and corn for silage are crops that can be grown, but often lack local markets. This is especially true for high-bulk forage crops. Prices for feed barley have been low for many years because of relatively large corn harvests in the Midwest. Irrigated wheat generally has low protein content, which often receives significant discounts. To date, soybeans have not been a viable crop alternative in Montana because of relatively short growing seasons.

In addition, if sugarbeets are not a production alternative, farm consolidation will likely occur. That is, alternative crops have smaller per acre margins than sugarbeets. Farm operations will have to get larger to generate sufficient net farm income to remain viable business entities. Therefore, some producers will exit farming and others will likely get larger. Kelly is uncertain if he wants to expand his production operation. Flood irrigation is highly labor intensive and, therefore, expansion of his farming operation would require additional labor resources. Given smaller margins associated with viable alternative crops in the area, he is uncertain if he wants to accept the added risks that go along with additional labor.

Perhaps the largest impact, however, is the effect of the loss of sugarbeet production on land values. It has been estimated that the loss of sugarbeet production could reduce irrigated agricultural land values in Montana sugarbeet producing counties by between 20 and 35 percent (Taylor). For landowners, the loss results in a paper loss of equity and, perhaps, reductions in borrowing capacity. However, for those who currently have land and machinery mortgages, the loss of sugarbeet production significantly reduces repayment capacities. In fact, many producers would be unable to continue making scheduled mortgage payments.

As Kelly finishes replacing a roller chain, he wonders if this is the last time that he will be performing such tasks given the uncertainty of sugarbeet production in Montana.

Future Directions

As an empty truck pulls even with Rick Dorn's moving John Deere tractor -- and the first of 15 tons of beets begin to thump into the truck -- Rick contemplates the Cooperative's options. Before any action can be taken, Rick knows that he must have a formal, written plan that can be used to interest alternative financing sources. The plan must:

1. Indicate whether the sugar industry is an attractive one to enter.
2. Discuss the importance of U.S. sugar policy.
3. Provide a list of advantages and disadvantages of investing in a cooperative.
4. Discuss the financial projections of the Cooperative.
5. Evaluate the long term feasibility of two sugar beet processing companies (Western Sugar and Imperial Holly) co-existing in the same geographic region.

The loud clattering of a "slip clutch" jolts Rick out of his melancholy and causes him to simultaneously motion to the truck driver, shift his tractor into neutral, and disengage the power to the harvester. He shuts off the tractor engine, climbs out of the tractor cab, jumps to the ground, and walks back to look for the rock that has likely been trapped in the digger causing the loud noise and halting its smooth operation. He wonders if the noise caused by his recent cell phone call has similarly halted the purchase of the Western Sugar Company and sugarbeet production in southcentral Montana.

Comments from the Chairman of the Board

Following the case presentation, the Chairman of the Board of the Rocky Mountain Sugar Growers Cooperative, Rick Dorn, spoke to one group of students in-person, and simultaneously to another group via an interactive video connection. Mr. Dorn responded to student comments, answered questions, and updated the group regarding some of the issues posed in the case.

Rick noted that sugar is an important food ingredient in that it serves as a sweetener, preservative, and bonding agent. More than 40 sugars and syrups are produced by the U.S. sugar industry, and quality is important to food processors. Nonetheless, selling bulk, un-branded sugar within the domestic market is a "street fight" with respect to price. Buyers are very sophisticated, and service is a critical factor for maintaining market share. Sugar processing by-products are important to processor success. Additional efforts have been made in recent years to add value to by-products and to extract additional sugar from molasses (desugarization) that is produced during the refining process.

Rick acknowledged that the purchase of sugar processing assets is risky. Most factories are quite old, and the business environment is very competitive and dependent upon federal legislation. Nonetheless, the loss of sugarbeet production could reduce regional land values by as much as 30 percent. In addition, growers have invested in developing a brand name for sugar produced by Western. In fact, growers already own 60 percent of Western's sugar packaging equipment and a large share of their sugar storage facilities. Although 60 to 70 percent of Western's sugar is sold in bulk form, Western can store a higher percentage of their sugar than other companies. Hence, they have a competitive advantage in responding to year-round sugar demands.

Through contractual arrangements, growers have historically shared in the costs of packaging, marketing, and selling sugar. Western's current labor and management human resource assets will continue to be employed by the Rocky Mountain Sugar Growers Cooperative. Irrigation offers an important competitive advantage to the region's growers. However, this is somewhat offset by lower operating costs of non-irrigated producers in the Upper Midwest region.

Finally, one might question the timing of the Western Sugar Company purchase. As Rick noted, "This is a perfect time in terms of purchasing these assets at the lowest possible price. Waiting until things are going great is a sure method of paying top dollar. In addition, opportunities do not always surface at perfect times." In fact, sugar prices have recently started to rise, and prospects for favorable sugar provisions in the new farm bill appear strong. Current negotiations are being held in which seller financing by Tate & Lyle is being pursued. Nonetheless, Rick noted that the presence of two sugar processing companies within the same region is not likely to be sustainable because that neither company will likely be able to contract enough acreage from regional growers to efficiently run all factories.

As a conclusion to the discussion, Rick asked for a show of hands of those who thought that producers should not purchase Western Sugar because of the riskiness of the venture. Approximately one-half of the students raised their hands. Rick smiled and noted that a similar percentage of producers would probably agree with the students.¹

¹. On April 30, 2002, the Rocky Mountain Sugar Growers Cooperative (whose name has since been changed to The Western Sugar Cooperative) acquired Tate & Lyle North America Sugars' Western Sugar Company division for a total amount of \$185.5 million. The plant, property, and equipment component of the purchase totaled \$57 million. Sugarbeet producers committed equity investments representing approximately 125,000 acres. The remaining portion of the sale was seller-financed over 8 years (with a balloon payment in year 6) at a 10 percent annual interest rate. Details of the acquisition are presented in a teaching note.

For more information

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Exhibit 1. Sugarbeet and Sugarcane Harvested Acres Per Region (1,000 acres), 1985-2001.

Year	Great Lakes ^a	Upper Midwest ^b	Great Plains ^c	Far West ^d	Total Sugarbeet	Total Sugarcane
1985	131	420	185	367	1,103	830
1986	125	475	231	361	1,191	835
1987	158	471	231	392	1,252	840
1988	160	510	239	392	1,300	855
1989	162	521	249	361	1,293	870
1990	176	557	271	371	1,375	850
1991	185	557	272	372	1,385	873
1992	196	565	282	367	1,410	893
1993	205	570	277	355	1,407	914
1994	203	613	257	358	1,431	904
1995	203	624	250	329	1,420	882
1996	135	663	230	295	1,323	875
1997	161	674	263	331	1,428	830
1998	174	701	220	357	1,452	860
1999	192	717	254	365	1,527	888
2000	167	662	220	330	1,378	941
2001	174	711	188	258	1,331	970

^aMichigan and Ohio

^bMinnesota and North Dakota

^cMontana, Nebraska, and Wyoming

^dCalifornia, Idaho, Oregon, and Washington

Source: U.S. Department of Agriculture Sugar and Sweetener Outlook

Exhibit 2. Western Sugar Company Balance Sheets, Crop Years Ending September 30
(in thousand dollars).

Item	1996	1997	1998	1999	2000
ASSETS					
<u>Current Assets</u>					
Cash	n.a.	n.a.	n.a.	n.a.	n.a.
Accounts Receivable	21,861	66,499	34,107	37,413	29,002
Inventories	57,842	29,358	37,503	59,936	26,094
Prepaid Expenses	<u>12,096</u>	<u>25,166</u>	<u>25,049</u>	<u>24,130</u>	<u>26,290</u>
Total Current Assets	91,799	121,023	96,659	121,479	81,386
<u>Long Term Assets</u>					
Property & Equipment	<u>139,895</u>	<u>165,281</u>	<u>167,981</u>	<u>162,133</u>	<u>147,731</u>
Total Assets	231,694	286,304	264,640	283,612	229,117
LIABILITIES					
<u>Current Liabilities</u>					
Notes Payable	53,891	75,261	73,067	85,665	57,786
Accounts Payable	60,104	40,322	36,558	38,934	26,652
Income Taxes Payable	<u>13</u>	<u>10,583</u>	<u>(3,948)</u>	<u>500</u>	<u>n.a.</u>
Total Current Liabilities	114,008	126,166	105,677	125,099	84,438
<u>Non-Current Liabilities</u>					
Deferred Income Taxes	18,996	27,762	30,900	27,785	28,716
Other	<u>0</u>	<u>3,597</u>	<u>4,008</u>	<u>4,183</u>	<u>0</u>
Total Non-Current Liabilities	18,996	31,359	34,908	31,968	28,716
TOTAL EQUITY	98,960	128,779	124,056	126,544	115,963

Exhibit 3. Western Sugar Company Income Statements, Crop Years Ending September 30
(in thousand dollars).

Item	1996	1997	1998	1999	2000
Sales Revenue: Sugar and By Products	232,706	268,532	223,431	209,705	261,933
Sugarbeet Costs (est.)	112,500	143,000	140,000	121,000	150,000
Other Production Costs	<u>95,788</u>	<u>73,561</u>	<u>60,760</u>	<u>71,393</u>	<u>100,694</u>
Cost of Goods Sold	208,288	216,561	200,760	192,393	250,694
Gross Profit	24,418	51,971	22,671	17,312	11,239
Administrative/General Exp	<u>8,648</u>	<u>6,218</u>	<u>7,171</u>	<u>6,461</u>	<u>5,702</u>
Pretax Income Before Interest	15,770	45,753	15,500	10,851	5,537
Interest Expense	<u>4,389</u>	<u>5,993</u>	<u>6,859</u>	<u>6,985</u>	<u>9,169</u>
Pretax Income -- Operations	11,381	39,760	8,641	3,866	(3,632)
Income Tax Expense	<u>3,870</u>	<u>13,518</u>	<u>2,938</u>	<u>1,314</u>	<u>(1,235)</u>
Net Income	7,511	26,242	5,703	2,552	(2,397)

Exhibit 4. Summary of Sugarbeet Supply, Production, and Sales for the Western Sugar Company (in thousands except where noted), Crop Years Ending September 30.

Item	1996	1997	1998	1999	2000
Calendar Year Planted and Harvested	1995	1996	1997	1998	1999
Acres Harvested	152.8	149.3	171.1	153.4	174.0
<u>Sugarbeets:</u>					
Tons Purchased Per Acre	18.5	20.0	20.2	21.3	21.4
Total Tons Purchased	2,821	2,980	3,455	3,275	3,716
Total Tons Sliced	2,666	2,816	3,265	3,095	3,512
Shrinkage	5.49%	5.49%	5.49%	5.49%	5.49%
<u>Sugar Percentages:</u>					
Sugar Content of Beets	16.00%	16.90%	15.70%	15.20%	15.80%
Sugar Extraction Rate	80.10%	81.50%	77.90%	78.80%	79.90%
Pounds of Sugar Extracted Per Ton of Sugarbeets	256	275	245	240	252
Hundredweights of Sugar Extracted Per Acre	50.1	50.6	44.8	47.5	51.0
<u>Production for Crop Year:</u>					
Sugar Hundredweights	7,663	7,794	7,667	7,233	8,875
Beet Pulp Tons (est.)	140	142	140	132	162
Molasses Tons (est.)	53	54	53	50	61
<u>Net Beet Payment to Growers:</u>					
Total (million dollars, est.)	112,500	143,000	140,000	121,000	150,000
Average Per Acre (dollars)	738	962	818	786	865
Average Per Ton (dollars)	39.90	48.10	40.50	36.90	40.40