THE SOCIAL RELATIONS OF PRODUCTION OF AMERICAN CRYSTAL SUGAR COMPANY: A CAPITALIST CO-OP IN THE RED RIVER VALLEY

by

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DRAYTON FACTORY

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ABSTRACT

THE SOCIAL RELATIONS OF PRODUCTION
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North American farmers in both the United States and Canada have united their efforts, voices, and resources periodically during the last century in an attempt to overcome the opposing forces which exist between agricultural production and the industrial market economy within the capitalist system. The organization of cooperatives is one result of the historical process of such unions which has gained some prominence. This study examines the social relations of production of the American Crystal Sugar Company, a Minnesota agricultural cooperative corporation, which is owned by the sugarbeet farmers in the Red River Valley of Minnesota and North Dakota. The grower-owners, the Spanish-speaking migrant workers, who are primarily from Texas, the southwestern United States, and Mexico, and the workers and management in the five processing plants are the categories of people who interact with each other within the capitalist economic system in order to produce sugarbeets in the fields and refined beet sugar in the factories. Opposing forces, or contradictions, between the social relations of production, or property and power relations, and the requirements and organization of production are noted. Important relationships between the small town of Drayton,

North Dakota and the surrounding rural area and the processing plant at Drayton are also considered. The structure of the co-op is described in detail and its value and limitations within its local and national contexts are assessed, as well as how the co-op is related to and affected by the larger world capitalist system.

The changes that have occurred due to the formation of the cooperative have improved the economic and political conditions of the farmers who grow sugarbeets in the valley. The American Crystal co-op succeeds in its major purpose by gaining greater control over the market for its sugarbeets, but the co-op loses that control in the free domestic and world market where prices for raw and refined sugar are unstable. When there is a strong national sugar program in operation the domestic sugar industry receives some protection and the co-op benefits. The sugarbeet growers in the valley share in any profits from the sales of the processed sugar and by-products of the co-op. The migrant and factory workers who are involved in the production of beet sugar in the Red River Valley benefit only marginally from the surplus which results from their combined labor. The co-op operates at their expense. Also, some dependence on the processing plant has developed in the rural area of Drayton.

The co-op has produced no fundamental change in the existing capitalist economic relations regarding a more equitable system of decision-making, distribution of surplus, and property relations for all people. The structure and operation of both the producer co-op and the larger capitalist economic system of which it is a part are oppressive and exploitative. Thus, profits, capital, and at least the short term survival of both the co-op and the larger system are perpetuated.

American Crystal Sugar Company is a capitalist co-op. The class distinctions and struggles between the smaller farmers and the larger farmers and between the workers and the owners are becoming sharper. The cooperative is part of a movement toward capitalist agribusiness in the Red River Valley, and unfortunately, profits are still more important than people and vital human needs. This study suggests that the increasing number of grower-owned producer cooperatives is leading to the emergence of a new class organization within the agricultural sector.

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INTRODUCTION

Vast, leafy, green fields of sugarbeets, sprinkled liberally among fields of wheat, other small grains, dried edible beans, potatoes, and sunflowers, stretch out flat on either side of Interstate 29 as far as the eye can see on a summer day. I frequently travelled along this highway through the Red River Valley between Grand Forks, North Dakota and Winnipeg, Manitoba from 1976 to 1978. In the spring I observed the farmers preparing the soil and planting the beet seeds in the rich brown earth which was deposited long ago by ancient glacial Lake Agassiz. Sometimes in late spring and early summer I could see migrant workers "hoeing" the long, neat rows of sugarbeets. During the fall months I shared the road with trucks loaded high with harvested sugarbeets and watched the machines in the fields top and dig the beets. Hills sprang up on the flat plains as workers and their machines stacked sugarbeets in huge, long piles at piling stations and in the factory yard at Drayton, which is located near the highway. In the fall and winter my attention was drawn to the billowing cloud of steam and smoke rising from the stacks of the Drayton factory as tons of sugarbeets were sliced and processed into refined white sugar each day. Bold, red letters above the gigantic round storage tanks proclaimed the name, "American Crystal Sugar Company."

I learned that the company had become a grower-owned co-op in 1973, and I wondered how it was organized and what kind of relationships existed between the different groups of people engaged in the varied work of production. Why was the cooperative formed? How was the cooperative different from the original corporation? What were its advantages and limitations for all the people who worked to produce beets and beet sugar? What was the history of the sugarbeet industry in the valley? What was the impact of the Drayton factory--a large industrial beet sugar processing plant--on the small, nearby community of Drayton and the surrounding rural area? This case study and analysis is the result of my quest to answer some of these and other questions in order to gain further understanding of the nature and potential of producer cooperatives that attempt to function and survive within a capitalist economic system.

SCOPE AND OBJECTIVES

Periodically during the last century North American farmers, usually quite independent, have united into organizations and movements in order to attempt to gain greater control over financial institutions, transportation, and commerce to promote the interests of agricultural producers against big capital in the industrial market economy of the capitalist economic system. Some farmers are small-scale capitalists, or petit bourgeois. Others who do not hire wage workers for their farm operations remain independent producers. Conditions in rural areas during the last three decades of the nineteenth century, particularly where wheat and small grains were grown, gave birth to several agrarian protest movements in the United States. Independent parties sought to control transportation and ways to avoid enriching the middlemen in the marketing system. A variety of cooperative efforts were organized to promote the interests of the farmers. The Greenbackers emphasized monetary changes that would support farmers more and big business less. The wheat farmers in the Populist movement joined forces with labor and silver interests in an attempt to gain control of the government at both local and national levels in order to reform the marketing system to benefit farmers. None of these movements lasted more than a few years. Supporters lost interest during the good times between the cyclical economic crises. These periodic crises are characteristic of the capitalist system (Lipset 1971:15-26). Interest was difficult to sustain because the focus was on control of the market rather than on social change.

In 1915 and 1916 the Nonpartisan League (NPL) was organized in North Dakota among the state's wheat farmers. The purpose of the NPL was to represent rural interests in state government against the powerful "Eastern" interests of "Big Business"--the privately owned milling and elevator companies, food processing industries, railroads, banks and other financial centers that controlled prices and the marketing process, as well as credit and foreclosures on farms. In 1916 and 1918 the NPL gained control of the state offices and both houses and promoted the development of a state-owned bank and mills and elevators that were designed to benefit the small family farmers. Success was short-lived. The influence of the League diminished after 1921 following a recall election and a span of fairly prosperous years. The NPL was returned to power for a short period in the early 1930's but was unable to capture ongoing political support at the state and national levels; it has all but disappeared. Federal agricultural policies, embodied in the New Deal in the 1930's, placated the farmers and contributed to a declining interest in organized grassroots political power. However, the state bank and the mill and elevator at Grand Forks are still in existence (1982) (Beito 1981:4; Morlan 1955; Lipset 1971:28-32; Hanson and Nilsson 1978). Similar economic and financial problems continue to plague farmers in North Dakota and Minnesota today (1982) and agrarian cooperative efforts abound on the northern plains--evidence of a consolidated front of one sector of capital (farmers who are co-op members) against the exploitation of the centers of finance and commercial capital. No change has occurred.

Across the Canadian border in the prairie province of Saskatchewan the wheat farmers organized the Cooperative Commonwealth Federation (CCF) during the 1930's and 1940's. This radical, socialist agrarian movement successfully maintained its majority political power at municipal, provincial, and national levels for 20 years before eventually merging with another progressive political party, the New Democratic Party (NDP), which is supported by urban labor. The CCF had social, economic, and political programs similar to the NPL in North Dakota only on a larger scale (Lipset 1971: x-xxii,19,34).

In more recent years farmers in the northern plains of the United States have relied on such organizations and movements as the North Dakota Farmers Union, the National Farmers Organization (NFO), and the American Agricultural Movement (AAM) to help them overcome the recurring crises in agriculture. A number of co-ops are affiliated with the North Dakota Farmers Union which has been serving farmers for 55 years. The organization is part of a national organization and the state's largest farm organization. The NFO was formed in an attempt to change the marketing system and help farmers increase their incomes in order to cover the costs of production and make a profit. In its early years during the 1950's and 1960's the NFO resorted to holding actions and strikes but presently relies on collective bargaining in order to pursue its goals. The NFO has been acting on behalf of farmers in the Red River Valley since 1962 (Koehler 1979d:1,3).

When the more established farm groups no longer meet urgent, current farm needs new groups are formed. The American Agricultural Movement engaged in militant action from late 1977 through early 1979 in response to continuing low prices for farm commodities in the United States and impending bankruptcy for many small and medium-sized family farmers with big debts and low incomes. Grain, cotton, and small live-stock producers provided the greatest participation in the AAM. As farmers increased their inputs--land, seeds, fertilizer, chemicals, machinery, fuel--and expanded productivity in order to remain competitive, overproduction resulted and the prices for farm commodities dropped below the cost of production. The AAM demanded higher prices by attempting to block certain farm products at the Canadian border, by strike action, and a confrontation with the brokers and traders who speculate on the Commodity Futures Exchange at the Chicago Board of Trade and set prices unrelated to farmers' costs. A "tractorcade" was formed across the nation to Washington D.C. where farmers jammed traffic with their brightly colored tractors in order to gain public attention and lobbied on Capitol Hill for prices or price supports that would cover the costs of their farm products and assure a modest profit and the survival of countless family farms (MacLennan and Walker 1980:20-40; Anderson 1978a:4A).

In 1972 and 1973 the sugarbeet growers in the Red River Valley of North Dakota and Minnesota, the subject of this study, united, pooled their financial resources, purchased the New Jersey Corporation known as the American Crystal Sugar Company, and formed the Minnesota agricultural cooperative corporation of the same name. The goals of the co-op were to prevent further plant closings and to gain greater control over the product, the market, and the prices in order to insure a reliable and expanding market for their product, to realize a reasonable livelihood from their farm labor, and to survive in a highly competitive and expanding agricultural economy. The American Crystal co-op is one recent movement by a united group of farmers among a long history of regional agrarian movements and reforms within the capitalist economic system.

This case study notes the historical relations and developments which led to the formation of the producer co-op, American Crystal Sugar Company. It provides a description and analysis of the social relations of production of the American Crystal cooperative, the sugarbeet grower-owners, the factory workers and management, and the predominantly Hispanic migrant workers who labor in the sugarbeet fields; also, a summary is presented of the impact of the Drayton industrial processing plant on the rural community of Drayton, North Dakota. The system of ownership among the different classes of people who are engaged in the production process is explored in relation to the means and organization of production and the division of labor which make up the forces of production (Gurley 1976). The structure and operations of the cooperative are described and examined in detail.

The primary objectives of the study are (1) to point out any changes caused by the producer cooperative in the social relations of production, and (2) to point out any advantages and/or limitations of the cooperative in terms of the distribution of the profits or surplus value and the power to make decisions which significantly affect production and marketing. The power relationships and the conflict of interests that still exists in spite of the cooperative effort are analyzed. Considerable focus is placed upon the systematically oppressed and exploited groups within the dominant capitalist system that now participate in the production process of the cooperative--the migrant workers, the plant workers, the women involved--those who have traditionally had no share in the surplus from the products of their labor or in the major production decisions. The independent farmers were formerly more closely related to these groups before they purchased the company. Since many people in capitalist societies consider producer cooperatives to be different from the dominant capitalist system of production and capable of bringing about social change, a key question is considered: Is there a significant difference between the farmers' sugarbeet cooperative, the former sugarbeet corporation, and the dominant capitalist economic system of production? Has the cooperative actually changed the capitalist relations of production in some way?

The controversy regarding the human need for sugar and the nutritional and health merits and demerits of the consumption of moderate or large amounts of refined sugar are not issues here in this study, except to note any role the controversy plays in decisions related to the current operations and growth and expansion of the American Crystal sugarbeet co-op.

DATA

The collection of data began during November 1977 and has continued through summer 1982 via articles in the local newspaper about the American Crystal co-op, sugarbeet growers, migrant workers, the sugar industry in general, and agricultural and sugar policies. Fieldwork and library research have been combined. A number of prepared but informal and open-ended personal and telephone interviews of some length have been conducted with eleven growers in several factory districts. Similar interviews were conducted with a member of the Board of Directors of the American Crystal cooperative, a factory manager, an agricultural manager, an official of the Red River Valley Sugarbeet Growers Association, a fieldman who coordinates the work between the processing plant and the sugarbeet growers who have contracts with that plant, a union leader and machinist and several factory workers including some women, and with the city auditor and other townspeople of the town of Drayton. The latter interviews were designed to provide information on the requirements of the infrastructure of the sugarbeet processing industry and the impact of the American Crystal factory near Drayton on the rural community of Drayton.

I used the field research technique of participant observation and was able to spend some time in direct observation of both the technical and social operations of the Drayton plant and community and the East Grand Forks plant. I took personal tours and had plenty of time to ask questions at both plants with an Administrative Service Manager in charge of safety and sanitation and an Assistant Chief Chemist involved with lab work. I also visited American Crystal's research center and library and made contact with the Minnesota and North Dakota Migrant Councils and other related agencies. During the summer of 1978 I spent a day helping at a migrant school and a day working in a beet field. I interviewed several migrant workers.

I have gathered relevant literature published by American Crystal Sugar Company including the 1977, 1979, and 1980 annual reports. A copy of the 1977-79 contract of the company with the American Federation of Grain Millers AFL-CIO Sugar Division has also been obtained. I have done extensive library research, including a survey of several decades of the Drayton Express, a weekly newspaper, and have developed a selected bibliography of topics relevant to this study. I am keeping a current file of newspaper clippings concerning the production of sugarbeets and sugar in the Red River Valley and other pertinent agricultural news. Information regarding the latest legislation that regulates the sugar industry and migrant labor in the United States has been obtained.

RESEARCH METHODOLOGY, THEORY, AND DEFINITIONS

A detailed and careful documentation of the social relations of production of the American Crystal Sugar Company cooperative follows this presentation of the body of theory which is pertinent to this study. The sugarbeet cooperative is related to its national and world context within the dominant capitalist system of production. The co-op functions as an integral part of the world capitalist economy. From its very beginning the capitalist economy has operated on an international scale dominated by hierarchical structures and relations of inequality between nations and within nations and companies (Edwards et al. 1978: 471; Marx and Engels 1968 [1848]:35-40). In recent decades multinational corporations based in the United States, a dominant force in the capitalist system of today, have expanded into agribusiness and into every corner of the globe. Their power and control are changing the social relations of production (the system of ownership and power relations manifested in the class structure) into unequal capitalist relations among the subordinate and often destitute rural populations (Burbach and Flynn 1980). The theories of a world capitalist system and world economy (Wallerstein 1974) include an extensive division of labor, both occupational and geographical (Wallerstein 1976), and provide an important perspective and context for the analysis of the concrete social relations of production of the American Crystal cooperative.

The dynamics of the world capitalist system have created what some scholars refer to as "metropolis-satellite relations" (Frank 1966; Jorgensen 1971) and what others refer to as the "center" and the "periphery" (Edwards et al. 1978:471-475). The "metropolis" or "center" refers to the international, national, and regional areas which are the sources of capital and technology, economic management, financial and political power, transportation, and communication for the "satellite" or "periphery" areas. The satellite or periphery nations or regions have subordinate or dependent ties with the metropolis or center and are its sources of raw materials, minerals, water, land, export commodities for the market, and cheap labor. The metropolis or center develops at the expense of the increasingly impoverished satellite or periphery (Frank 1966; 1969; Jorgensen 1971; Edwards et al. 1978:471-475). These concepts are employed in this analysis of the American Crystal co-op where dependent relations exist.

This study of a cooperative effort of production has its foundation in the theoretical perspective of historical materialism -- a dynamic combination of interacting concepts developed primarily by Karl Marx.

> In the social production of their life, men enter into definite relations that are indispensable and independent of their will, relations of production which correspond to a definite stage of development of their material productive forces. The sum total of these relations of production constitutes the economic structure of society, the real foundation, on which rises a legal and political superstructure and to which correspond definite forms of social consciousness. The mode of production of material life conditions the social, political and intellectual life process in general. It is not the consciousness of men that determines their being, but, on the contrary, their social being that determines their consciousness. At a certain stage of their development, the material productive forces of society come in conflict with the existing relations of production, or--what is but a legal expression for the same thing--with the property relations within which they have been at work hitherto. From forms of development of the productive forces these relations turn into their fetters. Then begins an epoch of social revolution. With the change of the economic foundation the entire immense superstructure is more or less rapidly transformed. (Marx 1968:182-183).

This theoretical approach is useful to the study of history and social development and change. "The materialist conception of history" provides the analytical tools necessary for the investigation of the social organization of production of a society as a whole or a part of that society, such as its system of agricultural production, agrarian movements, or an agricultural cooperative. The process of production involves people producing products by the use of their knowledge, skills, tools and technology, raw materials or land, machines, buildings, and labor and, at the same time, engaging in social relationships with each other--relations of property and power. The former--people producing products--refers to the "forces of production" which includes the means and organization of production, and the latter refers to the "social relations of production." The social relations of production can be described and understood in terms of (1) who owns and controls the means of production, (2) the social relations between those who produce the surplus and those who appropriate the surplus (surplus value being generated within the production process and referring to the difference between the net value of the commodity which the worker produces and the value of the worker's labor-power--the amount of compensation the worker is paid to produce the commodity and that is deemed socially sufficient to sustain and reproduce the worker and the worker's family) (Gurley 1976:31-61), (3) how the surplus is appropriated, (4) and whether the commodities are produced for direct use or for the market (Edwards et al. 1978:40). Together the forces and social relations of production constitute the economic structure, or base, of a society, the "mode of production" which, according to Marx, conditions the "superstructure" of the society, the dominant ideology, traditions, family relations, and the political, legal, and religious systems and social institutions which all support and reinforce the dominant economic system. In fact, all the structures influence and shape one another to some extent, some more than others (Edwards et al. 1978:39-42; Gurley 1976; Selsam et al. 1970; Friedman 1974:445; Sherman 1976; Harris 1968:217-249; Marx and Engels 1968 [1848]:35-46; Mandel 1968:271-301).

Historical materialism provides a framework for describing and analyzing specific structures of production and distribution and the human activity within them that is capable of transforming those structures. Concrete acts of "class struggle" between opposing classes of people with conflicting interests take place within the existing class structure. A "social class" is a group of people who have a similar relationship to the production and appropriation of the "social surplus"--the value of the commodities which are produced that is not needed to meet the costs of production, including the subsistence requirements of the society at a minimally acceptable level (Edwards et al. 1978:39-42; Gurley 1976:31-61). The differentiation of "class" and "class relations" is determined by the social relations of production of the dominant economic system within a society. The concept of "class" as historical human relationships between real people in an actual context (Thompson 1963) is an important and useful one for examining the interacting social groups that participate in the production process of the American Crystal cooperative.

The process of social change is a central concern of this study. The "dialectic" of Marx is materialist in that it reflects the material and social conditions and connections of the real world and helps develop scientific concepts in order to understand that changing world which involves a process of interaction, growth, and change between people and their environment. Dialectics as a method is a useful analytical tool that directs social scientists to ask appropriate questions (Gurley 1976:8-21; Sherman 1976).

Most studies directly related to the sugarbeet industry in the Red River Valley are studies of a technical nature. Two social studies that have been done involve (1) the Mexican-American migratory worker as a consumer in the Red River Valley (Maldonado 1971) and (2) the agricultural, economic and social impact of the sugarbeet industry and American Crystal Sugar Company in the Red River Valley from the geographer's point of view (Cougill 1957).

This study involves the material and social conditions of historical events and people in a particular time and place--the American Crystal Sugar Company cooperative in the Red River Valley during the

1970's and early 1980's. Migratory workers, factory workers, women, management, sugarbeet grower-owners, and the residents of the rural community of Drayton all experience the material conditions of life in different ways and often with conflicting interests due to the existing capitalist social relations of production.

The present owners of the American Crystal Sugar Company engage in a wide variety of tasks, including the planning and managing of the production of sugarbeets and beet sugar. Field and factory workers perform limited, often repetitious tasks or parts of tasks. The human body and hands and the human mind become alienated; thus, work becomes a degrading force in the lives of people (Braverman 1974). Marx viewed work in the capitalist process of production as the source of alienation. Workers under capitalist relations are systematically denied both the control of the products they produce and a full understanding of the labor process of which they are but a fragment, divided from other workers by being forced into constant competition with each other in order to survive, and robbed of their power to function effectively as whole human beings (Gurley 1976:31-61). This perception of the division of labor which segments people into narrow interest groups and contributes to class interests and relationships is important to this study of the social relations of production of the American Crystal co-op.

Several additional definitions will help provide a clearer understanding of the analysis presented in this paper. "Capitalism" refers to "a system of production for the market" in which there are two major classes of people--capitalists and workers. The capitalists own and control the means of production and purchase and exploit labor-power on a contractual basis in order to create surplus value in the production process and expand their capital by selling their products for a profit. The workers, who are the producers, are completely separated from the means of production and must sell their labor-power to the capitalists for wages on the market in order to survive. Thus, according to Marx, labor-power has been reduced to a commodity like any other item of exchange (Dobb 1963: Chapter 1). Some important features of a capitalist system are: the exploitation of workers despite illusions to the contrary (Stavenhagen 1970; Wiest 1979); authoritarian and hierarchical structures that deny democracy and power to workers within the process of labor and production; a relentless need to expand sales, facilities, products, and markets in order to accumulate capital from profits for further expansion; and the recurring nature of economic crises with declining productivity and rising inflation and unemployment due to the tensions between the capitalists and the workers and the competition between the capitalists for markets leading to periods of excess production (Edwards et al. 1978:76-79).

"Exploitation" refers to the appropriation by capitalists of the surplus value in the form of profits as a result of the sale of the products at a greater value than the value of the wages and salaries paid for the labor which produced the products. Workers have no share in the surplus value they help create. Workers must work on a regular basis at whatever jobs are available in order to eat. They have little leverage or power for dictating their own terms except through united efforts, especially during times of high unemployment. Capitalists use their wealth to manipulate the terms of labor-power to their own advantage (hiring and firing and laying off at will, and determining wages, benefits, incentives, plant closures, and working conditions). The apparent voluntary and equal transactions between capitalists and workers are "in reality a coercive exchange between unequals." Marx developed the explanation of "exploitation" in his theory of surplus value (Marx 1967 [1867]; Edwards et al. 1978:77; Gurley 1976:31-61).

The term "oppression" refers to the unjust use of power or authority by capitalists and their managers that controls workers and limits their full expression as human beings. The workers have no control over the product that they produce, the process of production, or capital investments, and very little control over working conditions; nor do they share in any profits. Workers have no significant voice or political power (except collective bargaining and the strike). They do not make the decisions. The authoritarian organization of labor and the production process denies workers the full use of their human intelligence, their skills, and their creative and cooperative impulses which divides them within themselves and from others. Marx spoke of "alienation." Exploitation and oppression of the workers by the capitalists lead to both material alienation (poverty) and alienation of the spirit (passivity). Many workers engaged in oppressive capitalist social relations have developed a sense of powerlessness which interferes with effective thinking and actions. Thus, it is difficult for workers to initiate the changes necessary to improve their economic conditions (Gurley 1976:31-61).

Reference to "small," "medium," and "large" farms represents the three classes of farm owners in the United States that have emerged as distinct groups during the past decade. They are defined by government statistics according to sales:

Small farms	under $20,000 in sales
Medium farms	$20,000 to $100,000 in sales
Large farms	$100,000 and over in sales

The large numbers of small and medium family farms have been diminishing. Small farmers or their family members often work part time for wages in order to supplement farm income. Jobs are obtained in the local school system teaching or driving a school bus or in a nearby town or agricultural processing plant. Some farm families operate a small business in addition to their farm. Only 6 percent of the total number of farms qualify as large, but they account for over 50 percent of agricultural production in the United States. Many large farms are owned and operated by families but require additional labor from the agricultural working class that works for wages and is becoming less transient. Agricultural capital and wealth is becoming more concentrated in fewer hands in the large farm sector (MacLennan and Walker 1980:33). The United States Department of Agriculture reports that the average size of a farm in the United States was 429 acres in 1980 and 1981 and that the total number of farms increased slightly in 1981 for the first time since the depression.

COOPERATIVES

Cooperatives are owned and controlled by the people/members who benefit socially and economically by using or producing the goods and services that the co-ops offer. A few of the general objectives of cooperative organizations are to serve their members, to promote the welfare and development of the community and the nation, and to "build a better world." The co-op is designed to improve the material and political conditions of producers/workers or consumers in some specific way (Gossen 1975; Knapp 1963; Coutinho 1972).

These objectives can be accomplished by following the basic and workable guidelines of cooperation known as the Rochdale Principles of Cooperation: (1) "One person--one vote." (2) "Anyone can join." (3) "Neutrality in matters of religion and politics." (4) "Constant education." (5) "Constant expansion" (new cooperative approaches and enterprises). (6) "Cooperation among Cooperatives." (Arvio 1979). "Limited interest on capital" and "Patronage dividends" have also been included in the guidelines (Coutinho 1972:50-52). The members of the first successful consumer cooperative, the Rochdale Co-op, developed these principles and put them into operation in order to resist the exploitation of industrial capitalism. This cooperative retail store was organized in Britain in 1844 by poor industrial workers. It provided not only essential goods at low prices for its impoverished members but also an opportunity for them to control part of their lives (Gossen 1975). Co-ops sprang up in other European countries as well, and in Sweden the consumer cooperative movement has become the largest and most powerful in the world, yet with the continuing efforts of the Consumers' Congress and thousands of local people it remains responsive to its many members (Lundberg 1979).

Eventually the idea of organized cooperation spread to North America with the large numbers of European immigrants where it was developed in order to meet unmet needs and strengthen the bargaining power of the working population, particularly in rural areas. A variety of cooperatives--agricultural cooperatives for the production, processing, and marketing of farm products, financial cooperatives such as credit unions, wholesale and retail consumer and farm supply cooperatives, fisherman's cooperatives, and housing, health, and student cooperatives--exist throughout Canada and the United States today (Gossen 1975).

Agricultural cooperatives are capitalistic institutions that are capable of providing efficient, democratic (for the owners) competition for private corporations within the free enterprise system. Most farmers who become co-op members are seeking immediate economic gains, such as decreased costs and improved incomes or needed services, rather than any basic changes in the socioeconomic system itself (Knapp 1963). The cooperative movement in the midwestern and prairie states grew out of the lessons learned from the early cooperative attempts promoted by the Grange, farmers' exchanges, and other farm organizations and has allowed groups of farmers to accomplish what one farmer never could accomplish alone against the power and monopoly capital that controls the market, arbitrarily sets prices, and manipulates the economy to its own advantage. The Consumers Cooperative Association (CCA) is one of the largest regional wholesale farm supply co-ops in the United States. In 1964 the CCA distributed petroleum products and other supplies and services to 1,791 local retail cooperative associations and some 450,000 farm families in eleven midwestern states along with earned net savings (profits) of $16,781,673 (Fite 1965). Cooperatives have become big business.

The largest and most powerful cooperatives in North America today are located in Saskatchewan where they compete in the provincial, Canadian, and world markets with the multinational corporations as a fully integrated part of the capitalist system. The cooperatives were originally designed to overcome the exploitation by powerful monopoly capital in the eastern provinces. Farmers were subjected to a loss of credit, foreclosures, unfair marketing practices, and high prices and transportation costs. The agriculturally related co-ops organized to handle and market grain, finance farm operations, and distribute farm supplies and machines, together with the centralized cooperative wholesale and retail stores, have always been characterized by an organization and operation of capitalist relations. Contradictions exist between the relatively small-scale capital of many co-ops and powerful corporate capital. The overriding concern for profits and the accumulation of capital within cooperatives and an emphasis on the rights of private property in spite of collective ownership has led to a long history of poor relations, such as opposition to unions and union leaders, strikes, lock-outs, and a strong emphasis on the rights of management. A wage and power hierarchy exists similar to that in capitalist corporations and on farms where there are hired hands and farm laborers. Any increase in wages for workers or improvements in working conditions are seen as a minus in relation to profits. Independent agricultural producers (farmers) become small capitalist businessmen when they become members of a co-op. The cooperatives have expanded and moved toward centralization, diversification, and trained management in order to survive and remain competitive against their "larger rivals" who are able to reap greater profits and provide better wages due to "economy of scale." However, these co-ops have provided some limited economic, political, and social improvements for their members and communities and are generally more accountable locally than private corporations (Jeffcott 1977;1978). This case study of a Minnesota agricultural cooperative that produces sugarbeets and refined white beet sugar for the general industrial and retail markets demonstrates a continuation of the traditional capitalist relations, goals, contradictions, and struggles that have been common to other agricultural cooperative enterprises.

RED RIVER VALLEY FARM PROFILE

Agricultural production dominates the economy in the Red River Valley (RRV) of eastern North Dakota and northwestern Minnesota. Much of the industry in the area is related to agriculture. Dry farming is generally practiced, although a few of the larger farmers use mechanical irrigation equipment. Diversified crop farming exists throughout the valley with some livestock. Hard red spring wheat, durum, barley, pinto beans, sunflowers, sugarbeets, potatoes, and other crops are grown. According to the North Dakota Crop and Livestock Reporting Service, in 1981 North Dakota was the number one all-wheat producer in the nation, as well as the largest producer of pinto beans and the fourth largest producer of sugarbeets.

Transportation by rail and truck continues to be a costly problem for farmers in the RRV who must ship their farm products great distances to domestic markets and who are striving to develop new foreign export markets for their farm commodities. Some of the wheat crop is marketed through the major grain handling companies, such as Cargill, Inc., and some through the wheat pool in North Dakota which is supported by the state mill and state bank.

Farm supply co-ops and grain elevator co-ops continue to serve the needs of their members in the valley. Sugarbeet and sunflower seed processing and marketing cooperatives have sprung up in the past decade. These grower-owned producer cooperatives allow the growers to compete more effectively in the marketplace with the large, private multinational agribusiness corporations. Many farmers participate in more than one co-op and a variety of farm organizations that prove to be beneficial to their particular interests.

Most of the farms in the RRV are family farms which have been growing larger in size and sales and fewer in number. A very few farms are owned by foreign interests. The North Dakota Agriculture Stabilization and Conservation Service reports that in 1980, 50 farms in 23 counties, or 17,594 acres out of the more than 27 million tillable acres in North Dakota, were owned by foreigners. Most of this land was acquired through inheritance, primarily by Canadians and Norwegians. These farms are operated by U.S. citizens on a crop share or cash rent basis. The Minnesota Agriculture Department reports that 15 aliens from 7 foreign countries owned 33,202 acres of farmland in the state as of August 1980. The family farm prevails. The 1978 Census of Agriculture for Minnesota revealed a general rise in large farms and decrease in medium farms with a few counties showing an increase in small part time farms. The 1978 Census of Agriculture for North Dakota indicated that there are fewer and larger farms in the state and that farmland values are increasing. Farm size on a per farm basis rose from 992 acres in 1974 to 1,020 acres in 1978, and the value of products sold per farm increased from $42,210 to $43,638 in the same four years. In 1979 the typical farm was 1,005 acres and realized net farm income dropped to an average of $10,185 per farm according to the North Dakota Crop and Livestock Reporting Service. William Rise, extension farm management economist at North Dakota State University, says that the typical farmer's net income in North Dakota declined from a high of $34,461 in 1973 to $2,949 in 1977. A survey of farms in 1981 by the major vocational-technical institutes in 6 Minnesota regions revealed an average profit of $16,589 in the northwestern region including the RRV, down from $21,306 in 1980. The other regions in the state had lower average profits and some losses.

There are no large corporate farms in either North Dakota or Minnesota. All corporate farming was banned by law in North Dakota until 1981 when the state legislature passed the Family Farm Incorporation Act that allows the members of one family to incorporate their farm operations. The law limits the number of shareholders to 15 family members who are directly related. Three quarters of the shareholders must be active farm operators. Incorporation can provide some inheritance and tax advantages (Associated Press 1981a). Minnesota has a similar law in force. Lawyers at a public meeting in Bismarck, North Dakota, warned that incorporation is not for everyone and that large farms with large incomes and plans for expansion stand to gain the most from incorporation (Regional Digest 1981). The North Dakota Farmers Union has opposed family farm incorporation for decades because it is afraid that the law will open the door to large-scale farming which would force many family farmers off the land. The Farmers Union has initiated successful referrals against past laws but decided not to fight this law since more of the members now have larger farms and see some merit in the new law. Class lines among the farmers are shifting and class struggle is evident.

Farmers in the RRV have been struggling with the current economic crisis for several years due to inflation, high interest rates, tight credit, and low product prices which are often below production costs. Inflated farmland values finally leveled off in 1981. According to North Dakota Farm Research the high in 1979 in the northern RRV was

$765 per acre and $1001 per acre in the southern RRV. The farmers are experiencing a worsening and serious "cost-price squeeze." The cost-price squeeze hits farmers early and fuels the general economic crisis. Farm auction sales have increased as farmers decide to get out of the farming business before they have no choice or no assets left. Foreclosure sales are also increasing. After a survey of 86 banks in North Dakota the North Dakota State Agriculture Department has predicted 272 farm and ranch loan failures in 1982 and double that figure in 1983 due to the economic conditions in the nation.

The sugarbeet crop has been a popular one in the RRV for over half a century. It is a fairly reliable cash crop. The climate and soil in the valley are suitable for an adequate yield of a quality sugarbeet crop. Sunlight and moisture are usually adequate, but flood and drought conditions do occur occasionally. All the beets must be harvested before the ground freezes. The long, cold winters in the valley serve as an ideal outdoor deep freeze for the cold storage of sugarbeets until they can be processed in the factories before spring arrives. It is possible to maintain the appropriate levels of nitrogen in the soil that are needed for the optimum growth of sugarbeets by crop rotation, soil tests, and the application of fertilizer.

The sugarbeet crop was readily expanded as sugar refineries were constructed throughout the valley and farm-to-factory transportation costs were reduced. The RRV led the nation in sugarbeet production in 1979 producing 28.1 percent of the nation's sugarbeets. Minnesota produced 17.7 percent of the total U.S. sugarbeet production in 1979 and North Dakota produced 10.4 percent (Gray et al. 1979:27). In 1980 the Red River Valley harvested 386,000 acres of sugarbeets equal to

5,670,000 short tons and produced 24.7 percent of the sugarbeets in the United States in spite of drought conditions. Minnesota produced 15.6 percent of the nation's sugarbeets in 1980, the second largest producer in the U.S. (California was the number one sugarbeet producer in 1980 with 24.9 percent.), and North Dakota produced 9.1 percent of the nation's sugarbeets in the same year (Barry et al. 1980:14,30).

HISTORY OF SUGAR AND SUGARBEETS

Sugar has been considered a major and desirable source of readily available, cheap energy in the human diet for centuries (until the recent controversy developed regarding the consequences of modern food processing and sugar consumption patterns). Sugar has also been used for medicinal purposes and is presently used in the manufacture of medicines and a variety of industrial products. The production of cane sugar in tropical climates developed more rapidly than the production of beet sugar. Sugarcane existed in India and the Orient centuries before the Christian era. Trade and cultivation of sugarcane spread westward to the countries and islands surrounding the Mediterranean Sea and off the coast of Africa. Europeans learned how to crystallize cane sugar in the fourth century, but the refining process was not perfected and widely used until the 1400s. Sugar monopolies in Europe rose and fell. The first planting of sugarcane, brought to the West Indies by Columbus, led to the development of commercial cane sugar production in the Caribbean and South America with the help of a cheap labor supply of slaves from Africa (U.S. Beet Sugar Association 1959:iv,6-7).

Sugarbeets grew wild in parts of ancient Asia and eventually were cultivated in southern Europe and Egypt. It is thought that laborers in ancient Egypt ate sugarbeets as part of their diet. In the 1600s it was noted that when sugarbeets were boiled they produced a sweet juice or syrup similar to that of sugarcane. In 1747 a German chemist, Andreas Marggraf, demonstrated in the laboratory that pure sucrose crystals could be extracted from sugarbeets that were the same as crystals extracted from sugarcane. Forty years later one of Marggraf's students, Franz Karl Achard, developed the method on a commercial scale. Frederick William III, King of Prussia, funded the first successful commercial beet sugar factory in the world at Cunern, Silesia. Many beet sugar factories have since failed due to lack of sufficient technical knowledge, practical experience, good management (ibid.:8-9), and capital.

During the Napoleonic Wars the French searched for a domestic source of sugar in order to meet their sugar needs because their major foreign source of sugar was no longer available. Efforts to cultivate sugarbeets and produce beet sugar in France received the enthusiastic and practical support of Napoleon I. Land and money were appropriated for a sugarbeet program in 1811. Farmers and landowners were educated as to the advantages of cultivated sugarbeets. Besides providing an important commercial crop, sugarbeets would improve the fertility of the soil and the residue would make a good feed for livestock. Also, the cultivation of sugarbeets would promote good farming practices and diversified farming through crop rotation. By 1813, 334 small beet sugar factories were constructed. The new industry thrived on the urgent need of Napoleon's armies for a cheap "quick-energy food." When Napoleon I was defeated in 1815 foreign shipments of cane sugar, produced by slave labor in the French colonies, resumed. A year later only one French beet sugar factory had survived the severe competition. The sugarbeet industry in France gradually recovered and improved its extraction methods. With the help of some effective laws and government assistance the industry grew slowly and spread throughout Europe and to many Asian countries and North America and gradually developed a competitive position in the world sugar market (ibid.:9-13,22).

There is some evidence that the processing of beet sugar in the United States had its earliest beginnings in what is now California. The Indians of the Sierras had apparently devised a method of extracting sugar from a variety of wild beet, even before the Europeans developed a method. Commercially the beet sugar industry developed very slowly in the U.S. The influence of the European beet sugar industry promoted interest in a domestic sugarbeet industry that would strengthen both the economy and the agricultural practices of the developing nation and reduce its dependence on foreign sugar imports. Fourteen factories were built between 1838 and 1879 from Massachusetts and Maine to California, including an ambitious project by Mormons in Utah. All failed. Finally, in 1879 a successful beet sugar operation was constructed in California, and then in Nebraska. These profitable examples encouraged some wealthy individuals and a number of officials in the U.S. Department of Agriculture to provide technical, financial, and educational support, and the industry began to thrive. By 1900 there were 30 successful beet sugar factories in operation in eleven states. The sugarbeet plant itself is a hardy, adaptable plant that grows well in a variety of climates and altitudes from the Red River Valley in the northern prairies to the high plateaus of Colorado to southern California. By 1915 there were 79 factories in operation. The sugarbeet industry was firmly established in the economy of the United States. Sugarbeet crops have provided a stable source of income for many farm families and their farm operations and produced approximately one quarter of the nation's annual sugar supply (ibid.: 14-18).

The future of the beet sugar industry in the United States is somewhat uncertain. Between 1950 and 1979 both the number of factories and the extraction rate of sugar from the beets declined. In 1950, 72 factories processed sugarbeets. Only 44 factories operated for the 1979 crop, and only 4 new factories were constructed in the U.S. from 1970 to 1979--two in 1974 and two in 1975. Nineteen factories stopped operating during the same period--13 of them from 1976 to 1979. All the new factories are located in North Dakota and Minnesota and all of them are cooperative enterprises. Six beet sugar factories closed down in the U.S. between 1970 and 1973 (Hammig and Angelo 1979). Two of them were closed by American Crystal Sugar Company, the New Jersey Corporation. Growers in the Red River Valley purchased the American Crystal Sugar Company and organized the American Crystal cooperative in 1972 and 1973 in order to prevent further factory closures and to gain control over part of the market and marketing process. The industry has become more concentrated. One new modernized factory may have the capacity to slice as many beets as two or three old factories. However, it may be that bigger is not better when it comes to the most efficient extraction of sugar from sugarbeets. There seems to be a relationship between increased productivity from larger farms and factories, increased mechanized harvesting, and increased length of processing operations on the one hand and reduced sugar content and lower extraction on the other. Further expansion of the sugarbeet industry is unlikely as long as costs are so high and sugar prices are so low (ibid.).

REGIONAL SUGARBEET INDUSTRY

American Crystal Sugar Company dominates the sugarbeet industry in the Red River Valley with its 5 factories. However, competing companies do exist in the region. Minn-Dak Farmers Cooperative is located south of American Crystal at Wahpeton, North Dakota. The Southern Minnesota Beet Sugar Cooperative is located southeast of the valley at Renville, Minnesota. Manitoba Sugar operates in the northern RRV in Canada. There is a sugarbeet refinery on the southern edge of the city of Winnipeg. Officials and growers from all the companies share regional educational opportunities. The Farm and Home reported April 9, 1981 that the North Dakota Association of Cooperatives had organized in order to coordinate educational and legislative concerns. North Dakota (number two) and Minnesota (number one) lead the nation with the largest number of cooperatives. Some sugarbeets are also grown in the Yellowstone River Valley of western North Dakota and eastern Montana for processing plants in Montana which are owned and operated by Holly Sugar Company. This sugar company is a private corporation and was the third largest sugar producer in the U.S. in 1980 (M.A.C. 1977: 1511; M.A.C./P.F. 1980:1545).

HISTORY OF AMERICAN CRYSTAL SUGAR COMPANY

1899 March. American Crystal Sugar Company (ACSC)was incorporated in New Jersey as American Beet Sugar Company for the manufacture and sale of granulated and liquid beet sugar, dried beet pulp, and other by-products. The present name was assumed in July 1934. Company headquarters were located in Denver, Colorado.

1906 A beet sugar processing plant was constructed at Chaska, Minnesota.

1926 The first beet sugar processing plant in the Red River Valley was constructed at East Grand Forks, Minnesota which greatly reduced the need to ship beets grown in the RRV to the Chaska plant.

Sugarbeet production began in the RRV in 1923 and expanded following the opening of the East Grand Forks plant.

1936 Two beet sugar factories at Clarksburg, California and Missoula, Montana were acquired from Amalgamated Sugar Company. Minnesota Sugar Corporation and Colorado-Utah Investment Company, wholly owned subsidiaries, were dissolved.

1939 ACSC dissolved its wholly owned subsidiaries, Western States Agricultural Credit Corporation and American Beet Seed Company.

1948 The second beet sugar factory in the RRV was built in Moorhead, Minnesota. This plant has a slicing capacity of almost 5,000 tons of beets per day (24 hours).

1954 The third beet processing plant was built in Crookston, Minnesota. Sugarbeet production flourished in the RRV as area growers contracted to deliver beets to the factories for processing. Seasonal field workers were recruited from Texas by ACSC for the growing season and the harvest. Some growers arranged for their own workers. Most of the seasonal factory workers came from the local population.

1965 Construction on the Drayton, North Dakota factory was completed. With shipping costs reduced (growers used to ship their beets to the Chaska and East Grand Forks plants by rail) the number of sugarbeet growers in the northern RRV expanded. The Drayton plant was the first in North Dakota, the fourth in the RRV, and has a slicing capacity between 5,000 and 6,000 tons of beets per day.

1967 Northern Sugar Corporation, a wholly owned subsidiary, merged with ACSC.

1971 The Chaska beet processing plant was closed except for the processing of syrup. A distribution center remains in operation at Chaska which serves the Twin City area. During fiscal 1971 ACSC produced 7,671,000 cwt. of refined sugar and 3,130,000 cwt. of dried beet pulp in 7 beet sugar processing factories in 5 states. There were 850 permanent employees, about 2,500 temporary employees during the processing campaign, 700 prior preferred stockholders, and 3,000 common stockholders with one vote per share. Net sales were $112,431,000 and the net profit was $2,509,000. Most of the "Crystal Sugar" brand was sold through independent brokers to markets in the Midwest states, Colorado, and California. Between the calendar years 1967-71 the company sales averaged 13 percent of beet sugar and 4 percent of all sugar produced in the United States. By-products were sold both direct and through independent brokers.

1972 Beet pulp sales to foreign markets were handled by International Sugar By-Products Corporation, a wholly owned subsidiary, which was formed in 1972 in order to benefit from the latest income tax deferrals. The factory workers went on strike in the RRV.

1973 The Mason City, Iowa processing plant was closed but continued to function as a distribution center. At the time the Red River Valley sugarbeet growers organized and merged with the New Jersey corporation and transformed it into a Minnesota cooperative, American Crystal Sugar Company owned 6 beet sugar factories: at Clarksburg, California; Rocky Ford, Colorado; Moorhead, Crookston, and East Grand Forks, Minnesota; and Drayton, North Dakota. The total slicing capacity was approximately 23,000 tons per day. Prior to the merger American Crystal had closed 5 factories in 5 different states: Oxnard, California; Mason City, Iowa; Chaska, Minnesota; Missoula, Montana; and Grand Island, Nebraska. All of the assets of American Crystal Sugar Company, the New Jersey corporation, were liquidated as a result of the merger.

1974 The New Jersey corporation, along with several other major sugar companies in the U.S., became involved in federal antitrust civil and criminal actions and private class action lawsuits related to alleged illegal marketing practices prior to the merger.

(Volkin 1975:1,14; Moody's Industrial Manual 1972:50-51; Department of Public Affairs 1974; ACSC Annual Report 1980:29).

HISTORY OF AMERICAN CRYSTAL CO-OP

1943 The Red River Valley Sugarbeet Growers Association (RRVSGA), an agricultural cooperative bargaining association, was organized by farmers in order to negotiate satisfactory contracts for selling their sugarbeets to American Crystal Sugar Company, the New Jersey corporation.

1960 RRVSGA was incorporated as a Minnesota nonprofit corporation. Headquarters are in Fargo, North Dakota.

1970 The RRVSGA reorganized according to the Minnesota Agricultural Marketing Cooperative Act. Some 1,500 sugarbeet growers were members.

1971 The leaders of the RRVSGA became concerned by the pattern of American Crystal to curb rather than expand its processing and marketing operations. The growers decided to purchase 100,000 shares of American Crystal common stock in order to gain enough control to influence corporate decisions and hopefully to keep the factories open in the RRV.

1972 March. After learning about the RRVSGA's plans American Crystal agreed to consider an alternative, a purchase proposal of the whole company from the RRVSGA, because the New Jersey corporation did not view further expansion of the company as profitable enough for its stockholders and was willing to sell. In June, the RRVSGA organized Crystal Grower's Corporation which was incorporated under the Corporation Act of Minnesota. This interim corporation was designed to facilitate the acquisition of and merger with the American Crystal Sugar Company and to provide the necessary producer equity capital of $20 million. The equity goal was reached by 1,306 sugarbeet growers who subscribed to stock in the Crystal Grower's Corporation, the future members of the American Crystal cooperative.

1973 February. After two years of investigating, organizing, and negotiating, which was complicated by complex financing involving a consortium of banks and antitrust inquiries, the Crystal Grower's stockholders approved the plans of acquisition and merger and purchased American Crystal Sugar Company for almost $66 million. When the merger was completed the Crystal Grower's stockholders became American Crystal stockholders of the New Jersey corporation, and Crystal Grower's Corporation no longer existed. In June, the new grower-owners converted American Crystal Sugar Company, the New Jersey corporation, to a Minnesota agricultural cooperative of the same name. The American Crystal cooperative assumed all the assets and liabilities of the New Jersey corporation which was dissolved when the cooperative stock was distributed to the grower-owners. Seventy-nine percent of the 1,310 stockholders who were eligible to vote approved the conversion with 1,042 voting in favor of the co-op and 12 against. The responsibility of providing for American Crystal's long term loan was taken over by the St. Paul Bank for Cooperatives from the consortium of commercial banks. The complex business transactions of the large cooperative were set into motion. The four major objectives of the growers and now also of the co-op are as follows:

1. to maintain and expand market outlets for their sugarbeets;

2. to continue operations of all processing plants;

3. to implement plant improvements to meet environmental and efficiency standards; and

4. to increase plant capacity if and when necessary. (Volkin 1975:1).

1974 Two new beet sugar cooperatives were organized in the RRV offering American Crystal some competition. The Red River Valley Cooperative, Inc. built a factory at Hillsboro, North Dakota and the Minn-Dak Farmers Cooperative built a factory at Wahpeton, North Dakota. Each has a slicing capacity of 5,000 tons per day. The newly formed American Crystal cooperative became involved in federal antitrust civil and criminal actions and private class action lawsuits related to alleged illegal sugar pricing by the former New Jersey corporation and other large sugar companies.

1975 The Red River Valley Cooperative, Inc. at Hillsboro merged into the American Crystal cooperative. A new addition was built onto the East Grand Forks factory. The Southern Minnesota Beet Sugar

Cooperative constructed a factory at Renville, Minnesota. American Crystal supplied management and marketing assistance and working capital for several years until the Renville co-op decided that it was able to assume full responsibility for the whole operation in 1978 rather than merge with American Crystal as earlier proposed.

1976 The old East Grand Forks plant was modernized and modified. The total slicing capacity of the modernized and newly expanded plant was over 8,000 tons per day. The total slicing capacity of all American Crystal's factories in the RRV was increased to approximately 27,000 tons per day, an increase of 10,000 tons per day since the co-op was formed in 1973.

1977 Right before the harvest, when the factories were due to start up, the American Crystal factory workers in the RRV went on strike in an effort to influence the new labor contract between the American Federation of Grain Millers union and American Crystal Sugar Company regarding wages and work time shift schedules. Satisfactory negotiations ended the strike in a couple of weeks. Construction was completed on the American Crystal Research Center at Moorhead, Minnesota.

1978 A record sugarbeet crop was produced for the second year in a row. Acreage for future crops under good growing conditions was reduced by 8 percent in order to avoid the excessive stress and strain on the capacity of the beet sugar refineries that results when they are pushed to perform beyond their optimum limits to meet the processing requirements of a bumper crop. The cooperative entered into a settlement agreement regarding antitrust matters involving the former corporation which no longer possessed any assets. The settlement was approved by the Federal District Court in December 1978. In order to avoid further legal costs and entanglements, a payment of $5,525,000 was made by American Crystal Sugar Company and charged to 1978 operations. In March, the president and chief executive officer since 1973 resigned due to health reasons. He also made public that he had been a major stockholder since 1969 of E.W. Wylie Corporation, a trucking firm under contract to haul most of the sugarbeets for American Crystal. American Crystal officials said that there was no indication of preferential treatment toward the Wylie firm and that the president was not being forced to resign due to any conflict of interest. In August, an executive from Amstar Corporation's Spreckels Sugar Division became the new president and chief executive officer of American Crystal Sugar Company.

1979 American Crystal's non-member factory at Rocky Ford, Colorado was permanently closed when the growers refused to grow any more sugarbeets due to high costs and low sugar prices. Twelve other western beet sugar factories were also closed because it was no longer profitable to keep them operating. American Crystal officials decided to forfeit 30 percent of the company's sugar inventory to the federal government's Commodity Credit Corporation through its sugar price support loan program. The company, had hoped to buy back the sugar by paying off the loan and selling the refined sugar in the marketplace at higher prices, but the sugar prices remained low. Some growers now produce beets without using any hand labor in their fields. The number of migratory field workers has declined as mechanization in the beet fields has increased.

1980 A severe drought reduced beet crop yields. The fiscal 1980 average beet payment ($38.08 per ton including qualified patronage of $3.48) was the first to reach the scale price (goal price set by the cooperative) since fiscal 1976. The fiscal 1981 first average sugarbeet payment in December (1980) of almost $25 per ton was the highest ever to be received by the growers for the company. Outstanding legal claims filed by industrial users, wholesalers, and retail grocers regarding the antitrust matters were settled with no further financial impact on operations.

(Refer to Table 1, page 35 for further statistical information on the American Crystal co-op from 1974-1980.)

1981 The fiscal 1981 average beet payment to growers was a healthy $46.46 per ton, the second payment to reach scale in two years and the second highest payment since fiscal 1975 (crop year 1974) when growers received $46.58 per ton (before unit retains were deducted). On August 29, 1981, the union factory workers from the 5 American Crystal factories in the RRV went on strike after they rejected the company's contract offer by a large majority. Wages and bonuses were the major issues negotiated for the third year of a three-year contract. The strike lasted 4 weeks while negotiations continued and involved some 2,000 full time and seasonal workers. After the union workers rejected the company's second offer the grower-owners recruited non-union workers and prepared to start up the factories themselves and begin harvesting and processing the sugarbeets in order to keep losses at a minimum. The Drayton factory was started up first during the fourth week of the strike. The union workers finally voted to accept the company's third offer in spite of only minor changes because of their own increasing job insecurity and financial insecurity.

1982 March. The grower-owners were informed of the lowest estimated average beet payment in co-op history at $15.00 per ton--way below production costs. Tension ran high between the grower-owners and the Board members and top level management. The growers expressed their frustration, resentment, and antagonism at factory district meetings. The growers questioned the lack of communication, the employee incentive program, management marketing decisions, the level of cost cuts, and the disparity so evident between the 1982 beet payment of $15 per ton and the fiscal 1981 payment of over $46 per ton from a net sales of $182 million, as well as the 1982 payment of $28 to $30 per ton to growers of the Minn-Dak Farmers Cooperative just south of American Crystal. Explanations were demanded.

(Volkin 1975; Department of Public Affairs 1974; ACSC Annual Report 1977; 1979; 1980; Koehler 1978a; 1979e; 1980c; 1980d; Grand Forks Herald 1978; Associated Press 1979a; 1979b; 1981b; Alexander 1977; Valentine 1979; Evans 1981a; 1981b; Terhaar 1981b; Smetanka 1981; Hand 1981b; 1982).

(In Thousands)	1980	1979	1978	1977	1976	1975 (Note A)	1974 (Note A)
	Year Ended August 31,						
Operations:							
Revenue...............................$	322,946	$ 284,590	$ 257,149	$ 187,678	$ 183,328	$ 254,897	$ 163,824
Net proceeds resulting from member and non-member business............$	166,458	$ 127,194	$ 101,246	$ 74,327	$ 90,336	$ 140,512	$ 101,583
Summary of Net proceeds:							
Net credit to members' investment....$	21,624	4,871	218	1,881	7,172	39,601	21,066
Payments to members for sugarbeets...	144,834	122,323	101,028	72,446	83,164	100,911	80,517
Total..........................$	166,458	$ 127,194	$ 101,246	$ 74,327	$ 90,336	$ 140,512	$ 101,583
Statistics:							
Red River Valley -							
Acres planted	275	303	304	289	252		
Acres harvested	273	302	302	285	221	212	201
Tons purchased	4,311	5,895	5,295	3,846	3,017	2,394	3,243
Tons purchased per acre harvested...	15.8	19.5	17.5	13.5	13.7	11.3	16.1
Amount paid per ton of sugarbeets purchased including unit retains...$	34.60	$ 21.75	$ 20.53	$ 19.83	$ 28.56	$ 43.14	$ 25.81
% sugar in beets	16.5	15.2	15.1	16.7	16.1		
Red River Valley and Clarksburg -							
Sugar hundredweight -							
Produced	11,152	13,624	12,114	11,046	9,386	6,146	7,305
Sold...............................	11,962	13,017	12,027	9,957	8,185	6,468	6,937
Pulp and molasses tons -							
Produced	512	653	573	473	394	320	360
Sold	466	679	538	424	375	315	350
Members Investment ....$	96,512	$ 78,205	$ 73,639				
Property and equipment additions, net of retirements ....$	19,350	$ 18,609	$ 6,621	$ 9,159	$ 32,277	$ 43,341	$ 40,300
Working Capital.....................$	29,806	$ 23,939	$ 30,753	$ 25,884	$ 25,328	$ 21,638	$ 37,018
Debt/Equity Ratio	.74:1	1.01:1	1.15:1	1.05:1	.91:1	.79:1	1.05:1

Table 1. SUMMARY OF OPERATIONS AND SOME STATISTICS OF THE AMERICAN CRYSTAL SUGAR COMPANY SINCE THE ORGANIZATION OF THE GROWER-OWNED COOPERATIVE

Note: A. 1975 and 1974 involve a restatement of operations due to the merger with the Red River Valley Cooperative, Inc. (Hillsboro plant) in 1975.

Source: ACSC Annual Report 1980:2,4,28-29

NATIONAL CONTEXT

The domestic sugar industry of the United States supplies over half of the nation's industrial and retail demands for sugar. Sugarbeets supply around 30 percent of the domestic sugar supply and sugarcane around 25 percent of the supply. About 45 percent of U.S. sugar is imported. American Crystal Sugar Company is one of the 10 largest sugar producing companies in the United States. Although sugarbeets are a significant crop in the Red River Valley, sugar constitutes only about one percent of the U.S. agricultural economy (Koehler 1980e; Associated Press 1979b; Hand 1981a).

Strong competition exists in the domestic sugar industry. American Crystal competes with other beet sugar companies. The beet sugar industry competes with the cane sugar industry, and high fructose corn syrup (HFCS) is steadily encroaching on both markets. The industrial use of HFCS in beverages increased by 30 percent from 1979 to 1980. The Coca-Cola Company, one of American Crystal's major buyers, had substituted this cheaper corn sweetner for about 50 percent of its sugar requirements by 1980. As the use of alternative sweeteners rises and as U.S. consumption of refined sugar continues to slowly decline for whatever other reasons, the sugar industry could diversify its production into fuels and chemicals. Many profitable possibilities exist (Yeager 1977; Barry et al. 1980:2,5,6,19; Koehler 1980e).

Competition also comes from sugar imports, primarily cane sugar, from the Dominican Republic, Central America (7 countries), and Brazil. When world sugar prices are depressed and the U.S. is without an appropriate sugar program, as it has been since 1974, the surplus of low-priced sugar (or duty-free sugar through preference arrangements) can be dumped on the U.S. market, which drives domestic sugar prices down below the costs of production. This is disastrous for growers and processors in the U.S. where the costs of sugar production are generally higher, particularly production costs for sugarbeets and refined beet sugar. In most countries in the world sugar production and trade are subject to a variety of regulations in order to protect the domestic sugar industries. The U.S. sugar industry also began competing in foreign markets with substantial sugar exports for the first time in 1980 (Barry et al. 1980:17-19; Yeager 1977; U.S. Beet Sugar Association 1959:62-63).

Sugar policy in the United States began with a sugar tariff of one cent a pound on raw sugar, imposed by the first Congress in 1789 as a source of revenue for the developing nation. Except for 4 years during the 1890s, this tariff, with varying rates, was the only sugar regulation in the U.S. until 1934. Tariffs offered minimal protection to the developing domestic sugar industry which suffered greatly from the extreme fluctuations in sugar prices in the "free market" system. Finally, in 1934 the U.S. Congress adopted the Jones-Costigan Act, later known as the Sugar Act (U.S. Beet Sugar Association 1959:63-66).

The U.S. Sugar Act was designed to cultivate foreign trade, to maintain a competitive domestic sugar industry and an adequate supply of sugar for consumers, and to provide reasonable and stable prices for producers and consumers alike. This comprehensive national sugar program regulated the production and marketing of sugar by assigning import quotas to foreign countries (45 percent) and marketing quotas to the areas within the nation which produce sugar (55 percent). Marketing allotments were distributed to each sugar processing company and acreage allotments to individual growers, depending upon their crop history and their ability to produce sugarbeets or sugarcane. The interests of small, new, and tenant farmers were also given consideration. Allotments and the estimate of the annual national sugar consumption requirements upon which they were based were made by the Secretary of Agriculture according to a specific legal formula (U.S. Beet Sugar Association 1959: 67-70).

The restrictions and conditions of the Sugar Act were enforced by penalties on processors and by conditional payments to growers which were funded by an excise tax on processed sugar. Under the typical contract between sugarbeet growers and processors, the net return of the growers for their beets depended upon a share of the processor's net return from the sales of sugar. The excise tax came out of the net sales of sugar, and thus reduced the returns of both processors and growers. The growers received conditional payments from the federal government only after indicating compliance with allotment restrictions, child labor laws, minimum wages for field workers and other conditions. The larger payments per pound of sugar produced were paid to the smaller producers. At least the sugar program made an attempt at producing for need and redistributing the sugar dollar by offering some support to the smaller family farmers and field workers. This program more than paid its own way and stabilized the sugar market (U.S. Beet Sugar Association 1959:70-71).

The Sugar Act was renewed and amended many times and was finally defeated in 1974 after providing 40 years of stability for the domestic sugar industry. Sugar prices shot up to new heights and then down to new depths and the sugar market has continued to be unstable. Import duties and fees and periodic sugar loan price support programs have not been effective substitutes for the Sugar Act (Koehler 1979e; 1980e). Except for its first year of operations the American Crystal cooperative has experienced unstable sugar prices and market conditions in the absence of an effective U.S. sugar program.

According to the Commodity News Service, the U.S. Department of Agriculture has a sugar purchase program at 16.75 cents per pound for raw cane sugar and 19.16 cents per pound for refined beet sugar presently in force (spring 1982) for eligible processors who agree to pay the growers the minimum support price for their beets or cane. This interim program will operate until the newly enacted (late 1981) sugar loan price support program goes into effect in October 1982. The loan program will allow the grower-owners of American Crystal co-op to obtain a loan on the 1982 sugar crop at a little over 19 cents per pound for refined beet sugar (17 cents per pound for raw cane sugar). If the market price of sugar is around 19 cents per pound or less when the loan is due, the co-op may decide to forfeit its sugar to the government. If the market price is above the loan level price the co-op may redeem the loan and sell its sugar in the marketplace. In early May 1982, the world price of sugar was 9 cents a pound. Even after adding the maximum import duties and fees the price would still be no higher than the loan price. In order to avoid a run on sugar loans and a drain on the federal treasury, the Reagan administration imposed new import quotas on sugar in early May 1982 in an attempt to raise domestic sugar prices to 20 cents a pound. This would be a definite improvement for the co-op and its growers, but the president of the RRVSGA said that the cost of production for beet sugar is closer to 25 cents a pound (Hand 1981a; New York Times Service 1982; Associated Press 1982a). A study by the U.S. Department of Agriculture reveals that 23.67 cents a pound will be necessary to cover the production costs of beet sugar in 1982, and that figure excludes land costs. Interest charges may account for almost 40 percent of sugarbeet production costs. American Crystal grower-owners must still contend with the "cost-price squeeze" within the "boom-bust cycle" of the capitalist economy.

WORLD CONTEXT

Not only do U.S. national policies and competition have considerable impact on the operations and income of the American Crystal co-op, but world policies and competition do as well. Opposing interests within the sugar industry exist on a global scale as well as on a domestic scale in the drive to maximize profits and accumulate capital. On May 15, 1982, the Commodity News Service reported that the U.S. Beet Sugar Association supports the new U.S. sugar import quotas and opposes the lawsuit which the U.S. Cane Sugar Refiners Association filed against the U.S. government for imposing the new quotas. Some of the sugarcane which is processed by U.S. refiners is grown in foreign countries and quotas will limit supplies of sugarcane and production of cane sugar. Foreign interests apparently play a significant role in the U.S. cane sugar refining industry and are contradictory to domestic beet sugar interests. If world sugar prices were to rise several cents or more a pound, the sugar quotas could be discontinued.

The International Sugar Agreement (ISA) was approved in 1977 by most major sugar producing and exporting countries and is administered by the International Sugar Organization (ISO) council. The ISA is an agreement between participating countries to cooperate for the purpose of maintaining a reasonable balance between the world production and consumption of sugar and promoting some control over the range of world sugar prices. The target range for 1981 was 13 to 23 cents a pound. The ISO sets an annual global sugar quota and has the authority to set individual quotas for participating member countries according to negotiated procedures, when the world sugar price drops to 17 cents a pound or less. The quotas serve to keep surplus sugar in check and support the floor price. Members of ISA can generally reduce sugar production and/or hold sugar stocks in order to meet their quota restrictions. A contribution fee system on all free market sugar (most sugar in the world is produced under contract or traded under preferential agreements) was begun by the ISO in 1980 to provide a loan fund in order to help members finance the holding of sugar stocks when necessary. A reserve stock of sugar was established in order to help regulate the ceiling price in times of world shortages of sugar. The U.S. became a full member in April 1980 when no restrictions were in force. The European Common Market, a major sugar producer and exporter, has refused to join the ISO without further negotiations and continues to subsidize its sugar exports, making it difficult for the ISA to function effectively and to maintain a relatively stable world sugar price and market (Barry et al. 1980:10; M.A.C. 1977:1506; Cohen 1982).

The European Common Market is being pressured by several ISO members, Brazil, Australia, and the U.S., to end its subsidies to sugar exporters, stockpile some of its bumper crop, and reduce production in order to help curb world sugar surpluses in 1982 which have severely depressed world sugar prices. Claims against the European sugar export subsidies are being reviewed by a panel of the General Agreement on Tariffs and Trade in Geneva. Great Western Sugar Company of Colorado, the second largest U.S. beet sugar processor, claims that the U.S. sugar industry has lost over $2 billion due to declining world and U.S. sugar prices largely as a result of the sugar policies of the European Economic Community (Cohen 1982; Commodity News Service 1982).

Without effective national and world sugar policies and programs sugar prices fluctuate wildly, making it difficult for growers and processors to carry on rational and profitable operations. Consumers also pay. In early 1981, the world price of sugar was running around 40 cents a pound. On June 29, 1981, the sugar price was 18 cents a pound, during the fall of 1981 it was 12 cents, and by May 1982 the world price of sugar had dropped to only 9 cents a pound as surpluses grew beyond the control of the ISO. The world price of sugar is expected to remain low during 1982. Since 1974, world sugar prices have reached a high of 66 cents a pound and a low of 7 cents a pound (Hand 1981a; Associated Press 1981c; 1982; Koehler 1980f). Between November 1980 and May 1982 retail prices at a Grand Forks, North Dakota grocery store ranged from $5.32 for a 10 pound bag of refined Crystal beet sugar ($5.73 for more than one bag) on November 21, 1980 to $2.55 from the middle of September 1981 to the middle of February 1982 when the price rose again to $3.09 a bag within a week. During the second week of May 1982, the price of a 10 pound bag of Crystal sugar dropped from $3.09 to $2.75 a bag. The price for Crystal sugar is always a few cents higher than the competing brand.

The price of sugar is determined by a combination of many factors that contribute to the balance or imbalance between supply and demand. Some of the important factors are the production level and processing capacity, consumption level, reserve sugar supplies, weather, crop diseases and pests, political conditions, inflation, the supply and costs and demands of labor, speculation, the manipulation of prices and markets and investments by multinational corporations, the availability and cost of alternative sweeteners, and national and international sugar policies and programs.

The conditions of sugar production in the production year 1980-81 created world sugar shortages and rising prices. Hurricanes and floods damaged the sugarcane crop in the Caribbean. A rust disease lowered the yield and quality of the Cuban sugar crop. Rains damaged the sugarbeet crops in the Soviet Union, Poland, and Eastern Europe, and frost damaged the beet crop in the Soviet Ukraine. Drought reduced the sugar crop in the Red River Valley and other parts of the U.S. as well as in South Africa. Labor unrest threatened the sugar harvest in the Philippines and Australia. World sugar production fell below world consumption and world sugar stocks were reduced. Sugar prices soared (Koehler 1980f; 1980e; ACSC Annual Report 1980:9). A bad year turned into a good year for American Crystal growers who survived the drought.

A whole new set of conditions existed for the production year 1981-82 which created sugar surpluses and depressed prices. Even though world sugar consumption continues to rise slowly, world sugar production has moved far ahead of consumption. Global stockpiles will thrive once again. India, Thailand, Turkey, South Africa, Cuba, Poland, and the Soviet Union all increased sugar production over the previous year's poor crops. U.S. sugar production increased 8 percent above the previous year. Sugar production also increased in Brazil, but part of the increase was diverted to the production of fuel alcohol. The European

Common Market had a bumper crop of sugarbeets and has been providing subsidies for its sugar exporters for foreign sales at low prices giving them an advantage and further depressing the price of sugar. The world market readily affects U.S. prices when there is no effective domestic sugar program (Associated Press 1981c; Cohen 1982).

American Crystal grower-owners have suffered serious losses despite a reasonably productive year (1981-82), except for some frost damage to the sugarbeets and a strike by factory workers that held up the processing campaign. If good sugar crops produce a large surplus they will not bring a good price. A good year can easily turn into a bad year if the price of sugar falls. The drive to compete and expand, along with other factors, creates this paradox. The newly imposed sugar import quotas should help decrease the influx of low-priced surplus sugar into the U.S. market.

The Dominican Republic is one of the leading sugar exporters to the United States. Gulf and Western Industries, Incorporated (G+W), a U.S.-based multinational corporation, 59th on the Fortune 500 list with revenues of over $4.3 billion in 1978, owns over half of the Dominican Republic's foreign investments, including 30 percent of the important sugar industry. G+W was encouraged to invest in sugar production in 1967 because of the good U.S. markets, a favorable political climate, government supports, and the abundant supply of cheap labor. Efficiency, "stringent cost control programs," and the ability to weather the downward economic cycles better than the state-run sugar industry and other competition have been priorities of G+W for maximizing profits (Tenney 1982; G+W Annual Report 1978: G+W 3,5,18).

At the University of North Dakota in November 1978, Roger Livdahl, a director of the Christian Rural Overseas Program, spoke and presented slides on agricultural development and underdevelopment at a conference on social, political, and economic injustice in Latin America and the Caribbean. He said that G+W cultivated sugarcane on 16.5 percent of the Dominican Republic's prime farmland and processed Domino sugar in one of the largest sugar mills in the world for export to U.S. markets. The policies of G+W, designed to maximize profits, led to extreme exploitation and oppression of the workers and to increased poverty. Livdahl reported that in 1978 women and children worked in the sugarcane fields for 10 cents an hour. Men worked 12 to 14 hours a day cutting sugarcane during the harvest for a similar low wage, while top executives of G+W received salaries of around a quarter of a million dollars a year. The workers and their families lived in crowded slum areas and were often in debt at the company store where they were charged 65 cents for a pound of sugar that they helped to produce. Malnutrition and related health problems were widespread. Some 60 percent of the children died before the age of five because not enough nutritious food was grown and kept in the country to meet the needs of its own workers and their families (Livdahl 1978).

Other researchers report that in 1975 G+W made 17 times the wage that workers earn on a ton of cane. G+W, with support from the state forces, has actively and sometimes violently repressed attempts by its workers to organize an effective union. Plans to increase mechanization will increase unemployment and poverty, as well as the productivity of this export cane sugar operation. Increased mechanization will serve to decrease labor costs and conflicts for G+W. In 1978, G+W worked with the government to transfer about 30,000 acres back to the country for use by agricultural cooperatives, a company owned by workers, and small independent farmers (Tenney 1982; Burbach and Flynn 1980:152; G+W Annual Report 1978: G+W 21). However, the vast majority of the rural population remains without land on which to grow subsistence crops and without sufficient wages to provide for the adequate basic necessities of life.

G+W is a large and powerful competitor that can influence the U.S. sugar price and still make a profit, even when the sugar price is low, because of its flexibility and cheap labor costs. One reason the price of sugar has been so low in the U.S. is that sugar imports can be purchased cheaper than domestic sugar because the wage labor costs of G+W in the Dominican Republic and of agribusiness in other foreign countries are even much lower than in the U.S. The costs of production of beet sugar, including labor costs, are higher for American Crystal grower-owners and options are fewer. The U.S. import quotas (1982) may give American Crystal some needed support. Although the cooperative, American Crystal Sugar Company, is geographically isolated from the financial, political, and industrial centers of the world, it is definitely not an isolated economic entity. Its goals, organization and social relations of production, operations, and returns on its investments are all very much connected to the larger national and international political economy. (See figure 1, page 47.)

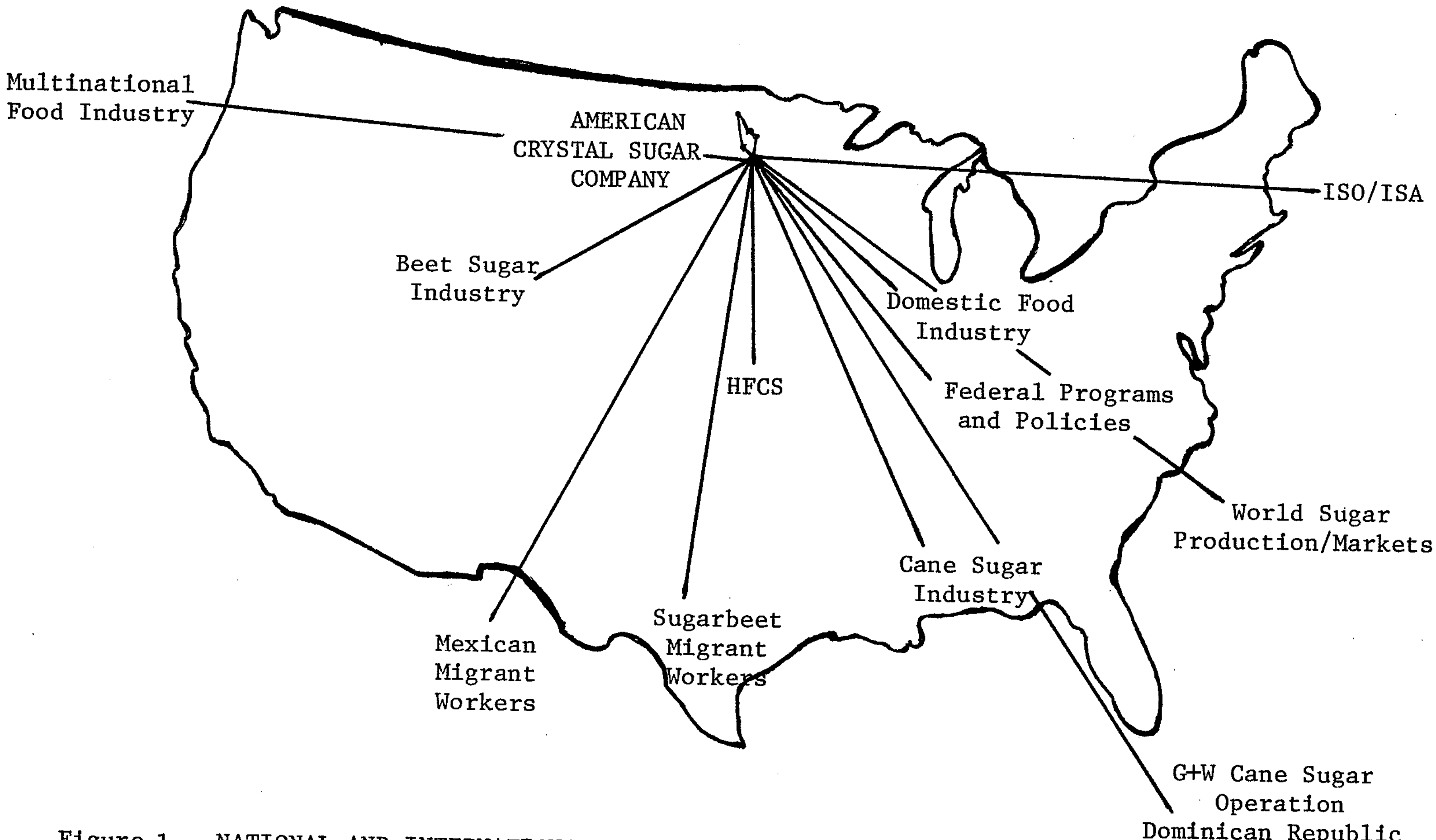


Figure 1. NATIONAL AND INTERNATIONAL CONTEXT

SUGARBEET FIELD OF AN AMERICAN CRYSTAL
GROWER-OWNER

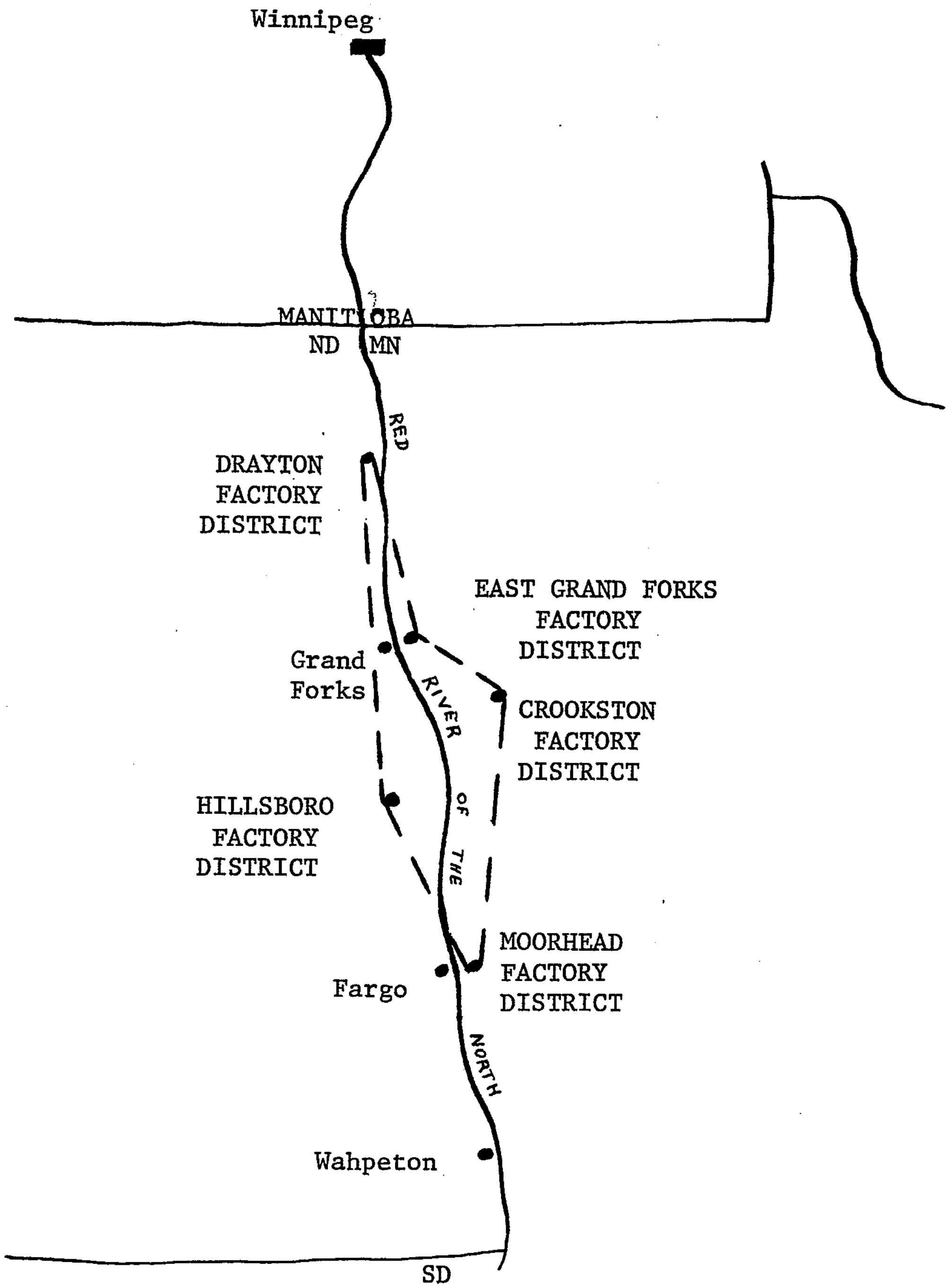
CHAPTER II

THE COOPERATIVE AND THE GROWER-OWNERS

CO-OP STRUCTURE AND OWNERSHIP

The American Crystal cooperative is organized into five factory districts--one district for each of the five processing plants (also referred to as "refineries" or "mills") which are located on either side of the Red River of the North in the Red River Valley. The Drayton and Hillsboro factory districts are located on the North Dakota side of the river, and the East Grand Forks, Crookston, and Moorhead factory districts are located on the Minnesota side of the river. (See map 1, page 50.) These factories are referred to as "member businesses" because they do business with the members who are the stockholders of the co-op. The members are the growers who own the farmland and who grow the sugarbeets within these districts. Each grower who cultivates sugarbeet crops has purchased both preferred and common stock in the cooperative and has a contract with a factory near his land. All the members are stockholders, and all the stockholders are producers.

American Crystal stock is owned entirely by sugarbeet growers who are referred to as "farm operators" in the company by-laws. None of the stock is listed on any stock exchange, neither is it traded in the open market. The cooperative has authorized 350,000 shares of preferred stock and there are presently (1980) 304,291 shares outstanding,



Map 1. THE FIVE FACTORY DISTRICTS (WHICH INCLUDE THE FIVE MEMBER BUSINESSES) OF AMERICAN CRYSTAL SUGAR COMPANY, A MINNESOTA AGRICULTURAL COOPERATIVE CORPORATION

i.e., 304,291 acres which can be planted in sugarbeets. Each share of preferred stock which a grower owns represents an acre of sugarbeets. The purchase of 120 shares of preferred stock entitles the owner to grow 120 acres of sugarbeets (American Crystal Sugar Company (ACSC) Annual Report 1980:1,21,24).

The total allotment of sugarbeet acreage is determined by the cooperative Board of Directors according to the capacity of the plants to slice and process a certain tonnage of beets during each campaign. The "campaign" refers to the period of time when the factories are actually operating and processing the sugarbeets--from the harvest to the slicing of all the beets and the extraction and storage of all the refined sugar and by-products. The Board approved an 8 percent reduction in contracted acreage for all growers for the 1979 and 1980 crops in order to prevent the factories from being over-burdened and to avoid excessive storage and spoilage problems. Only 92 percent of the outstanding acre shares were planted in sugarbeets (ACSC) Annual Report 1980:5). The cost of preferred stock, $100 par value, averages above $100 per share at present. The last two issues of preferred stock by the cooperative, a 14 percent and a 5 percent issue several years ago, ran around $130 to $140 per acre share.

Each grower who is a member of the American Crystal cooperative has also purchased one share of common stock, $10 par value. This stock entitles the grower to one vote in the major political and economic affairs of the cooperative. In fiscal 1980 there were 2,000 shares of common stock authorized and 1,630 shares outstanding. This figure is the same as the number of grower-owners or farm operators who participate in the Minnesota agricultural cooperative. In fiscal

1979 there were 1,659 common shares outstanding and 1,676 shares outstanding in fiscal 1977 (ACSC Annual Report 1980:21; 1977:22). The downward trend in the total number of common stock outstanding is some indication of the low world sugar prices which have existed since fiscal 1977 until fiscal 1980 and 1981 when sugar prices rose to more profitable levels.

Several possible reasons for the small, steady decrease in the total number of common stock, i.e., cooperative members, are (1) the perception by some growers after several years of low sugar prices, high inputs, and other problems that the production of sugarbeets is a poor risk, (2) steadily increasing costs of production and below cost or break-even returns accompanied by rising debts which are particularly hard on the smaller farms that operate on less capital, and therefore have fewer options and less credit, (3) a run of bad weather conditions which can suddenly decrease the value of the crop in relation to expenses, or (4) retirement.

American Crystal stockholders who choose to sell their stock must first offer to sell it back to the cooperative if the company is willing to buy, but if not, sugarbeet growers may transfer stock to other farm operators in the Red River Valley. Growers make their own selling arrangements with other farm operators either within or outside their own families or the current cooperative membership. In 1978 some preferred stock was selling for $300 or more per share. In 1980 the cooperative retired 67 shares of common stock and issued only 38 shares. The Board of Directors must approve each transfer of stock. This is generally considered a formality. If the farm operator who buys the stock is new to the cooperative, rather than adding to stock already owned, the agricultural department of the nearest factory will check the prospective owner's farming practices and land. Before the approval of the transfer of stock becomes final, information and assistance may be provided in order to assure the suitable quality of resources necessary for the reasonably successful cultivation of sugarbeets. This is one way the cooperative gains productive new members and maintains a stable membership and capital investment. The other method of gaining new members involves a new issue of stock by the cooperative which serves to increase the total membership and capital investments and expands general company operations.

In 1970 the former New Jersey corporation only operated four beet sugar processing plants in the Red River Valley and three plants in other states. Farmlands totaling about 6,200 acres was owned and operated in southern Colorado and Minnesota partly for livestock feeding operations and partly for tenant farming. The leased land provided a minor source of the sugarbeet tonnage necessary for the production of beet sugar. The major source of the required sugarbeets came from area farmers who were under contract with the New Jersey corporation and who owned their own land or rented land from other owners who were not farming their land or only part of it. Rocky Ford Ditch Company in Colorado was a 53 percent owned subsidiary of the former American Crystal Sugar Company. Also, in 1970 the company had 700 prior preferred stockholders, 2,900 common stockholders, 900 full time employees, and produced 8,749,000 cwt. of refined sugar for a net profit of $1,153,000. The number of preferred shares, par $100, was 58,969 (58,969 authorized shares) and the number of common shares, par $5, was 1,114,551 (1,500,000 authorized shares) in 1970.

Total prior preferred dividends were $265,000 and common dividends were $1,560,000; earnings per preferred share were worth $19.55 and earnings per common share were 80 cents. The stock of the New Jersey corporation was listed and traded on the New York Stock Exchange. Anyone could invest money in the former American Crystal Sugar Company. The only restrictions were the possession of sufficient capital and the availability of stock (Moody's Industrial Manual 1971:182-183). Whereas, stockholders in the American Crystal cooperative are exclusively "farm operators" who agree to grow sugarbeets for the company's factories in the Red River Valley.

In addition to the five factory districts the Minnesota agricultural cooperative corporation owns the general headquarters which were moved from Denver, Colorado to Moorhead, Minnesota after the co-op was formed. A new corporate office building has been built in Moorhead. Sales offices and distribution centers are also owned and operated (1980) by the cooperative in Chaska, Minnesota, Mason City, Iowa, and a sales office in Walnut Creek, California. The sales office which was operated in Minneapolis, Minnesota in 1977 has been closed. Sales offices in Bloomington, Minnesota and Lakewood, Colorado and a distribution center in Rocky Ford, Colorado, which were part of the corporate business structure in fiscal 1979, are no longer in operation (ACSC Annual Report 1977:35; 1979:31; 1980:32).

The cooperative also completed the construction of a $7.5 million research center on 211 acres of land near the Moorhead factory in 1977. American Crystal Research Center is one of the most modern and advanced research facilities of its kind in the world. The center exists in order to provide services to its grower-owners that will increase the value and production of sugarbeets and beet sugar. It is designed to advance maximum use of beet sugar technology for the growth of high yields of quality sugarbeets and the processing of beet sugar and by-products at the highest possible rate of recovery, and to maintain the co-op's leading and competitive position in the domestic sugar industry and its expansion into foreign markets. The research center is under the general management of a vice president in charge of research. The four major areas of research at the center are (1) agricultural, (2) environmental, (3) chemical, and (4) processing research (American Crystal Research Center n.d.; Bichsel et al. 1977: 24; Brown 1977:14).

The priority of the agricultural research department is to develop and test the best possible hybrid sugarbeet varieties for selection and cultivation by the grower-owners in the Red River Valley. Crystal's coded variety test program has been operating since 1973 and has become the largest program in the United States. Test plots are located throughout the valley. All varieties for sale to growers in the Red River Valley are tested for three years. The coded system provides growers with accurate, unbiased performance data for varieties of sugarbeets from domestic and European seed companies as well as for American Crystal seed varieties. A number of factors are evaluated, such as yield, percentage of sugar, impurities (such as sodium, potassium, and amino nitrogen) which affect the extraction of sugar in the factories, seedling durability, disease resistance, and storage qualities. Ventilation techniques for beet storage piles are also evaluated (Bichsel et al. 1977:24; Kern 1980: 16; ACSC Annual Report 1977:9).

The major task of environmental research is to meet the environmental standards set by federal and state agencies. Monitoring of particulate and gaseous emissions from factory operations and the flow of waste waters for coliform bacteria is conducted in order to assure compliance with legal regulations. The personnel of the environmental research department act as a liaison between the company and the pollution control agencies and handle all permits for pollution control devices and compliance reports. The control of the strong, unpleasant odor from factory waste ponds in the spring continues to be a challenge (Bichsel et al. 1977:24).

The focus of processing research is top efficiency in all factory operations through refining old processes and developing new ones in order to achieve the highest possible sugar extraction at the lowest possible cost. One goal which has received considerable attention is the improvement of the performance of the Moorhead ion exchange and fertilizer plant. The development of profitable by-products and waste products is also a concern of research activities. The production of alcohol and methane for energy purposes from molasses and beet pulp respectively is being evaluated. New manufacturing processes which can be patented are viewed as a potential source of additional income for the cooperative (Bichsel et al. 1977:25; ACSC Annual Report 1979:15).

The work of the chemical research department provides support to all the other areas of research, as well as quality control for the products produced by the American Crystal factories. Chemical research develops, implements, and improves the analytical methods required by the research center and the co-op as a whole. Two major projects of this research area have centered on designs to (1) chemically measure, by the use of continuous monitoring systems, the efficiency of various aspects of the factory systems, such as sugar loss which is related to both profits and odor control of the waste water treatment ponds, and to (2) measure the effects of agricultural practices, such as the quality of sugarbeets in automated or mechanized systems (Bichsel et al. 1977:24-25; ACSC Annual Report 1979:15).

American Crystal Sugar Company has also been operating several non-member businesses outside of the Red River Valley since the cooperative was formed. Business done with growers outside the Red River Valley who do not own stock in the co-op, and therefore are not members, constitutes "non-member business." In 1975 the company entered into a contractual agreement with Southern Minnesota Beet Sugar Cooperative to provide working capital and management for the operation of the factory near Renville, Minnesota and to market all of its products through the 1979-80 campaign. The Renville beet sugar factory is owned by the Southern Minnesota cooperative and all the sugarbeets are supplied by its grower-owners. The proposed merger in 1976 between the two agricultural cooperatives was never completed. In May 1978 Southern Minnesota Beet Sugar Cooperative assumed full responsibility for the operation of its own Renville factory with some continued financial and marketing services to be negotiated with American Crystal Sugar Company. Southern Minnesota notified the company in September 1978 that its services were no longer required. The original management agreement has since terminated with the 1979-80 campaign (ACSC Annual Report 1977:4,29; 1979:25; SEC News Digest 1976:3).

Following notification by Colo-Kan Sugar, Inc. that its growers would no longer cultivate beets for the Rocky Ford refinery due to low sugar prices and higher transporation costs, the non-member business at Rocky Ford, Colorado was permanently closed at the end of the 1979 campaign. The agricultural cooperative which is composed of Colorado and Kansas growers had leased the processing plant in 1973 from American Crystal Sugar Company and supplied all the sugarbeets for the plant. The beets had to be shipped a considerable distance by rail from field to factory. The added costs of transportation and irrigation plus low prices made the continuation of the operation unprofitable. Colo-Kan cancelled their lease and gave up their option to purchase the factory by 1981. American Crystal had agreed to manage the factory operation at Rocky Ford, to purchase and process the sugarbeets from Colo-Kan, and to market all the products. When the factory was closed, 80 full time and 240 seasonal jobs were lost. Some managerial employees obtained jobs in other Crystal factories. Most workers had to look elsewhere for work. The farming and cattle feed operations were also terminated, and plant equipment was transferred to other Crystal factories and piling stations. Just prior to the formation of the cooperative in 1973 the former American Crystal corporation closed outdated beet sugar refineries in Chaska, Minnesota and Mason City, Iowa (ACSC Annual Report 1977:4,29,33; 1979:13,25; Koehler 1979a:7A).

In 1980 American Crystal Sugar Company agreed to sell its Colorado properties to the Colorado Land and Water Supply Company of Denver for $13 million. The sale involved valuable water rights, 4,360 acres of irrigated farm land, 1,672 acres of non-irrigated land, and the former beet sugar refinery. The co-op plans to pay off qualified patronage to the grower-owners over the next five years with the cash receipts from the sale. The term "qualified patronage" refers to retained earnings which were used for expansion purposes. The cooperative will gain approximately \$6.5 million net of taxes from the sale of the non-member properties at Rocky Ford (ACSC Annual Report 1980:26; Koehler 1980a:7).

The Clarksburg factory in California is one non-member business that remains in full operation. It is still a successful enterprise maintaining adequate contracted acreage with area growers, even though sugarbeet acreage in the rest of the state has declined by about one third. The sugarbeets move directly from field to factory for processing. Due to the mild climate, frozen ground and cold storage are not problems as they are in the Red River Valley. The Clarksburg factory is owned and operated by American Crystal. Local growers for the Clarksburg plant are not members of the cooperative. Growers contract to supply the beets and are paid according to a scale which considers such factors as tonnage per acre, sugarbeet quality on an individual basis, sugar and by-product sales, sugar prices, and the non-member business expenses. Amortization of excess costs resulting from the formation of the Crystal cooperative in 1973 will be completed in fiscal 1981 at this plant. Union contract negotiations at the Clarksburg plant are conducted separately from those in member businesses. Negotiations in 1977 resulted in wage adjustments for factory workers paid by the hour who were covered by the three-year contract. A new union contract was negotiated at Clarksburg in February 1980 (ACSC Annual Report 1977:11; 1979:3,13,31; 1980:16,32).

POWER

Power in the American Crystal cooperative is concentrated among its members, the grower-owners in the Red River Valley. This group plays the primary role in the production of sugarbeets and makes all important decisions regarding the operations of the co-op. Three growers are elected to the Board of Directors from each of the five member districts in the Red River Valley. Each member of the Board serves three years in rotation with the other directors from the same district. One new director is elected each year from each district at the annual meeting held in that district. Members are also elected to factory district committees or boards which handle specific, ongoing concerns and problems of the district as well as emergencies. Reports are given, information is shared, elections are held, and resolutions are made to be presented to the whole cooperative and/or the Board for consideration.

The annual meeting of the co-op is held in the Fargo-Moorhead area each December. It is a time for reports and speakers, politics and socializing, and important elections when necessary. Some major issues or changes require final approval by the shareholders and are open to a vote by the whole membership at the annual meeting, such as a merger with another sugarbeet cooperative, a new system for sugarbeet payments to growers, or proposed changes in the by-laws. Absentee ballots are accepted by mail for the convenience of and in fairness to those members unable to attend the December meeting. Decisions are arrived at by a majority vote.

The attendance, participation, and interest of the grower-owners in the district and annual meetings varies with the districts and the current issues and circumstances. It is estimated that approximately 40 percent of the stockholders normally attend the annual meetings in the East Grand Forks factory district. Over one third of the grower-owners attended the annual meeting of the co-op in 1980. Other growers vote by absentee ballot when there is a major election as in 1979.

The Board of Directors is made up entirely of "working directors" who own and operate diversified farms in the Red River Valley. These farms include the cultivation of sugarbeets. The 15 directors meet regularly once a month. Necessary, special meetings may be called by the Chairman of the Board. The chairman and the vice chairman are elected by the members of the Board. All the Board members are men. Each member receives $100 per month plus mileage and reimbursement of expenses. Four committees of the Board have been established in order to increase the Board's effectiveness in carrying out its responsibilities to the cooperative: Audit, Long-range Planning, Budget and Compensation, and Legislative Committees. Each director serves on at least one of these standing committees which elect their own chairman. A major concern and goal of the Board members is the long-term viability, growth and profitability of the company (ACSC Annual Report 1980:32-33).

The Board of Directors works closely with top level management in order to benefit the owners and to maintain a prominent position for the company in the domestic sugar industry. The President, the chief executive officer, and Vice Presidents of Agriculture, Research, Public Affairs, Marketing, Operations, and Finance plus a Director of Personnel and Industrial Relations and a Director of Purchases make up the executive personnel--all of whom are men--of American Crystal Sugar Company. Overall objectives of the company have been defined. A decision was made to upgrade the electronic data processing system by conversion to a larger, more efficient computer which has been installed and is working well. Improved performance in all areas of the business is being encouraged. A management incentive plan that rewards individuals for improved performance has been recommended and approved by the Board. The work and loyalty of all employees are recognized and appreciated by the executive management and the Board of Directors in the annual report (idid.:3,32).

Occasionally, when special problems or emergencies arise decisions are made via the combined input of both management and factory district committees which are made up of key people who are familiar with the requirements and the problems of the factory-farm operations. During the harvest of the 1978 sugarbeet crop in the Red River Valley the possibility of leaving 7 percent of the beets in the ground was seriously considered. A number of factors were weighed by management and the factory committees. It was the second bumper crop in two consecutive years. New crop records were set for the Red River Valley for tons of beets per acre. If a crop is considerably larger than normal the five Crystal refineries may be unable to process all the beets before warm spring weather arrives. Deterioration of the beets in the storage piles is more likely. This leads to lower sugar extraction rates during the refining process. Disposal costs for those beets which cannot be processed are high. The risk of mechanical failure rises the longer the campaign lasts. Handling problems at the receiving stations and expenses are also increased by an overly large crop (Koehler 1978:1; Graham 1978:1B).

At first, American Crystal officials thought it might work out better for the growers to plow the extra beets under in the fall rather than risk hauling some spoiled beets away in the spring. Less than one percent of the 1977 record crop spoiled during the 1978 campaign, but disposal of the beets was still a problem. After further assessment of the crop and the factories, Crystal officials announced that the total contracted crop would be accepted along with hopes for a long, cold winter. (Luckily, it was one of the longest, coldest winters in years.) The clean harvest, which had very little dirt and topping debris on the beets, minimized beet spoilage. Payment was to be received only on beets that were actually delivered to the factories. It was further announced that the 1979 sugarbeet planting would be reduced by 8 percent for all growers if growing conditions remained good (ibid.).

All growers have ready access to the political process, the decision-making process, in such emergencies. They can readily phone or talk in person with their district representatives on the Board, who are also growers, the district committee members, some of whom are growers, and with the agricultural manager in their own factory district in order to make their own views known. In this way they can exert some influence on the final outcome in urgent situations which involve their individual farm operations as well as the co-op as a whole.

CONTRACTS AND PAYMENTS

Each grower-owner enters into a legal, written, five-year purchase contract with the Crystal factory to which the grower plans to haul sugarbeets during the harvest. Shares have previously been purchased from the plant or other growers. According to the terms of the contract the grower agrees to grow and deliver sugarbeets per allowed acres. The plant agrees to purchase and process the beets grown on the designated number of acres and to market the sugar and by-products for the grower. No specific price for the beets is listed in the contract. Production of the raw material, sugarbeets, for the cooperative is considered an investment. Payment is determined through the use of a complex price scale which has been designed in accordance with the policy of the Board. One grower describes "scale" as "a way to divide the dollars in the pool." The scale price serves as a goal for beet payments.

For years sugarbeet payments to the growers have been based primarily on the sugar content of the beets. Prior to the formation of the co-op the average sugar content of all the beets to be processed at each factory largely determined the payments. Since the formation of the co-op the average sugar content of the individual grower's beets has determined the payment up or down from the factory average. Beets with an average sugar content of 16.5 percent have brought higher scale payments than beets with an average sugar content of only 14 percent. This has rewarded individual efforts to produce a product of high quality. Random samples are taken and tested for quality from 30 percent of each grower's loads of sugarbeets as they are delivered to the factory. Tests are run in the East Grand Forks sugar testing lab or tare lab.

Other factors have been and still are involved in the determination of the final payment. The size of the crop--the yield--is one factor. Payment is by the ton. Another factor is the tare. Tare samples are also taken in order to determine if the sugarbeets are clean or dirty. Dirty beets have excess dirt and topping debris clinging to them when they are delivered to the factory. "Hot spots" or heating and spoilage in the storage piles can result from dirty beets and cause a decrease in the sugar content. Growers can be docked for dirty beets. The ideal goals for agricultural production and the harvest for each grower have been clean beets, a high average sugar percentage, and a high yield per acre. A good average for the cooperative would be 16 or 17 percent sugar content and 18 to 20 tons per acre.

Additional factors which continue to contribute to the final payment are current sugar prices, the total sales for the fiscal year, and the member business expenses. The final payment made to the growers is adjusted up or down according to all of these factors. The first of three payments constitutes about 60 to 70 percent of the final estimated payment.

Fiscal 1980 was the first year since 1976 that the co-op was able to pay scale to its grower-owners. The members received a total average payment of $38.08 per ton, which included qualified patronage of $3.48 per ton of beets delivered, compared to a total average payment of $21.75 per ton in fiscal 1979 (ACSC Annual Report 1980:16). Low sugar prices played a prominent role along with inflation, high interest costs, and some sugar losses in the storage piles in causing the payments to remain below scale for several years despite increased production and generally efficient management (Koehler 1979c:1B).

A new Quality Purchase Contract and methods of payment and financing became effective in December, 1979 for the 1980 crop (1981 fiscal year). Ballots were mailed to all the stockholders of American Crystal Sugar Company. The grower-owners voted 489 to 286 out of a total of 1,659 members to approve changes in their contract and by-laws. The contract now specifies recoverable sugar as the basis of sugarbeet payments rather than only the customary percentage of sugar content.

The new payment plan is to be tried for 3 years. The changes also allow a variable "unit retain" to be decided annually by the Board of Directors up to a maximum of 10 percent of the average gross per ton payment. If the average gross payment were $30 per ton on beets the maximum unit retain would be $3 per ton. This amount will be withheld from sugarbeet payments to all members. The unit retain is an additional direct capital investment required by all members. According to the changes in the by-laws, the members are to be paid the net income from the current fiscal year's total production less member business expenses and the unit retain which has been a maximum of $1 per ton through fiscal 1980. There will be no allocation of patronage earnings. These changes assure that the current members share both the costs, the financial responsibilities, and the profits which in turn serves to remove any loss or profit from their cooperative (Koehler 1979b:2A; 1979c:1B; 1980c:3A; ACSC Annual Report 1980:24).

In other voting at the 1979 annual meeting of American Crystal Sugar Company the stockholders approved the directors' right to declare any patronage or any unit retains as either qualified or non-qualified for the purpose of determining whether individual grower-owners or the cooperative shall pay the income taxes (Koehler 1979c:18). Taxes on income from member business are paid according to federal and state cooperative tax laws, while taxes on income from non-member business are paid according to the laws regulating private corporations.

In order to change the method of beet payments to recoverable sugar per ton on an individual basis it was necessary to implement a 20-second interval for the beet quality assessment techniques which were developed by the British Sugar Corporation. The ability to use these techniques at rapid intervals was accomplished at the American Crystal Research Center in the late 1970s. The term "recoverable sugar" refers to the sugar that remains after sugar losses to molasses, processing, and storage. It is anticipated that the new method of payment for sugarbeets will encourage the kind of management and use of technology that will produce high quality beets with low impurities. This new method of payment is one more step in the ongoing, collective effort by the co-op to maximize the recoverable sugar, and thus, the revenue from each acre of sugarbeets planted by the grower-owners (Krabbenhoft 1979:16-17).

Other steps have been the improved seed varieties, projects designed to reduce sugar losses during storage and factory processing, the former beet payment scale which rewards growers for producing sugarbeets with a high sugar content, and the reduction of harvest expenses and frost damage risks by upgrading the beet receiving equipment and procedures. The latter change served to provide a longer growing season and the probability of larger amounts of recoverable sugar per ton of beets (Krabbenhoft 1979:16). Sunny fall days and cool nights raise the sugar content of the beets.

The new goal for sugarbeet production and harvest is a combination of high sugar content, high tonnage, low dirt tare, and the most important new factor, low impurities. Samples are taken from the loads of beets as they are delivered by each grower for processing. The dirt tare and quality analyses can be conducted at the same time on the same sample by the beet quality lab, or tare lab, at the East Grand Forks factory. The sample is now analyzed for sodium, potassium and amino-N along with the usual conductivity, nitrate, and sugar analysis.

The percentage of sugar lost to molasses, the percentage of dirt tare, and the percentage of sugar together determine the potential recoverable sugar. The information is stored in a computerized system and shared with growers for verification and comparison and for use in planning ways to improve the quality of the next crop of sugarbeets. A trial run was held on the 1979 crop which provided one means for growers to evaluate the new system before the issue came up for a vote (Holle 1979: 18-19). The higher amount of recoverable sugar per ton of beets will result in a higher beet scale payment beginning with the 1980 crop.

A special formula based on the work of A. Carruthers and J.F.T. Oldfield (1961) is used by American Crystal to estimate the yields of recoverable sugar:

Recoverable sugar/ton =
(fresh beet basis)

$$\text{Gross sugar/ton} - \frac{(3.5\text{Na} + 2.5\text{K} + 9.5\text{ amino-N}) \times 3{,}000}{1{,}000{,}000 \times .93}$$

"The symbols Na, K, and amino-N represent the concentration in parts per million of sodium, potassium and amino-N in sugarbeet roots. In other words, each pound of the weighted impurities is presumed to result in the loss of 1.5 pounds of recoverable sugar." (Moraghan 1979:20).

A number of agricultural factors contribute to a high level of impurities in the sugarbeets which in turn leads to a decrease in both the quality of beet juice during the refining process and the amount of recoverable sugar--the sale of which determines the return on the investment to the grower-owners. The progressive change from the use of hand labor to the use of machines for thinning, cultivating, and weeding tends to promote more low, uneven stands of beets. During the harvest when the beets are defoliated and scalped the crowns of the beets are not always properly removed at the recommended 3 to 5 percent of the total root weight. Trashy, dirty loads of sugarbeets which contain many crowns and poorly removed crowns may be rejected at the factories. The crown of the beets, particularly the top part of the crown, contains a high level of the impurities or non-sugars which cause a reduction in the amount of recoverable sugar per ton during processing and adversely affect beet payments. Adequate and uniform field scalping increases the percentage of sugar content and beet purity and lowers storage problems and the production costs of sugar at the factory level which raises beet payments (Krabbenhoft 1979:16; Hobbis and Bichsel 1980: 31,34).

The amount of nitrogen available to sugarbeet crops in the soil or from fertilizer, either remaining from applications on previous crops or applied directly to the beet crop itself, also contributes to the level of impurities and the quality of the beets. Adequate supplies of nitrogen are needed early in the growing season in order to establish a healthy, leafy canopy for the optimum maturation of the beets. However, exececssive nitrogen late in the growing season proportionately increases the impurities in the crown of the beets and lowers the sugar content, and sugarbeet quality declines. Since the mature root system of the sugarbeet is an extensive, fibrous network, soil testing at 4 foot depths may provide growers with useful information in order to more effectively combat this problem before the root system reaches deep into the subsoil later in the growing season. Every pound of impurities that reaches the factory converts to 1.5 pounds of molasses which sells for much less than refined white sugar (Krabbenhoft 1979:16-17; Moraghan 1979:20-22).

Thus, the emphasis is on recoverable sugar as the basis of the sugarbeet payments in the new contract agreement. This new method of payment and the distribution of information from studies being conducted by educational institutions and beet sugar co-op research centers in the Red River Valley will encourage and enable growers to make the necessary adjustments and improvements in their agronomic practices in order to produce high quality beets. The growers will reap the rewards of their efforts in increased yields of recoverable sugar and higher individual payments, as well as in larger overall revenues which will benefit all the grower-owners and the cooperative as a whole (ibid.).

GROWER OPERATIONS

The growers own or rent the land on which they carry out the diverse seasonal activities required to produce a crop of high quality sugarbeets. Extensive machinery is also utilized. Credit for these capital intensive items is more accessible to farmers who already possess substantial assets and who are expanding those assets, than to farmers with small farms and few assets or young farmers who want to begin farming. It is extremely difficult to raise enough capital to begin a new farming operation without some source of assistance. If land were purchased at $1,000 per acre at 10 percent interest, the interest alone would come to $100 per acre each year. Many sons of farmers help run the family farm and gradually assume ownership of part or all of the land, buildings, and equipment upon the retirement or death of the parents. A variety of business arrangements exists. Some fathers and sons or brothers become equal joint owners.

Some growers remain owners of their land and rent the land to other growers after they retire from farming. It is cheaper to rent land than to buy it. One small farmer who farmed 280 acres for years after her husband died finally stopped farming because the costs were so high. She said, "A smaller farmer can't hardly [sic] make it anymore." When she began renting her land she quickly discovered that the bigger farmers were able to afford to offer and pay higher cash rent in order to acquire use of even more land, often topping the offers made by smaller farmers. Even though she could have easily rented her land for $40 to $80 per acre (1978 and 1979), she chose to rent low to the smaller farmers at $30 per acre, and in return they took time to care about some of her needs, such as snow removal in winter.

Most growers rent land for cash, but a few sharecrop their rented land. One grower rents 230 acres from a retired couple who own the land and live on it. They pay the taxes on their land and receive one third of the income from the crops. The grower receives two thirds of the income, provides the seed and equipment, and pays for the costs of production. Growers rent land from each other as well as from retired farmers. A few farmers find it more profitable to rent their land than to farm it.

The growers who have access to credit and the land and seeds and machines--the means of production--are the ones who make the critical decisions regarding sugarbeet operations at the agricultural level--decisions which involve expansion and replacement through capital investment in land, equipment, buildings, or supplies. Growers also decide how to prepare the soil and what crops and variety of seeds to plant, and where, when, and what crops to rotate. The grower decides whether or not to use "no labor" machines or hand labor for thinning, cultivating, and weeding. These tasks are essential to a good stand of beets. Hand labor must be obtained--usually Spanish-speaking workers who migrate from Texas and other southern states--travel and housing arrangements made, and wages determined plus whether or not migrant laborers will receive a bonus for good work. The use of fertilizer, herbicides, insecticides, or other chemicals is also determined by the growers. The harvest--topping and scalping, lifting, and hauling the beets in large trucks to the factory yards and piling stations--is coordinated with the factory process and the weather.

Sugarbeet growers engage in diversified farming and some growers decide to initiate or join other cooperative efforts related to the other crops that they raise. One grower-owner of the American Crystal cooperative is also a director of a local elevator co-op for small grains. This is a smaller operation than the sugarbeet co-op. The grains can be stored and marketed when the prices are reasonable. It provides the growers with some degree of control over the marketplace for small grains just as the sugarbeet co-op serves to control the market for beets, and the huge factory storage bins offer the co-op some leverage in the process of marketing the refined beet sugar.

Besides being planners, managers, and owners who make decisions and control the agricultural production process and the product, sugarbeet growers are also producers who often do a substantial amount of the work in the beet fields and the maintenance work on the machinery. They hire family members, local high school young people and rural residents who are seeking summer jobs, full time farmworkers, and migrant workers to do the work on the farm that they do not have the time to perform themselves, especially on the larger farms.

Women are not thought of as "farmers" but contribute considerable labor to the farm operation as well as to the family, the home, and to gardening. Only a very small percentage of single grower-owners are women. Some of these women are widows who now own their husband's shares in the American Crystal co-op. One woman who works a farm with her husband owns the sugarbeets and does all the business with the co-op. She is an exception. Wives and daughters who are equal partners in the incorporated family farms of Minnesota that grow sugarbeets are listed as grower-owners with an equal number of shares. If there are 4 members in the farm corporation each would own one quarter of the co-op shares. Women in these circumstances are more numerous in the co-op. They help make important decisions and purchases and often keep the books for the farm operation. Even women from unincorporated farms are involved driving the beet topping machines, hauling beets to the factory or piling station, and/or handling correspondence with the company. Sugarbeet operations require good timing and many hands from family members--both men and women alike.

The costs for growing sugarbeets from start to finish were estimated by a number of growers at approximately $300 per acre in 1978 and 1979. (See table 2, page 74.) Costs vary somewhat with each grower and farming operation. The average yield of 15 or 16 tons per acre at the then depressed price of about $21 per ton barely covered the costs of production or, at best, provided only slight profits for the extensive investments involved. When the sugar prices and payments are low, any bad luck, serious problems, or mismanagement can easily lead to losses by increasing the costs since the average payments per acre would only amount to $315 or $336 respectively. With effective management and use of mechanization and other technology, hard work, and some good

Seed	$15
Fertilizer	15
Chemicals	20
Seasonal field labor	45
Thinning-cultivating-weeding	
Land costs	50
Interest-principle-taxes-rent	
Interest on equipment loans	22
Interest on crop production loans	25
Stock	14
Machine costs	70
Seed bed preparation-planting cultivating-chemical applications some electronic thinning roto-beating (topping-scalping) lifting-hauling	
General farm agricultural labor costs	12
Other	20
Replacements-housing-etc.	
	$308

Table 2. AN APPROXIMATION OF PRODUCTION COSTS PER ACRE FOR SUGARBEETS — 1978

luck, it is possible for a beet grower to realize a reasonable profit by producing a higher yield quality crop. A yield of 20 tons per acre at an average $21 per ton of beets would result in a payment of $420 per acre. This figure makes the large investment in a sugarbeet crop more worthwhile (Church and Drapkin 1978:96). Of course, growers with less than average rates of production will be unable to keep up with the rising costs of production.

A number of problems may develop which can add to the normal overall costs of raising sugarbeets and to the possibility of partial or total crop failure. Some problems yield to measures of control or modification, while other problems remain beyond control. The emphasis is on control over every aspect of grower operations to the extent that regulation is possible.

Various pests exist which plague the sugarbeet grower by adversely affecting the crop and increasing production costs. Fields must be regularly inspected for destructive insects that require immediate treatment upon discovery (Call 1977:19; Hilde 1980:5). Disease pests which affect the leaves of the beet plants can lead to a serious loss in sugar content with a corresponding increase in impurities (Hardcastle 1977:19; Koehler 1980b:3).

Weed control is also important because such pests as redroot pigweed and wild oats compete with the beet plants for available moisture and nutrients (Dexter 1977:20). The presence of weeds during harvest also increases the likelihood of trashy loads of beets which in turn contributes to spoilage and sugar losses in the storage piles. An increasing number of young beet plants in the Red River Valley are becoming "weed beets." They have a low sugar content and act like annual weeds. Research is being done in order to improve the methods of control over this new problem since neither electronic thinners nor hand laborers can readily recognize "weed beets" and remove them from the fields early in the season (Dexter 1981:21).

The weather must constantly be taken into consideration by beet growers, but it cannot be controlled and only seldom outwitted. Sometimes it delivers some hard and costly blows. Wind damage can be minimized, but the wind and the rain have their own timetable. Drought conditions lead to a general decline in tonnage and beet quality. The results are uneven stands of beets, and eventually those plants that do manage to emerge will die without rain unless some form of irrigation is available. Most farmers in the valley do not have access to any means of irrigation. Flooding or heavy rains can delay planting or damage or destroy part or all of a crop. A wet fall can reduce the sugar content of the beets and create harvest problems. Hail or tornado winds can wipe out an entire, healthy crop in a matter of minutes. A late spring frost can kill tender young plants which have just emerged from the soil. Some acres may need to be replanted. An early fall frost followed by warm weather may lower sugar content. On the other hand, if the ground freezes it will be difficult or even impossible to get the beets out of the ground. The weather also has a direct affect on problems with pests and the labor situation. Migrant workers can do a better job in the fields than machines under adverse weather conditions. The unpredictable nature of weather challenges the best of farming practices and the ingenuity, the perseverance, the patience, and the pocketbook of sugarbeet growers.

Three brothers and the son of one of the brothers farm 2,000 acres in the American Crystal Crookston district. During the spring of 1980 they planted 570 acres of sugarbeets, and the rest of the acreage was planted in small grains. The emergence of the seedlings was sparse and eventually all the young plants died from lack of water. The growers reseeded 200 acres which did not begin to grow until August when the rain finally came just in time for the grain harvest. These beet growers never delivered one sugarbeet to their district factory. While some Crystal growers were receiving the highest average first payment in the company's history at $24.88 per ton due to the higher world sugar prices, these four Crystal growers and many others received no payment at all. Growers are paid only for beets delivered, not for acres under contract or stock owned. Around 19,000 acres of American Crystal sugarbeets were plowed under mostly in the East Grand Forks and Crookston factory districts where the drought was most severe. The three brothers and one son had to absorb their considerable losses because the Agricultural Stabilization and Conservation Service disaster program does not cover sugarbeets, and they did not have any crop insurance. The dry, windy conditions early in the 1981 planting season following a dry winter prompted these growers to obtain crop insurance from the Federal Crop Insurance Corporation (Koehler 1980c:3A; 1981:1B). However, the moisture situation greatly improved and a good crop matured.

Other problems that beet growers face are the availability and costs of hand labor. A drought may delay or reduce jobs and disrupt the labor migration patterns from crop to crop. "Hoeing" close to 300,000 acres of sugarbeets within a few weeks requires thousands of field workers at the right time. This time varies to some degree with each growing season and area. These problems related to the availability of the labor supply and the increasing interest of growers in cutting production costs are rapidly moving many growers in the direction of "no-labor beets." The cultivation of sugarbeets without hand labor involves the effective use of electronic thinners or "planting to stand" (spaced planting that avoids thinning altogether) and mechanized methods and herbicides for weed control. An effective way of reducing the costs of wages, transportation, and housing for labor is to use less hand labor for thinning and weeding beets and more machines (Alexander 1977:10). Machines are available on the farm when they are needed and faithfully serve their owners without protest if they are kept serviced and repaired. Some growers note that machines are cheaper, much faster, and generally more efficient than hand labor, but machines do not think and they do make some mistakes. They cannot operate in wet, muddy fields nor after the crop canopy fully matures. Hand labor functions better than machinery in muddy fields during a wet season and in very uneven stands of beets which are characteristic of drought conditions. As noted earlier in this chapter there are some indications that hand labor may produce a higher quality beet crop.

In a survey conducted by the University of Minnesota and North Dakota State University, 64 percent of the sugarbeet growers grew part or all of their beet crop without hand labor in 1978--14 percent grew their beet crop without any hand labor--and 30 percent of the growers surveyed planned to grow "no-labor beets" in 1979 (Associated Press 1979a:20). One beet grower who farms with his brother and sons reduced his migrant labor force of five years from 24 workers to 15 in 1979.

He only needed 12 workers for his 670 acres of beets, but he kept three families which numbered 15 workers rather than split one family in half and risk losing the whole family to another grower (Valentine 1979:1A).

The harvest of sugarbeets and potatoes used to be a job for hand labor. Today the harvest is a highly mechanized process for both crops. Mechanization is on the rise and many jobs are being lost. A beet grower who also grew potatoes told a story which clearly reveals an additional dimension as to why beet growers are moving toward full mechanization in the beet fields. The grower-owner was trying to finish harvesting a field of potatoes before an approaching storm arrived. The migrant workers stopped working and sat down in the field. They had their own concerns which obviously frustrated and contradicted the concerns of the grower. Some of the workers demanded more money for daily wages. The grower-owner of the farm wanted the strike to end and everyone to get back to work as quickly as possible. All the workers who wanted more money for the day's labor were asked to come up to the truck at the edge of the field and give their names and they would get more pay at the end of the day. The harvest was successfully finished. All the workers were paid higher wages at the end of the work in the field, but the workers who asked for higher wages and who gave their names were fired. The grower-owner managed to get the crop in before the storm arrived, kept costs down as much as possible by only paying the higher wage once, and still maintained control over the labor force. The workers accomplished only a small gain and a greater loss with their limited power. Mechanization means lost jobs for hand laborers but may have certain advantages for the growers. Machines do not speak out, talk back, make demands, or go on strike, and it takes far fewer people to run them than to do the same labor by hand.

A few growers do not even think about mechanization because they have established a regular, reliable labor force of migrant workers who consistently do excellent work. An extended family of some 35 members returns from Texas each year in order to thin and weed 900 acres of sugarbeets for one grower who has no intention of further mechanizing beet operations. Some of these workers do work for other growers in the area during slack work periods.

Various resources and programs exist which can assist the grower to implement effective operations and maximize the return on his investment. The cooperative itself performs relevant research and makes its publications of news and research and the annual report available to all Crystal beet growers. Factory agriculturalists and fieldmen work closely with growers and help with problems that may arise during the growing season. They also coordinate the activities between farm and factory during the harvest. The Grower Practices Program encourages growers to maintain good crop records, particularly regarding soil tests and applied nitrogen, seed variety, plant population, and plant pests. The information can be interpreted in relation to the crop yield and quality averages and compared with the averages of the grower's past crop records and the delivery station, factory, and co-op averages in order to help improve grower practices, and thus the amount of recoverable sugar per acre (Hilde 1980:4-6). The new Green Thumb Project was presented to American Crystal growers at the November 1980 district meetings. It is being made available for the 1981 growing season. The project involves a two-way communications system between a home or farm computer unit, which costs about $339, and a county agent's, or Crystal's central host computer. The grower can obtain current (hourly changes) local data pertaining to the weather, insect and disease infestations, environmental regulations, and area and regional market prices, all of which help the grower to make better decisions for the total sugarbeet operation, reduce waste and costs, and increase profits (Keir 1980a:20).

The Sugarbeet Research and Education Board of Minnesota and North Dakota promotes effective research and education programs for the Red River Valley sugarbeet industry as a whole. Seven sugarbeet growers, four North Dakota State University (NDSU) scientists, two representatives from cooperative management, and one United States Department of Agriculture official serve on the board. Activities are funded by the beet growers at a maximum of three cents per ton of beets (1980). These funds, along with government funds, also help support the annual extension programs of sugarbeet specialists who work for the NDSU and University of Minnesota Cooperative Extension Service. These programs include: sugarbeet grower seminars; a grower idea contest as part of the Crookston Sugarbeet Institute with its displays, machinery exhibits, speakers, and social events; weed control and other tours; research reporting; publication of a pocket production guide and fact sheets; training workshops for fieldmen; weekly radio scheduling; and trouble-shooting at the farm, field or factory site (Feight 1980:18). And the American Sugarbeet Growers Association plans annual meetings with talks related to issues of world agriculture and the sugarbeet industry.

American Crystal provides special recognition for its top producers in each factory district. There are three categories based on acreage harvested within each district since the management for 800 acres of beets differs considerably from that of 25 or 50 acres. Five top producers are selected for each category according to the number of pounds of sugar produced per acre. One grower in the Drayton district produced an average of 7,757 pounds of sugar per acre with 177.6 acres harvested at 22.4 tons per acre and 17.3 percent sugar. The results are published in the American Crystal co-op journal, Crystal-ized Facts (February 1980:18-21), and in local newspapers. An inscribed plaque is presented to the top Crystal producer in the Red River Valley for outstanding performance. These are the "pacesetters" who set new production goals for all the growers in the co-op. They also receive the highest payments per ton for their beets and keep all the growers competing with their own records and each other's records at the different levels of cooperative organization.

When the beet sugar co-op was organized the acres for raising beets had to be purchased in the form of American Crystal stock. Some of the older growers felt that they were too near retirement to take such a risk and make such a heavy investment. Consequently, they stopped growing sugarbeets. A few others also stopped because they did not like the idea of the cooperative venture itself.

While a number of growers consider sugarbeets to be their best crop even when none of the crops brings in much income and they "zero out at the end of the year," others have sold their sugarbeet shares and have stopped growing beets for the co-op. They said that there is no money in it and no future in sugarbeets. One grower said it was just too much extra work, thought, and "hassle" to grow beets. This same grower finally decided that all the pressures during the harvest, when people and machines drop everything else and work around the clock for two solid weeks topping, lifting, hauling, and stockpiling beets, were not worth the meager returns from 1977-1979. This successful farmer who cultivates over 1500 acres of land did not plant any of his usual 270 acres of sugarbeets in 1980 and is no longer a member of the cooperative. (See table 3, pages 84 and 85 for a farm profile of American Crystal grower-owners.)

Many farmers in the Red River Valley have never grown sugarbeets. Some of the reasons given were that sugarbeets are a lot of work and too expensive to raise. A beet crop requires a high investment in machinery and in stock since the co-op began in 1973. Some of the smaller farm operators said that they cannot handle the high costs of production. Also, the late beet harvest is viewed by some farmers as a problem, along with the necessity to recruit hand labor and provide housing facilities or assistance for the workers for about two months each summer.

One other significant grower operation is the new beet hauling program at the Hillsboro factory that was organized for the 1979-1980 campaign after the previous loading and hauling contract with Sugar Lines Trucking Company, a private firm, expired. This pilot program was initiated when several grower-owners in the Hillsboro district contacted the factory management about hauling the beets themselves. The cooperative and factory management agreed to a trial run since the necessary equipment was either available or readily obtainable. Some growers owned their own truck tractors and hauling beets would provide an additional means of making a profit. The agricultural manager and the beet haul supervisor from the factory continue to meet regularly

TABLE 3. FARM PROFILE—A RANDOM SAMPLE OF GROWER-OWNERS OF THE AMERICAN CRYSTAL SUGARBEET CO-OP—1977-1981

	Total number of acres	Acres owned	Acres rented	Number of sugarbeet acres	Past sugarbeet acres	Other crops grown	Other co-op roles	Beet Profit estimates
1.	1680	1590 crop acres	-	0	270(1961-1979)	barley, wheat corn, sun-flowers alfalfa-cattle	Director of grain co-op	$14,310 loss (fiscal 1977) $13,230-generally above average income (fiscal 1978)
2.	1700	1700	-	175(1973-)	-	pinto beans wheat, barley	Active parti-cipant (AP)	Just barely covered costs - generally adequate income (1977)
3.	1400	1400	0	315	-	wheat	Former leader RRVSGA, Board Director	"No real profits" generally adequate income (1977)
4.	1800	1800 by father	1600 by sons	400	(1924-1969) by father	wheat potatoes	AP	Adequate (1977)
5.	1002	402	450 from parents 600 total	122(1965-)	-	wheat, barley potatoes, peas sunflowers	AP	$12,200(1977)
6.	731 oper-ated by father & son	688 crop acres by father	0	144(1965-)	-	wheat, barley	Factory dis-trict committee-man, RRVSGA repre-sentative (father)	$38,000 equally shared by two families (1977)

	Total number of acres	Acres owned	Acres rented	Number of sugarbeet acres	Past sugarbeet acres	Other crops grown	Other co-op roles	Beet profit estimates
7.	3500	1900	1600	1400 (estimate)	-	wheat	Board Director Part owner of grain co-op	$168,000(1978)
8.	660	260	400	144	-	wheat,barley	AP	Adequate(1978)
9.	620	400	220 varies	292(1949-)	-	seed grains wheat,barley durham	Board Director	$13,432(1978)
10.	1400	1400	-	280(1973-)	(1928-1973) by father	pinto beans spring wheat sunflower seed	AP- Member of Farmers Union - Chairman of N.D. Edible Bean Council	-
11.	2000 farmed by brothers & son	-	-	570	-	small grains	-	A total loss (1980 crop) drought
12.	700	-	-	not available	-	pinto beans wheat,sun-flowers,barley	-	$35,000 loss on all crops(1980)
13.	3200	-	-	445	-	wheat,durham barley,sunflowers navy,black turtle, and pinto beans	-	-
14.	2840	1700	1140	410	-	wheat,corn,barley oats,hay,pasture Angus cows	-	-

Sources: Interviews and news articles

with a truck tractor owners' committee in order to establish rates and procedures and work out any problems which arise. That first year eleven grower-owners contracted with the Hillsboro factory which paid them to load and haul beets from the specified outside receiving stations some 40 miles or so to the factory yard storage piles. Twenty-six drivers were hired to work 12 hour shifts delivering 3500 tons of beets each 24 hour day 5 days a week for about 85 working days. In early 1980 the cooperative reported that the experimental grower beet hauling project was running smoothly (O'Leary 1980:13). This successful grower hauling program may set a precedent for the other 4 factories in the co-op which presently have contracted E. W. Wylie Corporation to haul their beets.

RED RIVER VALLEY SUGARBEET GROWERS ASSOCIATION

The Red River Valley Sugarbeet Growers Association (RRVSGA) has been in existence both before and since the cooperative was established in 1973, but its role in relationship to the American Crystal Sugar Company has changed. Indeed, the RRVSGA is the collective body of growers that initiated steps in order to influence the decisions and policies of the private New Jersey corporation and later to organize the Minnesota cooperative and control the company and its investments as the new owners. Prior to 1973 the RRVSGA supported grower concerns and represented the interests of the beet growers in dealing with the New Jersey Corporation whose primary concern was the interests of distant stockholders who were totally uninvolved with the production of sugarbeets. Since 1973 the directors of RRVSGA and the directors of the Board of the cooperative, who are all grower-owners, meet annually. They have redefined the role of the association and continue to determine how it can best serve the grower-owners and co-op. The RRVSGA has gradually developed three major areas of involvement: (1) grower concerns with the actual farming of sugarbeets, (2) migrant labor relations and related labor issues, such as suggesting minimum wage guidelines for growers, and (3) legislative issues through lobbying for beneficial state and federal sugar legislation.

One major task undertaken by the RRVSGA related to migrant labor relations was the writing of a seasonal labor contract in 1976. It was a difficult and unique process apparently without parallel in the history of the cultivation of sugarbeets in the United States. The difficulties arose because of the uncertainties of weather and farming activities and the differing interests and requirements of the growers and the migrant workers. Both groups were represented during the deliberations. It was agreed that problems did exist on a small number of farms, often due to misunderstandings between people new to each other or new to sugarbeet cultivation, and occasionally due to growers and workers taking deliberate advantage of one another. In terms of the labor contract the growers were most concerned that workers be available when the beets are ready to be thinned, if they have been notified. Growers wanted assurance that workers would perform quality work for "agreed to wages." The workers, who represented thousands of workers who migrate to the valley for seasonal work, wanted some guarantee regarding the amount and type of work to be done and good housing upon arrival in the valley, basic funding or other work in the event of natural disaster, and a clarification of wage rates. The completed and more detailed contract reflects these concerns. The issue of "quality work" was more clearly defined for both the growers and the workers (Sinner 1977:18).

A draft of the seasonal labor contract was presented at American Crystal's annual meeting in December of 1976. The growers voted to make the contract available on a voluntary basis following some re-drafting. The migrant workers did not vote on the contract. All recruited seasonal workers and the growers were notified that the written, legal labor contract was ready for use. Either party could initiate its use but both must voluntarily agree to use it before proceeding. If problems arose the parties were encouraged to resolve them in the presence of their peers (one other grower and one other seasonal worker) before seeking legal action. The contract was open to revision after some use, feeback, and evaluation. The seasonal labor contract was designed to foster improved communication and understanding, fairness, and consideration which are necessary for good working relationships and productivity (ibid.).

No evidence surfaced in the course of this study that indicates any widespread use of the written labor contract. According to an official of the RRVSGA, migrant workers were reluctant to sign the contract, even though it was bilingual. Only one grower and his workers agreed to use the binding contract from 1980 through 1982. Even though the written labor contract was not used extensively, the effort to establish such a contract led to the development of the State Monitor Advocate system that provides free impartial arbitration--also a major concern of the labor contract--in order to settle disputes between the sugarbeet growers and the migrant workers. This system operates through the State Employment Security Offices and can be used by all migrant workers and growers, whether or not they used the employment services. Those growers and migrant workers who do use the employment services are provided with a written form that states the basic terms of employment. Similar forms are available from the RRVSGA for those who want them. In 1982, most disputes regarding working conditions and the quality of work were settled between the growers and the migrant workers and the state employment offices. Only one dispute in Minnesota required the services of the State Monitor Advocate and none in North Dakota. The new system takes care of immediate concerns but serves to cover up and perpetuate the underlying inequalities that remain in the social structure and that continually generate new disputes and class struggle.

The focus of lobbying efforts by leaders of the RRVSGA has been the passage of a federal price support loan program for sugar producers. The bill for a new sugar loan program was passed by the U.S. congress in October 1981. A similar program was allowed to lapse in 1978. The new sugar loan program sets a loan price rate of 19.6 cents per pound of sugar. This would cover about 80 percent of the costs of production. Costs vary somewhat from farm to farm. Producers can obtain loans against their sugar from the federal Commodity Credit Corporation. When the loans come due the producers can elect to default on the loans if the market price for sugar is lower than the loan price. The government will keep the sugar in storage and sell it, hopefully, when prices rise again. Producers can buy the sugar back by paying the loan off and sell it on the market if the market price is higher than the loan price.

Transactions will be carried out through the business structure of the co-op rather than directly with the growers. The loan program helps guarantee a strong domestic sugar industry, even though other countries are free to dump surplus sugar on the United States market at prices below the domestic costs of production which drives prices down. The price support program can help protect producers from some of the problems caused by the sharp fluctuations in world sugar prices since the United States no longer regulates its sugar trade (Hand 1981a:1A).

A less serious and more enjoyable pursuit of the RRVSGA than lobbying activities is the sugarbeet festival which is also good for business. Local newspapers announced the sixth annual Red River Valley Sugarbeet Festival during June 1981 in Grafton, North Dakota. It was to be a celebration of sugarbeets and sugarbeet growers. State dignitaries often attend. The festival promised agricultural and commercial exhibits, an arts and crafts show, a farm seminar led by extension sugarbeet specialists, a parade and carnival, games and contests, a softball tournament, good outdoor eating, and a street dance. Sometimes special women's meetings are held. Townspeople, migrant workers, and growers and their families all participate in the festivities.

The RRVSGA helps the festival committee with special projects. The 5 factory districts of the American Crystal Sugar Company, the Minn-Dak Farmers Cooperative of Wahpeton, North Dakota, and the Southern Minnesota Sugar Cooperative of Renville, Minnesota sponsor the Miss Red River Valley Sugarbeet Queen contest that is an integral part of the festival. Several thousand dollars in scholarships were to be awarded to the queen contestants. The RRVSGA sponsors the attendance of the sugarbeet queen at both the Minnesota and North Dakota state fairs where the queen helps give a talk about how beet sugar is made, and sugarbeet products are displayed. It is all part of the promotion of the sugar industry and its products.

CO-OP EVALUATION— GROWER VIEWPOINT

The grower-owners who were interviewed offered a variety of views regarding the benefits and limitations of their sugarbeet co-op and how it differs from the former corporation. They view the co-op as the means to long-term survival for the sugarbeet industry in the Red River Valley. The philosophy behind the producer cooperative differs from that of the former company. It is no longer a case of contract growers versus distant owners competing for a fair share of the profits from the sale of the product. The growers are the owners now, and they work together and cooperate with the factories for their own profits. The grower-owners of the cooperative believe that they have generally good relations with other farmers, migrant workers, the plant managers and workers, and the communities near their farms and factories, except perhaps when there are waste water spills or odors which the co-op keeps working to prevent. The new grower-owners also have a prime interest in sugarbeets and the co-op which the former owners did not share. The short term interests in profits of the former stockholders were the primary concern of the New Jersey company. The new owners are willing to take a loss if necessary to keep the co-op in business and growing in order to provide a market for their beets. Sugarbeets are a good cash crop; when the price of sugar is good beet profits are high. Any profits after the processing costs are paid are distributed among the local beet growers according to the business they do with the co-op and the number of shares they own. A few non-producers can no longer own shares and retain the profits. This benefits the local economy in the valley through increased general retail sales and farm investments.

Now that the profits of the cooperative return to the grower-owners and they control capital investments both at the farm and factory level, American Crystal Sugar Company has undergone considerable improvement and expansion. The co-op can adjust the acreage of beets and production of sugar to consumption trends and the market which they also help promote. The number of sugarbeet acres have about doubled under cooperative efforts, and the number of grower-owners has increased by approximately one third. Sales of farm machines and supplies from local suppliers have increased in the region. The increased acreage works better for producers. Expanded beet acres allow many growers to rotate crops on their own land which provides better returns, good rotation, and helps control weeds and eliminate idle land. The total slicing capacity of the co-op was greatly increased when the Hillsboro factory merged with the co-op and the East Grand Forks factory expanded--complete with a new labor-saving monitoring system. The new addition also created some new jobs in the area.

Expansion and improvements by the co-op have reversed the downhill trend, that was perceived by the growers, in the factories and the company as a whole. There are better repairs and better roads on which to haul the beets to market. Environmental concerns also gain a fair share of attention. The cooperative has recently invested substantial amounts of capital--millions of dollars--in several environmental projects in order to comply with federal and state regulations. Electrostatic precipitators have been installed on the boilers at the Moorhead, Crookston, and Drayton factories which will control the emissions of particulate matter into the air from the power plants. A Swedish designed waste water treatment plant known as the Anamet System has been built at the Moorhead and East Grand Forks factory sites (ACSC Annual Report 1979:10). The East Grand Forks system was funded by City Industrial Development Bonds. The Anamet involves a process of fermentation of beet wastes under anaerobic conditions. The new system effectively eliminates most unpleasant factory waste odors from the waste holding ponds when they thaw in the spring. The co-op placed a bold, full page announcement of its intentions to resolve the odor problem and an explanation of the new system in the local newspaper, the Grand Forks Herald, on June 26, 1979. The owners care about good community-business relationships because they live in the area themselves. Other anti-pollution projects have been undertaken as well.

Also, more research is being done by the co-op that benefits the farmers, such as new seed varieties, new processes that increase the sugar content of beets and the sugar extraction rates in the factories, new harvesting and piling methods, and new products--fertilizer from the new ion exchange operation at the Moorhead plant.

The cooperative itself is a form of vertical integration. The growers produce the sugarbeets, control the market for their product, and own the means of processing the beets--the means of production of beet sugar. It is noted, however, that fluctuating sugar prices remain beyond their control. One grower, who is also on the Board of Directors of American Crystal Sugar Company, says that expansion is the only way to make money and survive both at the farm level and the factory-business level. He thinks that this expansion of individual farmland, machines and technology, factory facilities, and sound management helps beet growers overcome poor sugar prices by removing as many uncertainties as possible in beet sugar production and marketing. More crop on more land helps assure some profit by spreading costs over more acres. This particular beet grower has bought out four other smaller farms in the past three decades. He farms 3500 acres, up from 700 acres in 1951, and owns 1900 acres himself, now that his father has retired from the farm. He presents a computerized, big-business image of farming and the co-op. He resented the policies of the former company which were characterized by a general lack of expansion, improvements, and active concern for the needs of the growers. The executive officers of the former company were located in Denver and had no contact with the growers. During the harvest the factories were shut down on weekends which created problems for the growers who were concerned about the crop and were the ones who had to sustain any loss from freezing or spoilage of the beet crop. Now the concerns of the growers for the crop are taken more seriously by everyone. Once the factories start up during the harvest they are kept operating 24 hours a day, 7 days a week, if at all possible, until the campaign is completed. The whole co-op works together to resolve harvest problems, and growers even have access to a company computer which provides information that helps them improve the sugarbeet crop (Church and Drapkin 1978:96). The expansion and improvements of the beet receiving stations and factory yards have also facilitated a smoother harvest. The additional space and equipment and new procedures permit the beets to be piled faster and better and the piles to be split for a more effective deep freeze. The cooperative saves several million dollars by stacking harvested sugarbeets more efficiently.

A couple of the grower-owners who were interviewed demonstrated some reservations regarding the cooperative. It was noted that some growers seem to take the co-op for granted, and some poor attitudes and lack of involvement persist. The assertion was made that unless the new owners remain responsible and continue the struggle with strong participation in the co-op, the considerable progress they have made may be lost. One grower viewed the benefits of the co-op as questionable and saw no real difference between the co-op and the former corporation. Profits were reduced when the cooperative had to pay a $5.5 million settlement in 1978 for an antitrust suit which was inherited from the former company. The idea of the co-op sounded better than the private corporation, but sugar prices have been low from 1976-1979 and remain unstable. The co-op cannot control these prices. The growers are paid on the net of sugar sales which is considered "iffy." Beet payments have been low for several years and funds are retained by the co-op to cover losses and for capital investments. Many growers have not prospered, even though the co-op itself is in sound financial condition. Most growers would agree that there is a need for a stable and fair national price support program for sugar that covers the costs of production.

Some of the sugarbeet growers who were interviewed said they were making an adequate living over the years in spite of low prices, partly from beets and partly from other crops or rural enterprises. Other growers said they were "slipping back," just breaking even, or unable to even cover costs. One beet grower bluntly responded, "Farmers are not rich." A larger farmer realizes less profit when the sugar prices are low but can more readily absorb any losses and the reductions and still maintain a very good personal income plus sufficient profits to expand capital through reinvestments. A good crop can also help overcome the effects of low sugar prices. Despite the low sugar prices, several difficult years, and many ups and downs, sugarbeets and the co-op continue to play a central role in the lives of many growers because the income potential for beets is generally considered to be good.

The company had sales of $384 million in fiscal 1981 with net proceeds of $182 million (Associated Press 1981b). However, in fiscal 1982 sugar prices took another typical plunge. In March 1982, company officials announced an estimated average beet payment of about $15 per ton. This figure was way below production costs and the lowest payment in the history of the co-op. The grower-owners expressed their frustration and displeasure toward the Board members and top level management at factory district meetings. They questioned the poor communication, the level of cost cuts, and management marketing decisions. They questioned the need for so many top level managers with salaries ranging from $72,000 to $157,000 (1981). Growers were satisfied with factory managers. Salaries range from $20,000 to $30,000 at the factory level. The grower-owners also questioned the employee incentive program which gives bonuses to non-union employees for outstanding performance but not to union employees, creating an obvious inequality and consequent unrest between factory workers. The growers wanted to know why there was such a wide gap between the 1981 payment to growers and the forthcoming meager 1982 payment. The obvious explanation of low sugar prices was simply inadequate by itself since the Minn-Dak Farmers Cooperative in the southern RRV suffered from the same low prices and its 1982 average beet payment was almost double that of American Crystal (Hand 1982). Some other explanations were offered to Crystal growers: a 15 percent loss of sugar due to heavy crop damage by frost in late October 1981 lowered the amounts of recoverable sugar which cost growers $2.59 per ton, as sugar per ton dropped from 228 pounds in 1981 to 179 pounds in 1982; the long campaign increased labor costs; the strike by factory workers in September 1981 cost growers $2.00 per ton of beets; co-op costs increased; and fewer bags of sugar led to higher marketing expenses (ibid.).

The fact remains that the grower-owners, primary producers for the co-op, are the only group of workers who will not receive any income for their labor and products in fiscal 1982, while the managers and factory workers engaged in the production process will continue to receive their usual salaries and wages. Resentment runs high. The grower-owners not only will receive no income but will also sustain considerable losses which will be particularly hard on the smaller and medium-sized farm operations with big debts and no other substantial income. Available government subsidies are not enough to cover production costs.

ANALYSIS

The producer cooperative, American Crystal Sugar Company, displays the primary characteristics and features of capitalist production and distribution. The co-op constitutes an agricultural and industrial processing system for the production of commodities--sugarbeets, beet sugar, beet pulp, molasses, and fertilizer--for sale on the market. There are two major classes of people participating in the co-op: (1) the grower-owners and their managers, and (2) the field and factory workers who sell their labor-power, their capacity for work, to the former. Even labor-power remains a commodity to be bought and sold within the cooperative. The grower-owners, the new group of capitalists, own all of the means of production, directly control the organization and process of production, and appropriate the surplus value from the workers.

The social relations of production of the cooperative are capitalist relations. The grower-owners own or have access to the land, the supplies, the machines and tools, and the factories, as well as credit, information, and skills--the means of production of sugarbeets and beet sugar. Most of the workers own little or no property, other than personal property, with which to produce a sufficient income for subsistence. The grower-owners of the co-op combine the means of production with labor by entering into a contractual relationship with seasonal field workers and factory workers. Labor-power is exchanged for wages so that the workers can physically maintain themselves and their families. In this way labor-power is partially reproduced. The field and factory workers and the growers all participate in the process of production. They are the ones who actually help produce the beets and the refined sugar on the farms and in the factories. At the same time that the growers are producers they are also owners, and they directly supervise the work of the seasonal field workers. The grower-owners supply the workers with hoes and instruct them on where and how to thin and weed the long rows of beets. Some growers check the work of their migrant workers and offer a bonus for good work performance. This practice is paternalistic. The grower-owners pay managers salaries for supervising, in great detail, the work of the factory workers and for managing the cooperative as a whole. (The relationship of the field and factory workers to the owners and the process of production and distribution of the co-op will be examined more closely in the following two chapters.)

The grower-owners assume the greatest economic risk in the co-op and farm operations. They share neither the profits nor the losses equally with the other producers who participate in the cooperative effort. The organization of the co-op pits the interest of one group against the others. The growers experience the opposing force of their own managers most in their role as producer, i.e., when the top level managers retained their high salaries in 1982, even though the grower-owners were expected to receive no income and to sustain losses. Cooperation in the cooperative has its limits.

By virtue of the rights of private and joint ownership within the capitalist economy of the United States the grower-owners make the decisions regarding: what product is produced and how; new payment plans; the technology and degree of mechanization that will be utilized both at the farm and factory level; the control of the production process and wages in order to increase productivity and profits; capital investments and expansion; and even the directions of research and experimental programs, such as the beet hauling program at the

Hillsboro factory. As the new owners of the co-op, the growers also own the products and appropriate the surplus value from the workers by selling the products on the market at a value which exceeds the value paid in wages to the field and factory workers for their part in producing the products. After deducting business expenses and sufficient unit retains, the grower-owners distribute any profits (if sugar prices cover costs) among themselves according to the volume of business each grower does with the co-op. Capital is reproduced and accumulated in this manner. These social relations of production of the co-op allow the grower-owners to exploit the field and factory workers who do not share in the profits except marginally from time to time when wages are increased slightly or housing is improved. This exploitation exists despite the appearance of equality and cooperation. There is actually little structure for implementing democracy, a more equal distribution of power, in the cooperative workplace except among the grower-owners. The exploitation of workers is a prominent feature of capitalist relations. The grower-owners and the workers definitely have antagonistic interests and relations within the cooperative enterprise because all of the producers of sugarbeets and refined beet sugar are not full functioning members of the co-op.

Expansion has become an integral force in the life of this producer cooperative in order for the company to grow and survive in a highly competitive capitalist system. The American Crystal co-op has achieved all of its initial goals--increased sugarbeet acreage and total slicing capacity for the co-op with greater utilization of machines and increased productivity, new executive headquarters located near the five factories and the new owners, and expanded beet receiving facilities and equipment--and continues to expand in many directions with new research, processes, and facilities, new products, and expanded markets and sales. The new owners invest capital in the means of production and labor, appropriate the surplus in the form of profits from the products produced by the workers and sold in the market, and expand their capital by reinvesting part of their profits in order to compete successfully with other larger sugar companies within the huge food industry and the capitalist market economy.

Expansion serves the ultimate goals of the co-op. These goals are to increase profits for the grower-owners, accumulate capital, and to continue to grow and remain in business. Thus, cutting costs is a primary concern of the co-op. There is a definite trend of resisting and reducing the rising labor costs of wages, fringe benefits, and labor regulations by introducing more and more machinery into the production process. The machines prove to be cheaper and more efficient and productive than the workers. Also, machines make no human demands; therefore, they are more easily manipulated to fulfill the goals of the cooperative and their costs are more easily controlled. Hand labor in the beet fields is being drastically reduced and perhaps eventually will be eliminated by the improved use of herbicides and mechanical weeding and thinning and the practice of planting to stand. Providing jobs and an adequate livelihood for migrant workers, area residents, and some small farmers who need the extra income is not a major goal of the co-op. However, the process of ongoing expansion will undoubtedly lead to some new jobs from time to time. Relocation of the company or factory closures in the valley are unlikely as long as local farmers are the owners and business remains viable.

The expansion of the sugarbeet crop itself depends, first of all, on the slicing capacity of the processing plants per campaign and on the trend of domestic and world sugar production and consumption figures, sugar prices, and the prospect of profitability. Human nutritional need for the product of refined sugar is not a serious consideration in plans for the expansion of the co-op or the crop. Nor does the controversy which surrounds refined sugar and other refined sweeteners in the American diet seems to be a consideration.

Refined sugar is not essential to human requirements for food and is often harmful. When consumed in excessive amounts over a long period of time--as it is by many people in order for the co-op and the sugar and giant food industries to make all their profits--sugar is known to contribute to a number of physical and mental disorders among an increasing proportion of the North American population (Hall 1974; Hoffer and Walker 1978; Reuben 1979). The push for expansion in the co-op ignores reason related to human welfare.

One significant change occurred when the American Crystal Sugar Company was expanded into a producer cooperative. Each beet grower assumed the role of stockholder and owner of the co-op while continuing to function as an important part of the production process by growing sugarbeets on land individually owned and rented. Property relations remain basically unchanged, even in the presence of joint ownership. The other producers, the field and factory workers, have not been included as members of the co-op. The organization of the social relations of production between the growers and the field workers remains essentially the same as always. Now that the growers have taken the places of the former stockholders the same capitalist social relations of production persist within the cooperative between the growers and the factory workers as existed in the former corporation between the former stockholders and the workers. (See figure 2, page 104.)

The growers now function from a position of power within the co-op. The former contradictions, or opposing forces, between the growers and the former company's policies and stockholders and their managers have been resolved. The growers are the owners of all the means of production and control the industrial market for their beets with minimal transporation costs, but the sugar prices and natural disasters remain beyond their control. Beet growers have a voice in elections and all major decisions and policies, and management works for them. The grower-owners receive both payments for the beets they produce and deliver to the sugar mills and a share of the profits depending on the business each does with the co-op. They do not have equal shares and do not share the profits equally in any social sense. Whatever profits exist are dispersed to the individual stockholders who are the growers--similar to "dividends." Generally, conditions for the sugarbeet growers have improved greatly, but the structure of the co-op still allows exploitation of the wage workers through the appropriation of the surplus value. These workers who help produce the commodities do not share equally in the results of their labor, the profits, and are systematically denied any real power or voice in the operation of the cooperative. The growers in essence have become what they endeavored to overcome. They have entered into the same capitalist relations with other groups of workers which they have successfully changed for themselves.

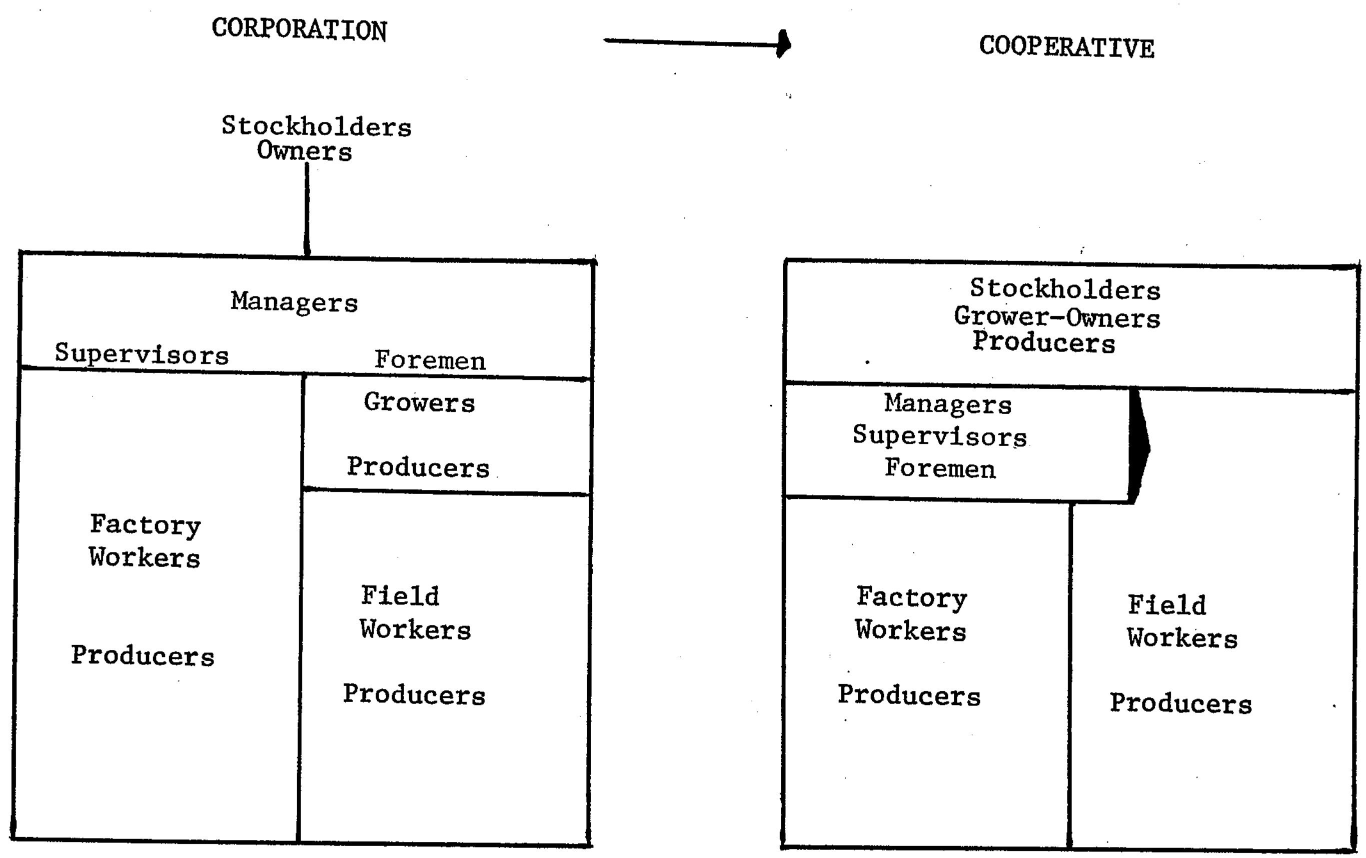


Figure 2. A MODEL OF THE MAJOR STRUCTURAL CHANGE IN THE TRANSITION FROM THE CORPORATION TO THE COOPERATIVE OF AMERICAN CRYSTAL SUGAR COMPANY

When the sugarbeet growers purchased the stocks from the former owners they engaged in a process of expansion similar to vertical integration. The agricultural process and the industrial process necessary to produce beet sugar became part of one organization and are owned by the growers. The farms and beet acreage are owned and operated individually, while the co-op and factories are owned and operated collectively.

The capital intensive nature of the cultivation of sugarbeets and membership in the American Crystal cooperative discourages small and the smaller medium-sized farmers from participating in or benefitting from the co-op. The organization of the cooperative does not support its smaller growers or members who have a bad year, even though individual growers may choose to help a neighbor, relative, or friend plant or harvest his/her crops if the farmer is unable to work due to illness or some other emergency. Growers are joint owners of the co-op, but that ownership is unequal. The members do have an equal voice in the operation of the co-op if they use it. The larger growers have the edge on purchasing more shares in the co-op, keeping costs down and absorbing any losses, and receiving a larger share of the profits than the smaller shareholders and farms based on the volume of business each engages in with the co-op. The members of the cooperative are also individual farmers who grow a variety of crops and compete with one another. That competition extends to the individual sugarbeet growers themselves. Beet payments encourage good quality crops, high yields in tonnage, and competition between grower-owners. It is possible for a smaller beet grower with a higher beet payment to reap a lower total profit than a larger beet grower with a lower beet payment when the smaller grower has a higher quality and yield and higher production costs than the larger grower. (See table 4, page 107.) Greater economy of size or scale gives the larger grower the advantage for reducing production costs and maintaining good credit and more flexibility in times of economic crises. The larger farmers can more readily meet the cooperative emphasis and capitalist pressures to increase profits, accumulate capital, and expand; consequently, they are buying out the smaller farmers. It makes no difference whether the small farmer has been a member of the co-op or not. These family farmers who are dispossessed of their farmland are being forced to work for wages either in rural areas or urban centers in order to subsist. Some struggling small or new farmers work in the sugar factories during the fall and winter campaign for extra money and work on their farms in the spring and summer months. Only a few of these smaller farmers who work for wages during the campaign also grow sugarbeets. A small grower-owner can benefit from the cooperative to some extent, but a large grower-owner has the advantage and benefits to an even greater extent.

Farmers have been and still are, for the most part, independent commodity producers, but the trend is toward larger farms and capitalist agriculture as noted in a special report by the Saskatchewan Research Education Centre (1981). The beet growers differ from independent commodity producers in that many of them regularly hire migrant workers for wages per acre to do part of the work in the beet fields for about two months during each growing season. As the larger farmers continue to expand their land base they require and gradually develop a new organization of production. The Saskatchewan report (1981)

1978

Grower 1.
$22.00/ton beet payment
19 tons/acre
19800
2200
$418.00/acre
$325.00 costs/acre
$93.00/acre profit
200 beet acres
$18,600.00 total beet profits

Grower 2.
$20.00/ton beet payment
17 tons/acre
14000
2000
$340.00/acre
$300.00 costs/acre
$40.00/acre profit
1000 beet acres
$40,000.00 total beet profits

$340.00/acre
$325.00 costs/acre (same as Grower 1.)
$15.00/acre profit
1000 beet acres
$15,000.00 total beet profits

1980-81

Grower 1.
$29.00/ton beet payment
18 tons/acre
23200
2900
$522.00/acre
$425.00 costs/acre
$97.00/acre profit
100 beet acres
$9,700.00 total beet profits

Grower 2.
$27.00/ton beet payment
16 tons/acre
16200
2700
$432.00/acre
$400.00 costs/acre
$32.00/acre profit
600 beet acres
$19,200.00 total beet profits

$432.00/acre
$425.00 costs/acre (same as Grower 1.)
$7.00/acre profit
600 beet acres
$4,200.00 total beet profits

TABLE 4. FACTORS THAT INFLUENCE SUGARBEET PROFITS AFTER THE BEET PAYMENT PER TON IS DETERMINED BY THE QUALITY OF A GROWER'S SUGARBEETS AND ANNUAL SUGAR SALES— YIELD, SIZE OF ACREAGE HARVESTED, AND PRODUCTION COSTS

views this emerging group within the agricultural sector as a new appropriating class of capitalists. The larger grower-owners of the co-op are hiring more full time and part time farmworkers in exchange for wages from among family members, high school and college students, small farmers and ex-farmers who have lost their land to financial institutions or who rent it for a more secure income, and other rural residents, or additional migrant workers. These beet growers are doing less of the actual work themselves and assuming more of a managerial role on their own farms. By favoring profits, capital accumulation, expansion, and larger farmers the cooperative contributes to the development of these capitalist relations of production in the agricultural sector with all their inherent inequities. The fact that a small farmer in the RRV consciously rents land at low prices to other small farmers is evidence of the developing class struggle between small and large farmers. It is ironic that the beet growers united against "big outside capital" as manifested in the former corporation only to allow "big capital" to flourish in the midst of their own ambitious cooperative effort at the expense of other producers.

Grand Forks Herald Photo

MIGRANT WORKERS "HOEING" A SUGARBEET FIELD NEAR CROOKSTON, MINNESOTA

CHAPTER III

MIGRANT FARMWORKERS

For decades thousands of migrant farmworkers, primarily from Texas, the U.S. Southwest and Mexico, have entered the Red River Valley each May seeking work in the sugarbeet fields of North Dakota and Minnesota. Their annual migration forms part of what is commonly referred to as the "midcontinent stream" (Metzler and Sargent 1960). Most of the people who are part of the midcontinent migrant stream are of Mexican origin. Family labor groups predominate in the RRV. Many of these migrant workers are U.S. citizens or registered resident aliens who are known as "Mexican-Americans" or "Chicanos" or simply "migrants" by many residents in the valley. An estimated 8 percent of the migrant workers who find their way to the RRV sugarbeet fields are undocumented illegal aliens, according to the records of the North Dakota Migrant Council (Jeannotte 1977a). Undocumented workers are at the mercy of their employers and are often willing to work for less than the rest of the labor force. They provide a source of good, cheap, docile labor because they know that if they cause any "trouble" or make any complaints they can easily be replaced and deported. Knowledge regarding undocumented migrant workers from Mexico has been contributed by Reichert and Massey (1979) and Reichert (1981).

Usually there is an abundant supply of labor in the RRV at the appropriate time, although poor growing conditions for the crops can disrupt the orderly and patterned flow of workers from one crop to the next crop, creating labor shortages and lost jobs and income. Some migrant workers travel north under verbal contracts with individual sugarbeet growers. American Crystal Sugar Company stopped recruiting hand labor for its growers in 1977. This reversion to a less formal labor recruitment network and mechanism is similar to the recruitment changes that have occurred in the sugarbeet industry of mid-Michigan agriculture in response to national economic trends in agricultural development, resulting in a decline in the need for hand labor (Haney 1979). The sugarbeet industry in the Red River Valley still depends on this cheap reserve labor force, even though the industry is moving toward greater mechanization. A fairly large group of workers look for work after they arrive in the valley. They fill in as needed and supply readily available replacements for workers who do not perform a good enough job or who become ill or suffer some misfortune and are unable to work. This reserve labor supply has tended to keep the contract migrant workers in line in terms of not making any strong demands for improved wages or better living and working conditions when these conditions are unsatisfactory. Generally, working and living conditions appear to be somewhat better for agricultural migrant workers in the RRV of North Dakota and Minnesota than they are in many other rural areas where the labor of migratory farmworkers is needed in order to cultivate and harvest the crops. However, all agricultural migrant workers are exploited and oppressed, some more than others. (Wiest 1979; Reichert 1981; Wright 1965; Coles 1971; Burke 1976; Moeller 1981; Schwartz 1978; Gaines 1981; McMahon 1982). The total number of workers migrating to the RRV is steadily declining as mechanization and the production of no-labor beets increases among the grower-owners of American Crystal.

HISTORICAL AND INTERNATIONAL CONTEXT

International capitalism generates conditions in Mexico and in the U.S. border area that assure a surplus of cheap labor that is willing to migrate anywhere and work under just about any conditions where capital investments require cheap labor to maximize profits. Many Mexicans, both documented and undocumented, have settled in South Texas where jobs are scarce and unemployment and poverty are common. These conditions keep the migrant stream flowing north where workers cultivate and harvest crops in the midwestern and northern states. These migrant workers also provide cheap wage labor throughout the nation for capitalist agribusiness, industrial, and service enterprises. Illegal migration has increased dramatically in recent years as people desperately try to find employment and earn an adequate living. Even low wages are many times higher in the U.S. than in Mexico. Economic conditions in Mexico and the Texas border region affect the supply of labor available to co-op growers for work in the beet fields. According to the 1980 census, 14.6 million Hispanics live and work in the U.S. (60 percent of Mexican descent); in addition, an estimated 5 million or more illegal immigrants (50 percent Mexican) work in the U.S. (Brom 1981).

Subsequent to independence from Spain, Mexico has endured a long history of political and economic domination by the United States. The Mexican people continue to be oppressed and Mexican labor, land, and other resources continue to be exploited on both sides of the

Mexican-U.S. border (Lopez y Rivas 1973:5-80). Since the Mexican revolution of 1910-1917 land reform has been limited and sporadic. Land has been distributed by the federal government as _ejidos_ to _Ejido_ Associations in some rural communities. Some _ejido_ land is worked communally but most is allocated to individual peasant households for use as subsistence plots. The vast majority of the rural population remains without adequate means of subsistence--most _ejido_ farmers and small, private landholders of less than 5 hectares (_minifundists_) and over three million landless peasants who work for wages on larger private landholdings (Stavenhagen 1970). In the past two decades monopoly capitalism has penetrated deeply into the industrial and agricultural life of Mexico. Capitalist relations and wage labor along with the _ejido_ land system, have replaced the large and exploitative traditional hacienda and plantation systems in the countryside (Stavenhagen 1970; Lopez y Rivas 1973:5-80; Burbach and Flynn 1980:83-191).

For example, in the northwestern state of Sinaloa thousands of _campesinos_ work long hours of stoop labor under hazardous conditions for low wages in the fertile irrigated vegetable and fruit fields. While the large Mexican landowners grow wealthier from their export crops which are grown for U.S. consumption, the field workers continue to live in impoverished camps and villages unable to afford the very tomatoes, cucumbers, and strawberries they produce, even if the fresh produce did remain in their own country (Anderson and Whitten 1977). U.S.-based multinational agribusiness corporations, such as Del Monte, control a significant segment of the Mexican agricultural economy. Canned vegetables and fruit for both national and international export markets are produced rather than staple foods for working people in the region. Del Monte controls the system of contract farming, the technology and "inputs," financial resources, land use and crops, processing facilities, the low wages of workers, and marketing and insists that if the company is to remain in Mexico certain conditions must be met--a cheap labor force, cooperative government unions that will keep labor under control, a stable political climate, and export subsidies. Del Monte reaps its considerable profits at the expense of the Mexican working people (Burbach and Flynn 1980:108-110,183-191). These capitalist agricultural relations of production reinforce the need for labor migration north or within Mexico.

Also, the poor living and working conditions, low wages, and repression that exist at the large copper mines of Nacozari, 70 miles south of the Arizona border, contribute to labor unrest, a high turnover rate, and the likelihood of increased migration north across the U.S. border. One miner questions how one of the richest mines in Latin America and the world can be surrounded with such human misery. The large Mexican company receives strong financial support from U.S. banks (Anderson 1978b) that helps maintain the oppressive social relations of production in the mines.

During the late 1970s the oil industry boomed in Mexico and exports soared. The oil revenues were poured into industrial development, while the agricultural sector was neglected. Today (1982) Mexico is in the midst of an economic crisis. Oil sales, prices, and exports have fallen. Tourism has declined. Austerity measures have been imposed and the peso has been severely devaluated. Inflation has risen to about 29 percent and unemployment is about 30 percent. When the percentage of underemployment is added to unemployment the total is nearly 50 percent. The production of staple foods has not improved for the past decade, and malnutrition is widespread among the peasants who make up almost half of Mexico's population of 70 million people. Most of the rising food imports end up in urban areas. Mexico's foreign debts have increased dramatically. Political repression and corruption continue to be harsh realities. All of these conditions combined (including the previous examples of capitalist relations of production and the agrarian social structure) have led to continued and extensive migration both within Mexico to the cities, mines, and oil fields and to the U.S. from the urban barrios and rural villages (Preston 1979:45; Brom 1981:6; Matloff 1982; Taylor 1982).

A few studies examine the consequences of extensive U.S. wage labor migration on the rural communities of Mexico (Cornelius 1978; Dinerman 1978; Wiest 1979; Reichert 1981). Cornelius (1978), Wiest (1979), and Reichert (1981) view the patterns of U.S. migration from rural Mexican towns as part of an overall dependency relationship between the U.S. and Mexico and a dependency between the rural communities and recurrent U.S. migration. The studies suggest a lack of any uniform economic development at the rural community level. According to the studies, only superficial or individually oriented benefits have accrued as a result of U.S. wage labor migration.

Downing (1979) refers to the dependency migration theories as "economy-specific"--the extensive patterns of migration are shaped by the development strategy of Mexico. This strategy of dependent industrial capitalism is characterized by the exportation of natural resources and agricultural products to industrialized nations and the importation of technology and capital from these nations, along with the concentration of capital, power, and wealth both geographically and by social class. A reserve, mobile labor force is essential to the development of capitalism on both sides of the U.S.-Mexican border, thus no serious efforts to reduce wage labor migration within Mexico or across the U.S. border are made by either country (Downing 1979:160, 162).

The U.S. Immigration and Naturalization Service (INS) along the Mexican border has consistently been underfunded and understaffed. Enforcement of INS policies against illegal Mexican aliens is selectively related to the labor needs of U.S. industry and growers in the border regions and throughout the nation. An institutionalized system of practices and procedures that supports illegal Mexican workers has been developed by all concerned as part of the cheap labor market that has existed in the border area since the border was established (Stoddard 1976).

Some of the policies proposed for the INS by the Reagan administration in 1981 involved a guest-worker program, an interdiction program and presidential emergency powers, fines against employers who hire illegal aliens, a complex legalization program and amnesty for illegal aliens already within U.S. borders, and increased funds for the Border Patrol. Immigration policy and the U.S. economy are closely integrated (Brom 1981:6).

The Simpson-Mazzoli bill of 1982 is a less overtly repressive compromise to the immigration proposal set forth by the Reagan administration in 1981. The 1982 bill has little opposition. The bill increases government control and the number and use of both skilled and unskilled temporary workers, while reducing the annual number of permanent immigrants by half. The immigration laws and policies are being adjusted to meet the labor needs of U.S. and international corporate capital by establishing a large, productive reserve of temporary foreign workers who have few social rights and who can be deported after two years. The bill is not expected to curb the use of undocumented workers from Mexico (Tactaquin and Yonn 1982).

Despite new INS policies there is no reason to believe that selective enforcement will not continue as usual among those who can use their positions of power to advance their own economic gain. The "underground labor market" in the border region serves the interests of the owning and ruling classes in both Mexico and the U.S. Mexico reduces its growing number of unemployed and underemployed, and thereby some of its own internal pressures, and a reliable, cheap reserve labor force is established for use by U.S. industry, business, and agribusiness (Brom 1981:6) as far north as the Red River Valley. The workers continue to be exploited on both sides of the border.

U.S. MIGRANT LABOR REGULATIONS

There are relatively few laws that effectively regulate the rights, wages, health, and safety of agricultural migrant workers in the U.S. Those laws that do exist are often poorly enforced. There are approximately 5 million migrant and seasonal workers in the U.S. The majority are not represented by unions. On the national level agribusiness growers have been campaigning and lobbying through large grower associations against an effective Farm Labor Contractor Registration Act (FLCRA). The FLCRA is the only legislation that offers specific protection to migrant workers against exploitation in contracting, housing, and working agreements (Dollar & Sense Editors 1981). This law does not pertain to sugarbeet growers in the Red River Valley as long as the grower directly recruits a migrant family for work just on his own farm operations and if the workers in that family are all immediate family members. The Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) is also frequently under attack by agribusiness interests, even though hundreds of migrant farmworkers are killed and thousands are injured by chemical poisoning each year (Moeller 1981). Migrant farmworkers are excluded from the most elementary protection. They are not covered by the National Labor Relations Act, which provides basic organizing and bargaining rights, or most of the Fair Labor Standards Act. It was 1978 before the federal minimum wage law, that applies to most other workers, applied to migrant farmworkers, but it is full of legal loopholes some of which exempt smaller growers. Child labor laws allow a migrant child under 12 to legally work in the fields of smaller farms that are not required by law to pay minimum wage rates if the child works outside local school hours and has written parental consent. There are no restrictions at age 16. The Migrant Legal Action Program (MLAP) in Washington D.C. provides necessary legal action and offers some support for the interests of migrant workers (Moeller 1981) as does the National Association of Farmworker Organizations (NAFO), an advocacy group which represents local farmworker groups in Washington D.C. NAFO monitors and prods the work of federal protection agencies, such as the work of the Environmental Protection Agency, to establish the degree of exposure to pesticide chemicals that can be safely tolerated by farmworkers, or the work of the Occupational Safety and Health

Administration (OSHA) to establish guidelines for sanitary facilities and drinking water for farmworkers in the fields. Lengthy studies and debates, pressures from powerful people, and bureaucratic delays have kept such protection off the books for years, allowing serious occupational and public health hazards to persist (Northrop 1978:68; Howard 1980:6).

At the state level most migrant farmworkers are excluded by state residency requirements from the assistance of Medicaid and unemployment insurance. Children in Minnesota under 14 are not legally allowed to work in the fields. Minnesota does cover migrant farmworkers under minimum wage, workers' compensation, and OSHA laws. However, minimum wage and workers' compensation laws apply to migrant workers in Minnesota only after 20 weeks of work in one place or area. Most migrant workers who work in the sugarbeet fields in the RRV come and go within a period of two months or 8 to 10 weeks.

North Dakota does not have similar state laws but is guided by the federal laws. In both North Dakota and Minnesota a state monitor advocate can place a farm lien on a grower's land if the grower refuses for some reason to pay his migrant workers when they finish all their assigned work and if the workers file a complaint with the state Employment Security Bureau. The farm lien prevents the grower from selling his products until wage settlements with the workers have been satisfactorily completed.

Labor costs are a continuing concern to sugarbeet growers in North Dakota and Minnesota. When migrant legal aid groups in southern Minnesota filed lawsuits for retroactive overtime wages for migrant sugarbeet workers in 1981, plans were quickly made by state legislators to exempt migrant sugarbeet workers from the hourly wage and overtime provisions of the Minnesota Fair Labor Standards Act because, it was argued, the workers agree to do "piece work" for fixed wages and long hours--thinning and weeding for so much an acre. Officials justify the change by the possibility of lost jobs if migrant workers become too costly to hire (Haga 1981). If sugarbeet growers were required to pay overtime their hand labor costs would rise considerably and the movement toward no-labor beets would proceed even more rapidly.

MIGRANT LIFE IN THE RED RIVER VALLEY

The "case studies" in this section reveal some of the social relations of production of the American Crystal sugarbeet industry at the level of concrete human experience. It is important not to overlook the details of the human dimension in the pursuit of abstract analysis and conclusions. This can also help keep studies useful. Many of the experiences expressed here are common; others are uncommon but can and do occur under the existing conditions. Pseudonyms are used in all cases and the cases are numbered.

1. Rosa was interviewed in 1978. She began picking cotton in the fields of Oklahoma when she was 8 years old. She had to drag the 5 foot bag of cotton to the weighing station. When she was 10 years old she began working full days in the sugarbeet fields of Minnesota during the 1960s. Each spring down in Texas Rosa left school early and migrated north with her parents and 13 brothers and sisters. They worked for the same grower for many years and generally had a good relationship. Only verbal work and wage agreements were ever made with the farmer. Except for the children under 10 years of age, every member of the family worked in the beet fields from 5 or 5:30 in

the morning to 8 or 9 in the evening 6 days a week. Wages were low but the farmer always paid them at the end of the season with no problems. Appropriate deductions were made for credit vouchers. "The rows of sugarbeets were so long," Rosa recalled. "We'd think of pleasant things and talk together about neat things in the stores we could buy with the money, but we were seldom able to because other things were more important." Rosa's family managed to have enough basic Mexican foods every day. Reasonably good health prevailed. One of the grower's relatives was a registered nurse. She gave all the migrant children and young people free immunizations. The grower held a 4th of July picnic for all the migrant workers who worked in his beet fields. This was a treat compared with the migrant family's ordinary fare. Food was always a large and expensive item of concern for the big family. Perhaps half the family wages remained in the RRV after food and gas bills and other debts were paid.

The sugarbeet grower provided housing for the migrant farmworkers. For two months between late May and July Rosa and her family lived in a frame house where "the wood on the outside was the same wood on the inside." The farmer fixed the leak in the roof every time it leaked. There was no running water. An outhouse stood nearby. A water tank was stationed outside the house for all water use--drinking, cooking, bathing, and washing clothes. There was rust in the bottom of the tank. The rust in the water bothered Rosa. The house had electric lights and a gas stove. There were 6 large beds in two big rooms for 16 people.

When Rosa's family moved on to pick cherries, cucumbers, and tomatoes in Wisconsin and Ohio they swept up crumbs off a dirt floor in one shack and lived in a migrant camp on the second floor of a house with central showers and wringer washers used by many families. When the harvest was done Rosa and her family returned to Texas for the winter where it was warm, but where work was very scarce-and school had already begun.

During the summer of 1967 both of Rosa's parents were hospitalized in Minnesota, using up all the beet money. The family had no money to travel to other crops or to return to Texas. Rosa was 15 years old. It was her last summer in the sugarbeet fields and in the migrant stream. A minister who was moving to another state rented his big, old house to the family for $25 a month. The older members of the family found work in town. Some worked in food processing plants for low wages. The younger children went to school all year for the first time but were behind the other students their own age because they had missed so much school in Texas, and the northern schools were better than the migrant schools in Texas. However, the discrimination and prejudice Rosa experienced in the northern schools that she attended hurt her deeply. One day she retaliated and was suspended from school. She never went back. Rosa worked at a variety of low paying jobs. Eventually Rosa landed a good job helping migrant families in North Dakota in the late 1970s. This is uncommon. She sharpened her bilingual skills and received a General Education Diploma (GED) and worked to provide information and services to migrant families that helped them live with as much dignity and control over their lives as possible. Rosa said that the growers no longer seem friendly with the farmworkers after the season is over. They seem to ignore them. She thinks many conditions have improved since she stopped working in the beet fields. Some housing is better and there are more helpful service agencies and federal health and education programs for migrant families. Nonetheless, Rosa admitted, "I never could work in the fields now like I used to."

2. Elisa was interviewed in 1978. Information from a local newspaper article was also used (Hagerty 1978). In 1969, Elisa and her husband, Juan, signed up at a migrant center near their home in Texas to work in the sugarbeet fields after a neighbor told them that there was work in the RRV. They have always had verbal work agreements, mainly with one grower. They thinned the beets according to the grower's specifications and weeded his fields. The grower paid each worker a set amount per acre when they finished the job. Juan and Elisa's 9 children helped their parents work in the fields as they became old enough. Everyone shared their money for family necessities. The young children stayed at home with an older child or played along the edge of the field until they were able to attend a local migrant school. Elisa put in a long day from 4 a.m. to 10 p.m. fixing meals, doing dishes, working in the fields, and giving some attention to her family with some help from the older children. A 12 hour day in the beet fields was not uncommon in the past, but in 1978 a 10 hour work day 6 days a week was more common. Family members worked longer hours and on Sunday when work days were lost due to rain and mud. In 1978, the family of migrant workers had 5 workers in the fields. They received a rate of $46 per acre for both thinning and weeding and earned between $5,000 and $6,000 in two months. "Enough to catch up on bills" is how Elisa put it (Hagerty 1978). She also said that her family has had good, friendly, helpful relations with the farmer who hires their labor. When it is windy or stormy, members of the migrant family are

welcome to go up to the grower's house and into the basement game room to watch TV until the weather calms down and any danger of a tornado has passed. The migrant houses are in a group of cottonwood trees separate from the grower's house. The migrant family does not have access to the material means that would allow them to take full charge of their own lives. They depend on the grower, who has greater resources, to take care of many of their needs.

The grower has consistently kept his migrant housing painted and in good repair. Juan and Elisa have found the housing to be satisfactory for the short stay in the RRV, but she misses her own house in Texas. In 1978, two parents and 6 children, including a son-in-law and grandchild, lived in the two two-room, wood frame cabins. Five other married children no longer work with their parents in the beet fields. The two cabins had electricity, running water with a shower, screens, and a wringer washer that sits out on the front porch.

Juan has been a farmworker since he was eleven and works on construction jobs whenever they are available during the winter in Texas. After 4 summers in the sugarbeet fields Elisa, who has finished tenth grade, got a job as a teacher aid and bus chaperone in the federally funded migrant school nearest the farm where her family works. This is not common. The school has educational, childcare, and health programs for the children. Elisa still works from 4 in the morning until 10 at night, but she enjoys working with the children. She received $120 a week as a teacher aid and $53 a week as a bus chaperone the first summer and was paid every two weeks. These payments made it possible for the family to keep some of their bills paid up and avoid piling up large debts while waiting to get paid by the grower at the end of the beet season. Elisa was able to purchase $300 worth of food stamps for $89 in cash without the usual credit vouchers from the grower or the Minnesota Migrant Council.

This new financial independence will be lost along with Elisa's job during the 1982 beet season. The school where she helped teach will no longer host the migrant program because enrollment and attendance have declined along with the migrant population, more migrant children are getting a full year of school in their home state, and the school district wants to prepare the building for the regular school year. Without the area school program more migrant children may be working in or playing near the sugarbeet fields again (Crothers 1982).

After the beet work was done Juan and Elisa used to pick cucumbers, fruit, and tomatoes in Wisconsin, Michigan, and Ohio, but it is no longer worth it to them because there are so many meetings and strikes and too little work and money. The Farm Labor Organizing Committee (FLOC), a Mexican-American Union, has been trying to unite the tomato farmers and farmworkers against the large, powerful food processing industries in order to improve economic conditions for everyone who works on the farms (Krass 1982). Juan and Elisa have decided not to become involved, but rather to drive straight back to Texas in their camper pickup where their children can attend the migrant vocational school and prepare themselves for jobs that will move them out of the migrant stream. Elisa may even return to school herself. She has taught herself a great deal by reading and encourages her children to read and use their learning to make a better life for themselves. Elisa believes that education and training are the key to a more stable future for her family, rather than participating in strikes and political action for social change.

However, it is the latter which can improve conditions and make a brighter future for the many migrant farmworkers whose labor is still needed and who will remain in the migrant stream. Technological progress threatens the livelihood of some migrant workers in the RRV. Juan and Elisa have talked about the increasing use of mechanical thinners and herbicides, but they do not feel overly threatened because they have alternative plans. Elisa observed that things are much better in the RRV in terms of childcare and health and education programs, with both Spanish and English being spoken, than when her family first came to work in the beet fields. She said, "We will probably keep coming back as long as we have two or three extra pairs of hands to work in the fields." (Hagerty 1978).

3. Margarita's life as a migrant worker is definitely an exception, except for her early years. Her life is an indication of the presence of an emerging awareness and a small, developing force of resistance to the existing social relations of production among migrant workers who actively seek social change. Information about Margarita was obtained from a local newspaper article (Jeannotte 1977b). Margarita is a remarkable young migrant woman, who was born in a hospital in Grand Forks, North Dakota while her family was in the RRV working in the sugarbeet and potato fields. She is one of 14 children and began working in the fields herself when she was about 6 years old. She lived and worked in 9 different states, including North Dakota and Minnesota. After school began in the north she worked several hours in the fields before and after school. She attended schools in Texas during the winter months. While attending high school Margarita first became aware

of Mexican-American activism and the value and power of organized protest and action from Jose Gutierrez and his Mexican-American Youth Organization (MAYO). Margarita graduated from high school, attended college, and hopes to study law eventually. She is developing her skills as a writer and has represented the interests of the migrant workers at federal hearings and on television programs (Jeannotte 1977b).

In 1977 at the age of 22, Margarita served as chairperson on the Board of Directors of the North Dakota Migrant Council. She continues to work with her family in the beet fields of the Hillsboro district. Some of the older migrant men have difficulty accepting Margarita's leadership because she is a woman. She is a proud woman--proud of her ancestry, her language, her life, and her people. Margarita knows the migrant life, and she has made a strong commitment to use her experience, her talents, and her education in order to help change the working and living conditions of her people, the migrant workers. It is very clear to Margarita that a grave contradiction exists: the farmworkers who cultivate and harvest the food for the tables of America for the benefit of the larger growers, the food industry, and the consumers are themselves among the most economically and politically dispossessed people in the United States (ibid.).

4. Information about Alberto and his family was obtained from a local newspaper series on migrant workers in the RRV (Jeannotte 1977c; 1977d; 1977e). Alberto was recruited from central Mexico by the U.S. government to work in the Bracero Program in the U.S. during World War II. He harvested a variety of crops in several states and worked in a cotton gin in Texas for three months each winter. In 1970 Alberto

was originally recruited by American Crystal Sugar Company to work in the sugarbeet fields of North Dakota (Jeannotte 1977c). To all its recruited hand laborers and the growers that they were going to work for the company gave duplicate copies of a general agreement which the grower and worker accepted when they agreed to work together. The agreement described the type of work to be done, the minimum pay rates for the different cultural methods in use, somewhat vague housing requirements, and the responsibilities and obligations of each party with an emphasis on the rights and powers of the grower (Cougill 1957:78).

Alberto and his family have worked for the same sugarbeet grower for 8 summers in the Drayton district. Hoeing beets is hard, hot work. Even though Alberto is near retirement age, he continues working in the beet fields. He said that as long as his children and their children needed something, he would keep working. The grower and the workers renew verbal work arrangements each year. The grower has steadily improved and expanded the housing facilities for the growing migrant family. Sixteen adults--Alberto, his 6 sons and their spouses, a daughter and her spouse, and a widowed daughter--and 12 grandchildren travel, work, and live together. They travel in 5 cars and a large truck and live in two small houses and three fairly new trailers. They have electricity and a 600 gallon water tank that can be hooked up to an outside, heated shower system. They have to do their laundry in town, which is more expensive, and dry it on the lines in the sun. Alberto and his family have been satisfied with their housing situation, considering that they do not pay any rent (Jeannotte 1977c; 1977d).

Money is a constant worry. One of Alberto's sons and his spouse asked for and received an $800 advance from the beet grower in order to have travel money and pay off some loans for rent and bills and purchase food stamps for the beet season. The couple has 4 children. They have to pay rent on their apartment in a low-income housing project in Texas while they are away working in the fields. A year ago their car gave out, and yet a reliable vehicle is essential to the migrant life. The North Dakota bank refused to finance another car for them without their grower's countersignature; the grower agreed to sign. The grower also signed vouchers for the couple that allowed them to purchase food and gas from local merchants on credit. The grower said he doesn't mind vouching for his workers because they are honest, hard-working people who serve his labor needs well and he wants to keep them. When the beet work was completed and the long 12 hour days were over, the couple was paid $3,000 after taxes. The grower deducted his $800 advance money. After they paid a $1,300 car payment and their food and gas bills, this family had only $550 left for travel money to get to the cucumber fields of Wisconsin and for living expenses while there. The grower in Wisconsin does not advance money. It is likely that the couple will need another advance from the beet grower sooner or later. Alberto's daughter-in-law despairs of ever getting ahead of all the debts in spite of all the hard work performed by her family. The larger family offers extra support as needed. Her 13 year old son said he has learned to work in the fields, but that he does not want to live the migrant life. He wants to become a lawyer "to help my whole people" (Jeannotte 1977e; 1977c).

5. Information regarding this migrant family was obtained from a local newspaper article (Jeannotte 1977f). Disputes between growers

and migrant workers over working and living conditions are not uncommon. In 1977 one family contracted to work what they thought would be 200 acres of sugarbeets through the American Crystal Sugar Company's recruiting office in Texas. They had worked for the same young growers the previous year. When the family arrived in the RRV they were informed that they would only have 60 acres because the growers had purchased an electronic beet thinning machine two weeks earlier in the interests of saving labor costs. The migrant workers wanted to know why they hadn't been told of this change before they drove north, while it was still possible to find more work with another farmer. The growers said they never promised them 200 acres. The migrant workers were the losers who ended up with insufficient work and income to meet their needs (Jeannotte 1977f).

The same family of 7 young adults and 10 children also had to contend with poor housing conditions. The family lived in three small plywood houses. The workers asked the growers to improve the outhouses that had no seats, to fix the leak in the propane gas container, to remove all the trash from the year before, to fix the electrical wiring and the drain in the washroom so that it would be safe (one of the children received a bad electrical shock), to repair the wringer washer (the family was washing all their clothes by hand after a long day in the field), and to control the rodents and cut the tall grass around the houses. The growers ignored their complaints and requests. The migrant workers even made some improvements of their own with their meager resources. When the workers persisted with the requests, they said the growers told them to hoe only part of the beet field. When the workers finished and left the field in the middle of the day the growers claimed that they were unreliable workers and that they were going to replace them with some new Mexican workers. The family was asked to turn in their hoes--the same as being fired. The family filed a complaint with the North Dakota Migrant Council, which set up a mediation session with a council official acting as mediator between the growers and the migrant workers in order to try to resolve some of the problems. After making excuses and shifting blame, the growers admitted the family members were good workers and that they could do the second hoeing. The family agreed to stay and do the work. The growers also agreed to make some housing improvements by a certain date. They met the deadline on only a couple of items. One grower said that the migrant workers get whatever they ask for, and he resented the council's intrusion into his own farm operations. The other grower remarked, "I ask them every damn week if anything is wrong and they say no, it's fine--they only want us to sign for their food stamps. I know they won't have a job here next year ... They may have won the immediate battle, but most farmers in this area won't tolerate tactics like this. They won't be able to get a job around here next summer." The grower agreed that the housing might not meet North Dakota standards, but he thought it was certainly good enough for migrant workers (Jeannotte 1977f).

Jobs in the sugarbeet fields have been very scarce since 1982. American Crystal growers have been reluctant to hire hand laborers until absolutely necessary in an attempt to keep production costs down since sugar prices and payments have been extremely low. Mechanical beet thinners and herbicides have been widely used by growers and are proving to be very successful. Most of the migrant workers who did not have prior work agreements have not been able to find work. Some have returned to Texas, some line up at the Job Service offices and Migrant Council offices every day hoping to be able to earn enough money for food and gas to move on to other crops or return home. Some migrant workers and their families are sleeping in their vehicles in parks and rest areas. Special service agencies provide whatever help they can. Some growers have told their workers of many years that their labor is no longer needed. Other growers have greatly reduced the number of acres that migrant workers will thin and weed, which will reduce their income and increase debts. Minnesota Job Service has placed 120 migrant workers out of 750 applicants. Last year they placed around 1,000 workers. North Dakota Job Service in Grand Forks has placed only 10 out of 175 migrant applicants by the end of June (Fedor 1982). A few sugarbeet growers prefer hand labor to machines, but they have long established agreements and good relations with migrant families and do not frequently seek new workers.

MIGRANT-GROWER WORK AGREEMENTS AND RELATIONS

The last year that the American Crystal Sugar Company recruited migrant workers for its sugarbeet growers was 1977. The growers were charged a small fee per acre for the service and to cover transporation and insurance costs for the migrant workers. The recruiting offices in Texas have been closed. The company encouraged use of contracts for recruiting hand labor, but many growers and workers are reluctant to sign contracts because they offer few guarantees and may interfere with further negotiations.

Since 1977 the growers have been responsible for making their own arrangements with migrant workers. Many rely solely upon verbal agreements. If the grower is satisfied with his migrant workers he can ask them to return the next year and keep in touch with them by letter or phone as to when they are needed and any problems that may arise. The migrant workers who help produce sugarbeets for American Crystal travel from one crop job to the next in their own vehicles. There are no crewleaders or farm contractors in the RRV like there are in other parts of the U.S. Migrant workers who hear of work in the RRV beet fields and arrive without a contract or work agreement usually contact the Minnesota or North Dakota Employment Security Bureau (Job Service) or Migrant Councils. The growers notify the state employment agencies of their labor needs and the agencies bring the workers and growers together. Many growers are fair. Some are not. The same can be said of workers, but the growers operate from a position of power. It is the grower or his foreman who decide which migrant workers will be hired, fired, or replaced, what work they will do, when and how they will do it, and what wages they will receive. The grower provides the land, the beet crop, and the hoes. The workers are expected to work long hours in the fields every day except Sunday and during bad weather until the assigned job is done. Workers have little control over their daily lives, which are dominated by wage work for someone else's farm and co-op.

One grower didn't even allow his workers to make their own decisions about what to do when an emergency occurred that affected their personal health. Due to poor communication and a misunderstanding, a plane began spraying chemicals over a beet field where a number of migrant workers were hoeing beets. The grower was finally able to wave the plane away. He told the workers to finish the rows of beets they were working on, then go wash the chemical spray off their skin. They would have to return to their houses since there were no washing facilities near the field. The workers were never even given the choice of leaving the field immediately to wash off their skin. They were told to finish the rows they were working on first. At least one woman developed a rash on her arms following the incident.

MIGRANT WAGES

The Red River Valley Sugarbeet Growers Association sets a suggested minimum wage rate for thinning and weeding sugarbeets each year. The rate is designed to reflect the federal minimum hourly wage for the average good worker who is able to work at a steady, fast, machine-like pace hour after hour, day after day, up and down the long rows of beets. The best and fastest workers are able to earn more than the minimum wage and the slower workers earn less. Growers who receive federal subsidies via sugar programs are required to pay all farmworkers the minimum hourly wage or its equivalent in the case of piecework. Piecework can make it difficult to determine minimum wage. Migrant workers agree to do piecework in the beet fields. They are paid by the acre rather than by the hour.

The total rate set by the RRVSGA in 1977 was $42.35 per acre "twice through the field"--thinning and weeding and a second weeding. In 1982 the rate was set at $53.50 per acre with $32 per acre for thinning and weeding and $21.50 per acre for the second weeding. Some growers choose to pay higher rates or an hourly rate of $3.50 (Fedor 1982). In 1978 one grower paid a couple of farmworkers $4 per hour for weeding his fields, while a few growers became desperate enough, due to the cost-price squeeze, to pay their migrant workers a total of $15 per acre. A farmworker who cannot find other work may continue working for these very low wages because a little money is better than no money. The grower's return on his crops affects the migrant workers' wages. After migrant workers see the beet fields they can negotiate with the growers for higher wages per acre if the fields are very dirty, i.e., if they have many weeds. However, the ultimate decision regarding migrant wages belongs to the grower, and a bonus is often offered in order to encourage quality work.

The growers agree to pay the migrant workers when they finish their work in the beet fields. Many migrant workers earn between $1,000 and $1,500 during their two months working in the sugarbeet fields. Since this money is not available for about two months and farmworkers have few other assets, they must rely on advances of money from their employers for travel money or food stamps. They also rely on their employers for credit. Migrant workers in the RRV cannot obtain credit from local grocery stores, gas stations, or other businesses or banks without vouchers or loans signed by the growers. The growers deduct the amounts of any advances and credits from the workers' paychecks at the time of payment. The use of the advance and the voucher system is very common among sugarbeet growers and migrant workers in the valley and has been for many years. Workers also depend on the grower to keep accurate payroll records and provide a list of paycheck deductions if they are to receive their rightful benefits, such as social security and food stamps.

One grower-owner of the co-op refused to pay his migrant workers when they finished work in his beet fields. It was Tuesday. The grower said he would pay the workers on Saturday. The farmworkers wanted to pay their bills and move on to other work right away without incurring further debts. When they persisted with their request for immediate payment the grower became belligerent. The workers told council officials that the grower said the workers weren't going to tell him how to run his business, that he would pay them when he decided, and that he threatened to get his shotgun if they didn't get off his land. The workers registered a complaint with officials at the North Dakota Council who sent a state monitor advocate from the state employment agency to the farm to talk with the grower in order to try to convince him to pay the workers. The state monitor advocate had to threaten the use of a farm lien before the grower finally paid the migrant workers. Most disputes between growers and migrant workers are settled without such extreme measures being threatened.

MIGRANT HOUSING

The grower-owners of the American Crystal co-op continue to provide housing for migrant workers just as they did prior to the formation of the cooperative. Conditions have not changed much between the beet growers and the migrant farmworkers. Some migrant housing is good, some is adequate, and some is poor. The estimates vary according to the values, experience, and class view of the individual making the estimate. The migrant workers do not pay rent or utilities. The growers bear the full initial costs plus the costs for repairs and improvements, expansion, gas, electricity, and water. Some growers claim that their farmworkers are too hard on the houses and cause unnecessary repairs. Some growers neglect housing repairs in order to cut the costs of farm operations, and a few have even been known to turn off the gas and electricity if they think the workers have been using too much. The class struggle goes on and on.

A variety of housing and housing arrangements exists. Wood frame buildings and trailers of varying sizes are common. Electricity is standard, but some do not have indoor plumbing. Outhouses are used. The source of water may be a well and an outdoor faucet, a water tank, or even the grower's hose. Many growers have made provisions for their own migrant housing on their own farms. Some beet growers rent migrant housing from other growers who are not growing sugarbeets or who are raising no-labor beets. A few growers use local workers who have their own housing, and a few help their migrant workers rent housing in a nearby town. This increases transportation costs. One beet grower pays half the rent on housing in town for his workers. A few growers have shared workers and housing costs, but this is no longer legal under the farm contractor's law without registration of the grower who originally hired the workers and who owns the housing. There are no large migrant camps among the beet fields of the RRV. Most migrant workers cannot afford decent housing on their incomes, even if a lot of housing were available. Migrant housing is scarce in the Drayton Factory District. A low income housing project has been planned with support from the North Dakota Migrant Council and federal funds.

Inspections of migrant housing by state and federal agencies and effective enforcement of needed improvements have been sporadic in the RRV. The North Dakota Health Department inspected about 500 migrant housing units a year which helped keep most migrant housing in reasonably good shape until the Occupational Safety and Health Administration (OSHA) took over the responsibility for housing inspections in the mid 1970s. OSHA is only authorized to inspect housing for 10 or more workers. Many beet farms have less than 10 workers. This housing will remain uninspected unless the workers were placed on a sugarbeet farm by the North Dakota or Minnesota Employment Security Bureau (ESB). These state employment agencies have housing inspectors of their own. If workers are recruited through these state agencies the ESB will inspect the housing. Their standards are similar to OSHA standards. The state health department can still respond to specific housing complaints but no longer has the funds for regular inspections. American Crystal fieldmen also used to inspect the migrant housing of those beet growers who obtained migrant workers by using the recruitment services of American Crystal Sugar Company both before and after the organization of the cooperative. If housing problems were discovered, state or federal agencies were notified as well as the farmer. The RRVSGA encourages its members to comply with OSHA housing standards (Jeannotte 1977d; 1977e).

Unfortunately, inspections and enforcement of minimal housing standards are two different things. After the inspectors check the housing for location and adequate electrical wiring, water supply, sanitary, bathing, laundry, and cooking facilities, flooring, roofing, space, screens, garbage cans, and pest control, a list of suggested repairs and improvements is left with the grower, or for the grower to find if he's out in the fields, as he often is in the spring. The grower never hears from the inspector until the next year and perhaps not even then. One beet grower said he has been growing sugarbeets for 14 years, and as far as he knows his migrant housing has never been inspected, but he keeps it in good repair anyway. Any grower can easily ignore the inspector's list of needed repairs. When growers are fined for housing violations some may choose to pay the cheaper fine rather than make the more expensive repairs. Again, the decision rests primarily with the growers. Some choose to provide adequate housing. The first year OSHA inspected 63 migrant housing units in the RRV and only issued three minor citations. No housing was inspected the next year (Jeannotte 1977d; 1977e). It takes determined migrant workers to satisfactorily change the poor housing situations that do exist. The cost may be high if they lose their jobs in the process. Work means food and survival for migrant workers.

MIGRANT HEALTH AND EDUCATION

The grower-owners of the American Crystal co-op have no involvement with the federally funded Migrant School Program and North Dakota and Minnesota Migrant Health Councils. The migrant school provides free childcare and educational and health programs for infants through eighth graders, as well as transportation by bus. Some 20 migrant schools operate in the RRV each hoeing season for several thousand children from the families of migrant farmworkers. The migrant health services have established 5 clinics throughout the RRV that treat everything from "sunburn to diabetes" and are available to all migrant farmworkers. A sliding fee scale is used for charges and the councils help migrant workers pay medical and hospital bills for services the clinics do not provide (Jeannotte 1977d). The clinic at Grand Forks, North Dakota was operated as part of the University of North Dakota Medical School's Family Practice Program. Health workers carried out follow-up visits in the homes of migrant workers in order to assist with health problems and education and encourage immunizations. One health worker noted a "leave us alone attitude." An old grandmother who no longer worked in the beet fields (She took care of 9 young children and babies, including a very sick child, on Saturdays when the school was closed and said it would be easier to work in the beet fields.) and other migrant workers expressed a dislike of being bothered and treated in such a paternalistic manner. They expressed a desire to lead more economically independent lives.

Considerable animosity and resentment exist between the migrant farmworkers and some of the grower-owners of the co-op and other area residents regarding all the "freebies" that the migrant workers receive--free housing and utilities, food stamps, free childcare, education, transporation, and reduced health care costs in addition to wages of approximately $1,200 for about two month's work in the beet fields. Officials from the migrant councils continue to point out that migrant farmworkers receive assistance because they do not earn enough money for their work to provide for all of their families' basic needs, and that farmers also receive federal assistance or subsidies in even greater amounts in the form of national wheat or sugar price support programs. Class competition for a fair share of the "American dream" is fierce and creates barriers of conflicting interests between people, even those who work together in the same production process. Those who possess the greatest resources and power have a definite advantage, but always to the disadvantage of others.

The grower-owners of the American Crystal co-op do offer some support for post secondary educational opportunities for young migrant workers. In 1974 the RRVSGA established a scholarship fund for members of migrant families who work in the sugarbeet fields in the RRV. Recipients must demonstrate need and be enrolled as full time students in either Moorhead Area Vocational-Technical Institute (AVTI), Moorhead State University, the University of Minnesota at Crookston, or other area educational institutions. Coordinators of minority programs and counselors at these learning institutions, the director of the Moorhead Migrant Council, and student representatives make up the advisory committee that screens and selects the recipients of scholarship funds. The total contribution by RRVSGA for 1977 was $2,500--a drop in the bucket compared to the large need for educational financial assistance for migrant young people. Ten migrant students received funds to further their education in 1977 out of some 80 applicants. One young migrant woman who received scholarship funds became the first Chicano woman to graduate from Moorhead State University with a four-year degree. Her family has been working in the beet fields for 35 years (Valdez and Moreno 1977), but beet work is becoming scarce and some workers are seeking alternatives to rising unemployment. The migrant scholarship fund seems to be the only concrete evidence that the members of the cooperative do have some recognition of and concern for migrant needs regarding increased mechanization and decreased jobs in the beet fields.

MIGRANT ORGANIZATIONS AND SERVICE AGENCIES

The migrant farmworkers in the RRV have no union to represent their interests and needs effectively and legally. In the early 1970s a petition to organize a union was circulated among the beet workers in the RRV. Several hundred signatures were obtained, but several thousand signatures were needed for a union to be effective. Even though some interest was definitely indicated, the attempt was eventually abandoned. Little hope of organizing a union for sugarbeet migrant workers exists since the workers spend such a short time together each year in the RRV. A migrant council official noted that a well organized strike by migrant farmworkers could be effective, but workers are reluctant to lose work time and the money they so desperately need.

A number of organizations do exist in the RRV which provide services, information, and support for the thousands of migrant farmworkers who migrate to the valley each spring. The state employment agencies help migrant farmworkers find jobs if they do not already have work arrangements with growers, inspect migrant housing, help solve job related problems--by the intervention of a state monitor advocate when necessary--and provide referral services as needed. Mission Socorro is a small private operation supported by church funds and individual contributions and run by a couple who provide emergency assistance and referral services for migrant workers. The North Dakota and Minnesota Migrant Councils are federally funded through the U.S. Department of Labor and the Comprehensive Employment and Training Act (CETA). Grants are secured for special projects. A major purpose of the councils is to provide a variety of educational opportunities, job training, and job placement that will help migrant workers break out of the migrant stream as mechanization gradually takes over the beet fields. Another major purpose is to inform migrant workers of their rights and of available services. The councils provide assistance for good nutrition, housing, emergencies, and relocation. They advocate improved conditions for migrant farmworkers in the RRV, mediate disputes, and help resolve problems and misunderstandings, sometimes caused by poor communication due to language differences between the workers and the growers. An extensive system of referrals is used to refer migrant workers to County Social Services for food stamps, the Red Cross, the Salvation Army, Migrant Health Services, Job Services, Legal Aid, or OSHA for housing problems according to the workers' needs. The North Dakota Migrant Council has been renamed the North Dakota Rural Development Corporation and has new leadership. It is funded from the same sources and has similar aims, programs, and services and some new, innovative approaches (Haga 1982). None of these organizations has legal authority and must refer people with legal matters, such as questions regarding the fair labor practices law, to Legal Aid at the University of North Dakota for legal services and any court actions that may be required.

The organization of the migrant councils offers a limited means of organizing migrant farmworkers. Beet workers are elected in their council districts to serve on a Board of Directors that functions in an advisory capacity on policy matters for the councils. The migrant workers who are elected have a chance to develop some leadership and organizing skills and speak for their people. In Minnesota the Board elects 4 of its members to serve on the Minnesota state advisory council for Spanish speaking migrant farmworkers which advocates new state legislation that will improve conditions for migrant workers in the state. The power of migrant workers who help produce sugarbeets for the American Crystal cooperative is very limited and indirect.

ANALYSIS

The relationship of the migrant farmworkers to the sugarbeet growers in the RRV is a class relationship and a relationship of dependence. The migrant workers own only their personal possessions and the vehicles that are essential for transportation to job locations. In order to gain access to the means of production, and thereby to credit vouchers, housing, and wages, the migrant workers who help produce sugarbeets for the American Crystal cooperative must sell their labor-power to the grower-owners. Many growers treat their migrant workers reasonably well and many migrant workers are reasonably responsible and do good work. Regardless, the system of capitalist social relations of production which dominates the co-op has serious inequalities. Migrant workers are exploited, oppressed, and subject to paternalistic practices, such as the bonus and the payment and voucher system.

The grower-owners and the migrant workers are both producers for the cooperative. Contradictions exist between these producers who have different class interests. The interests and needs of the workers lead to rising labor costs that are in opposition to the interests of the growers. The grower-owners act as a class of small-scale capitalists in their efforts to maintain some control over a reliable and peaceful labor force--the working class migrant workers--through their sugarbeet growers' association. The social network exists within the association and the cooperative for grower-owners to act in solidarity against "troublesome" migrant workers, making it difficult for them to find work in the valley by refusing to hire them. The growers have productive resources and the power to control the production process.

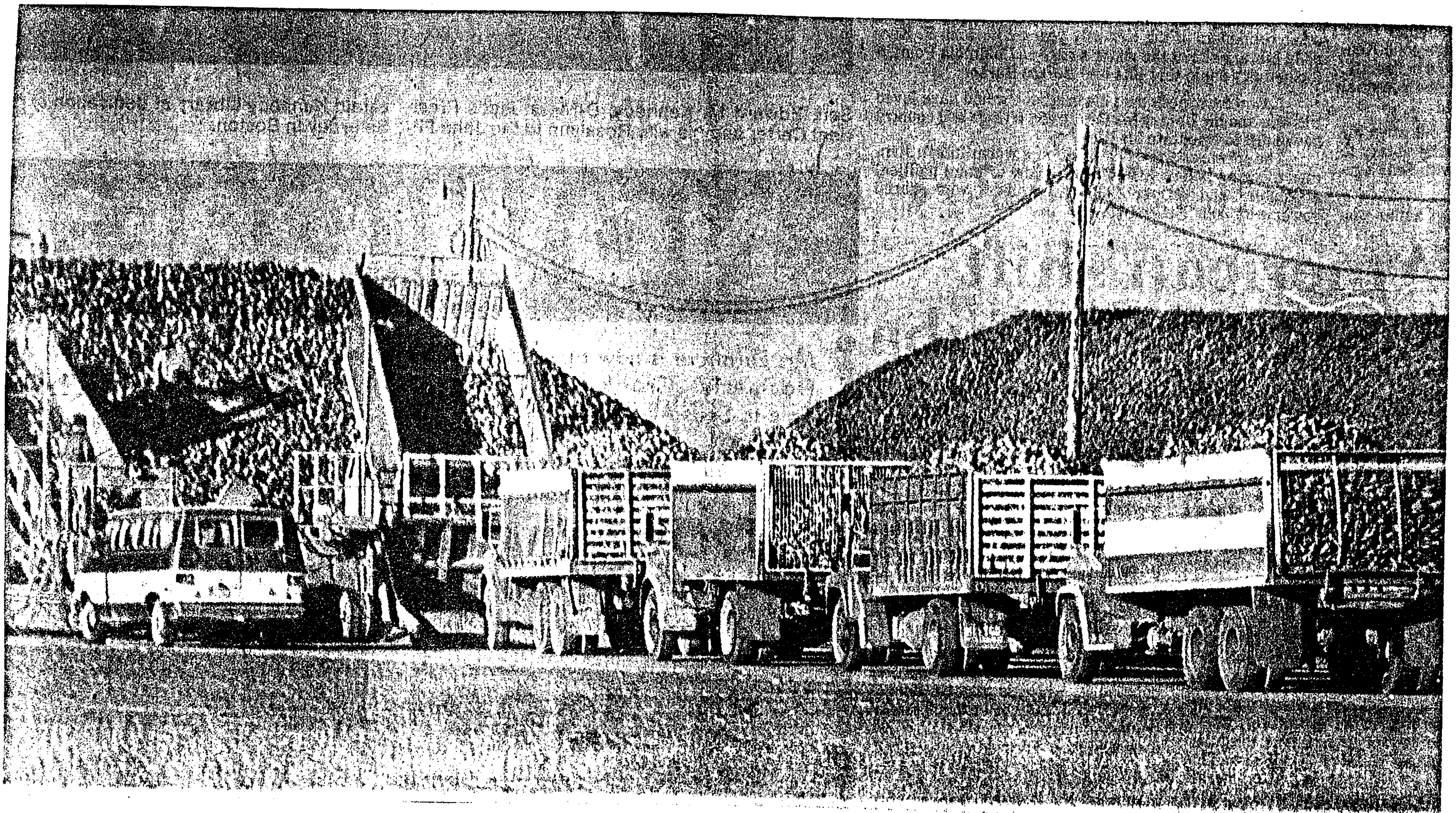
The migrant workers are without productive resources, remain unorganized, and consequently are powerless to affect the operations of the co-op or significantly improve their own situation within the migrant cycle. Choices are limited. Many migrant people keep working in the fields regardless of oppressive economic and political conditions in order to keep food on the table and keep paying their bills. It is a matter of survival--and also a matter of self-respect and dignity--not a matter of preference. These contradictions lead to increased regulations and fuel the class struggle between grower-owners and migrant workers with housing, wage, and work related disputes, attempts by workers to organize and influence policies that affect their lives, and lawsuits, like the claim of sugarbeet workers to overtime pay. The law involved in the suits was changed by state legislators and now favors the growers. Growers are the voters in Minnesota, not the migrant workers. Protective legislation would not be necessary if all the people who worked in the beet fields shared the resources, power, labor, and benefits of the cooperative more equally with the other producers. As long as the grower-owners are the only producers who are members of the co-op and as long as they appropriate all of the surplus for themselves, the class struggle between the growers and farmworkers of the co-op will continue.

Economic and political conditions continue much the same for migrant workers since the cooperative was organized except for the improved services and programs which are provided by state and federal regulations and agencies. At the same time these laws and service agencies provide for the important, immediate needs, that are created by the present social structure, they also serve to control and pacify migrant workers by obscuring the need for and diminishing the impetus toward more basic changes in that social structure. This contributes, along with a lack of information and awareness and a hand-to-mouth existence, to the reluctance of many migrant workers to risk work time and wages in order to become involved in organized actions for radical social change. Most people in the U.S. accept the migrant life as a way of life for others but would be unwilling to accept the standard of living dictated by the low wages and conditions of the agricultural migrant life in the RRV for themselves--only those with little political power and few economic alternatives accept such a life out of necessity.

When the cooperative was established and American Crystal Sugar Company expanded its operations, the increased sugarbeet acreage did create more jobs for migrant workers. Many of these same jobs are gradually being lost or reduced because of decisions being made by the grower-owners of the co-op to use machines and herbicides instead of hand labor. People who depend upon their farm labor for a livelihood are being pushed out of the beet fields by the use of technological advancements under capitalist relations. While this reduces labor tensions for the growers it increases tensions for the migrant workers. Also, none of the co-op factories has been shut down. If this did occur as it has in other sugarbeet areas, many workers would lose their jobs very suddenly. This is less likely to happen now that the local sugarbeet growers are the owners.

The cooperative, through its grower members, has maintained links with the international capitalist labor market that flourishes in Texas, the U.S. Southwest, and Mexico. Thus, the co-op is assured of a readily available supply of labor capable of meeting its fluctuating needs for hand labor. The sources of this labor supply have a satellite relationship with the RRV and the American Crystal co-op which represent the developing area or metropolis. Labor flows north to the agriculturally developed areas, while the areas from which labor migrates remain under-developed.

Similarly, the migrant workers are victimized by the capitalist social relations of production of the cooperative and both the grower-owners and the workers of the co-op are victimized by the social relations of production of the larger capitalist economic system, monopoly capitalism, and the hegemony of the state. All people fall victim to the relentless drive for profits sooner or later, even those who most diligently seek those profits. The structure of the co-op and the economic system forces people into oppressor and oppressed roles. The social relations of production of the co-op encourages competition among the farmworkers for the crumbs of society and divides the growers and the migrant workers from one another, diminishing the possibility for full human interaction at its best, including the ability to cooperate well in the cooperative process of production.



Grand Forks Herald Photo by Ron Smith

HAULING AND STOCKPILING SUGARBEETS FOR AN AMERICAN CRYSTAL FACTORY

CHAPTER IV

FACTORY WORKERS AND MANAGERS

FACTORY OPERATIONS

Huge machines connected by a complex system of pipes dominate the interiors of the five American Crystal Sugar factories. Once the sugarbeet harvest and processing campaign begins the factories operate day and night seven days a week for approximately six months, until all the beets have been processed. This continuous processing characterizes American Crystal sugar refining operations. It facilitates the harvest for the growers, and it saves time and money, as it is a time-consuming, expensive procedure to shut down and start up the factories on a regular basis. Also, more sugar can be extracted from the juice if it keeps moving and completes the process without being allowed to stand in the pipes and machines for long periods of time. The sugar content of the juice would be reduced if it remained in the pipes overnight or over a weekend for further processing. This would decrease the amount of recoverable sugar, and thus the revenues of the company and the profits of the grower-owners.

Processing sugarbeets into refined white sugar takes about 12 hours and involves a number of processes. Sugarbeets are flumed into each factory after being moved from the storage piles in the factory yard. They are thoroughly washed and sliced. The sugar is extracted from the beet pulp by a process of diffusion and osmosis which yields "raw juice" and pulp. The beet pulp is dried and stored and sold in bulk form for livestock feed. Some of the pulp is mixed with molasses, and then dried. Some of the pulp is also pressed into pellet form and packaged. The raw juice is purified by a carbonation and filtration process using milk of lime and carbon dioxide gas. This process is repeated until the "thin juice" is free of impurities and lime. An ion exchange process purifies the juice at the Moorhead plant and produces reconstituted non-sugars for feeds and fertilizer as by-products. The thin juice undergoes a process of evaporation in a series of evaporators. The result is "thick juice" which is boiled in massive vacuum pans in readiness for the crystallization process. Crystallization occurs when the thick juice in the vacuum pans is seeded with pulverized sugar. When the crystals are the appropriate size the mixture is centrifuged until the dark, thick juice, or molasses, is separated from the pure white sugar crystals. The sugar is dried, sifted and graded, and bagged, or stored for bulk sales. The actual process of refining sugar has changed little over the decades. The newer machinery has modern protective coverings and the whole system has been refined, automated, and computerized (Hand 1981c; Department of Public Affairs 1974; U.S. Beet Sugar Association 1959).

The Hillsboro factory captured the pennant award as the most efficient processing operation out of the five factories in the valley for two years in a row. In 1980 Hillsboro was in last place. The next two years Hillsboro had the highest scores, even though each factory also improved its performance. In 1981 each permanent employee at the Hillsboro factory was given a day's pay as special recognition. In 1982 an award dinner was held in honor of the employees' achievement (Grand Forks Herald 1981;1982).

The managers and workers of each factory in the cooperative must purchase large amounts of essential materials and supplies in order to process sugarbeets. A couple of general policies guide their decisions. First, an attempt is made to purchase supplies from sources as close to the RRV as possible in order to keep transportation costs down. Some coal for the coal fired plants is purchased from mines in North Dakota. If coal with a higher BTU is needed it must be purchased elsewhere. Coke is purchased from a firm in St. Paul, Minnesota. Sulphur comes from a Mandan, North Dakota refinery and some from Canada by rail depending on who can deliver when necessary. Limestone comes from Michigan and Manitoba, defoamer from Illinois, soda ash from Colorado and Montana, and caustic soda also from out of state. Diatomaceous earth, a filter aid, is purchased from suppliers on the west coast of California where it is mined from natural deposits.

Second, the purchasing of raw materials essential to the production process is a competitive, "lowest bidder operation." The cooperative purchases these materials from other co-ops only if they offer the best buy. American Crystal makes no effort to deal with other co-ops as such. Five factors are continually being considered: (1) cost, (2) quality, (3) availability, (4) transportation--the less the better, and (5) factory requirements--not necessarily in that order, although economics is definitely an important factor.

The distribution of the fiscal 1980 revenue dollar of American Crystal Sugar Company shows how the production costs of the factory operations are divided. The dollar was spent for:

Depreciation and amortization - 5¢
Energy cost - 7¢
Freight cost - 11¢
Personnel cost - 12¢
Payments for sugarbeets - 49¢
Parts, supplies, and services - 7¢
Interest expense - 4¢
Other - 5¢
(ACSC Annual Report 1980:16).

The cost of transportation is one of the higher costs. Between 2000 and 2500 permanent and seasonal cooperative employees share the amount allotted to the personnel cost. Some 1600 grower-owners receive by far the largest amount of each revenue dollar. From this amount they must pay their own production costs and unit retains. The rest is income or profit, or in a bad year a loss may be sustained.

The sales of beet sugar and its by-products from the five factories have been stable, even though the price of sugar has been unstable. In fact, the amount of sales keeps steadily increasing. Cane sugar companies produce what they sell; American Crystal sells what it produces, which requires extensive storage facilities. Eighty percent of the cooperative's revenues come from the sale of sugar and 20 percent from the sale of by-products. Ten grades of sugar from "industrial coarse" to "industrial fine" are produced to meet the needs of the larger industrial market. Standard granulated sugar and powdered sugar are also produced and bagged for the consumer market, and in order to provide a full line of sugar products for its consumers, American Crustal purchases brown sugar from cane sugar producers and sells it under its own "Crystal Sugar" brand (ACSC Annual Report 1980:7). The Paragon Companies, American Crystal's advertising agency, promotes the sales of the "Crystal Sugar" brand by keeping a positive image of the product's brand name and the company before the consumer's eye (Keir 1980b).

The giant food industry buys sugar in bulk form or in 100 pound bags. Crystal sugar is purchased by industrial bottling, canning, baking, candy and cereal companies. Some of the major buyers of Crystal sugar are Coca-Cola Company, Pepsi-Cola Company, other soft drink companies, General Mills, General Foods, and Nabisco, some of which own their own sterile rail cars for shipping.

Most of the retail sales are in twelve north central states and in the Chicago area. Crystal sugar is shipped from the factories to the distribution centers and from there to local and regional wholesale warehouses and finally to the local and regional retail stores. Only a very small fraction of the Crystal sugar products and by-products are sold in the RRV by retail stores or for manufacturing purposes. Fertilizer and beet pulp feed are purchased by farmers in the RRV for agricultural use.

Some Crystal by-products enter the international marketplace. Large orders of beet pulp livestock feed, with and without molasses, are exported to Japan and the Netherlands, as well as to large commercial feed companies in the U.S. Molasses is sold to feed companies and to the fermentation industry and pharmaceutical companies for the manufacture of yeast, molds, and antibiotics.

LABOR

The managers and workers who participate in the production process of the American Crystal factories are segregated in a number of ways. Managers carry out the policies of the grower-owners, work with top level co-op officials, make decisions, and plan and control the work process regarding plant operations. Workers do the work at the same well-defined job classifications day after day. Briefly, the managers run the factories and the workers, and the workers run the machinery and the lab tests and perform the repairs and upkeep. The Plant Manager, Agricultural Manager, Office Manager, and other managers and supervisors hold salaried positions. These people are usually men, have had years of experience, and are knowledgeable of the total beet sugar operation. The managers are not members of the union. It is common for managers to be transferred from one factory to another within American Crystal Sugar Company.

The workers are paid wages in exchange for their labor and may drive as far as 40 or 50 miles for a job. However, most live closer to the factory where they work. Skilled and unskilled workers come from nearby towns and cities and farms in each factory district. Farm laborers, including a few migrant workers, fill in on short-term jobs of several weeks related to the harvest and stockpiling of beets. At the Drayton factory 30 to 40 percent of the campaign workers were estimated to be farmers in 1978. Small grain farmers and a few beet farmers who are looking for a way to supplement their income find campaign work an ideal way to remain solvent and to continue operating their farms during the inter-campaign period. Fewer farmers work at the East Grand Forks factory, partly because the plant is located near a larger population center and workforce where competition for jobs is higher. If none of the available workers can supply an essential skill and cannot be trained quickly on the job, a skilled worker may be imported to fill the need. Most of the workers, except for some of the office workers and newly hired workers, are members of the American Federation of Grain Millers Union. All workers in the sugarbeet factories, whether members of the union or not, benefit by union wage scales and contract agreements.

The work day during the campaign on the mill side of the factories is divided into three 8 hour shifts — the daylight shift, graveyard shift, and swing shift. A small number of people work just the daylight shift most of the year on the office side of the factories — management, the agricultural departments, and office workers. The union helped set up the work schedule. It was approved by the union members in 1974. Many workers like it better than the old schedule. Some do not. It assures workers of one weekend off every 4 weeks. The worker works 7 daylights followed by 5 days off including a weekend, 7 graveyards followed by 2.5 days off, and 7 swings followed by one day off, and back to daylights again. Each worker is in one of 4 shifts. The fourth shift is the "off" shift. There are approximately 60 to 70 workers on each shift. It varies with the individual size and needs of each factory. The work schedule changes at the end of the campaign, as does the workforce.

About two thirds of the American Crystal factory workers are laid off at the end of each campaign until the following September. Many workers return year after year. There is also a large turnover and lack of commitment to the company among other workers. Some of the workers who are laid off find other jobs for 6 months or full time jobs and never return, some receive unemployment compensation, others operate their farms or small businesses, and a few housewives and mothers prefer the part time nature of the work.

Most of these seasonal or campaign workers are members of the union, but they are treated very differently from the permanent or year-round workers who are union members. A former seasonal worker noted that the part time Crystal workers were not nearly as well compensated as were the full time workers. Both groups received union wages of about $5 to $10 per hour in 1981, depending on the jobs performed. The full time workers also received fringe benefits which included sick leave, medical-hospital, dental, vacation, and retirement benefits. The part time workers received no fringe benefits and had to wait until the third year of employment in order to qualify for sick leave compensation; and yet Crystal management claims that its employees are the best paid workers in the sugar industry. The union promotes the interests of the permanent workers first, even though there are more seasonal workers who pay union dues. Some factory officials and union leaders view seasonal workers as less skilled and less reliable--people who work for extra money. In reality some seasonal workers are skilled production workers with more than 5 years of experience whose families depend on their income. Workers become frustrated when they see management line their own pockets in profitable times with an extra month of pay through a non-union employee program when their own needs are going unmet. This former worker thinks that these conditions exist "primarily because of union and management indifference and the worker's own sense of powerlessness" (Wakefield 1981).

In August 1980, 125 permanent workers were also laid off from four of the five Crystal factories. The start of the harvest and the campaign had been delayed until early October because of the drought and the smaller sugarbeet crop. The grower-owners wanted to leave the beets in the ground as long as possible in order to increase the tonnage and sugar content (Koehler 1980g).

Permanent workers include management (those who determine who will be laid off and when), chief laboratory chemists, shipping clerks, loaders, and the maintenance and repair crew--mechanics, machinists, welders, and electricians. Each factory must be cleaned up and repaired and any improvements made in preparation for the next campaign. Workers in the electrical, welding, and machine shops make all the parts, equipment, and repairs. Shipping sugar and by-products goes on all year but can have slow periods when all the workers are not needed. Permanent workers are laid off and recalled according to seniority. All the workers who were laid off in August 1980 were expected to be recalled in a couple of months with the start of the processing campaign (ibid.).

A high degree of specialization exists among the workers in the Crystal factories. Many workers perform limited, routine tasks. Other jobs require special skills. There is evidence of an extensive hierarchy within the workforce which is directed by management. Job titles are full of words like, "chief," "assistant," "head," and "foreman." Labor is quite literally divided. Even the color of the hardhats that are worn in the mill for safety are coded to the production hierarchy. At the Drayton plant white hardhats are generally worn by people with position and authority, blue hats are usually worn on the sugar end, red-orange hats by mechanics, etc. Numerous work classifications are listed with an accompanying wage scale in the 1977-79 contract between the company and the union--American Federation of Grain Millers, AFL-CIO Sugar Division:

TECHNICIANS I	August 1, 1977	August 1, 1978
Chief Electrician	$8.09	$8.70
Shop Foreman	8.09	8.70
Beet End Foreman	8.04	8.64
Sugar End Foreman	8.04	8.64
Certified Welder	8.04	8.64
Steam Fitter	8.04	8.64
Chief Boilerhouse Engineer	8.04	8.64
Machinist - Shop & Floor	7.99	8.59
Shift Mechanic - 1st Class	7.99	8.59
Boilerhouse Foreman - 1st Class	7.86	8.45
Carpenter	7.86	8.45
Welder - 1st Class	7.86	8.45
Etc.		
TECHNICIANS II		
Pulp Drier Foreman	$7.69	$8.27
Maintenance Foreman	7.60	8.17
Sugar Warehouse Foreman	7.60	8.17
Head Assistant Chemist	7.48	8.04
Electrician - 2nd Class	7.37	7.92
Crane Operator - 2nd Class	7.37	7.92
Pipefitter - 2nd Class	7.37	7.92
Yard Foreman	7.32	7.87
Utility Foreman	7.21	7.75
Fertilizer Plant Operator	7.20	7.74
Etc.		
TECHNICIANS III		
Laboratory Foreman	$7.10	$7.63
Utility Man	7.10	7.63
Limerock Shovel Operator	7.10	7.63
Bulk Sugar Operator	6.91	7.43
Control Room Operator	6.88	7.40
Tareroom Head & Chemist	6.86	7.37
Boilerhouse Fireman	6.84	7.35
Boiler Burner Man	6.22	6.69
Etc.		
STATION A	$4.82	$5.18
Knife Filer		
Diffuser Operator		
Carbonation Filter Foreman		
Evaporators		
Pan Floor Helper		
Centrifugal Foreman		
Sugar Sacking Station Foreman		
Lime Kiln Foreman		
Coal Handlers (Coal Fired Houses)		
Boilerhouse & Pulp Drier Ashman		
Etc.		

	August 1, 1977	August 1, 1978
STATION B	$4.55	$4.89
Boilerhouse Cleaners & Helpers		
Laboratory Benchman		
Centrifugal Operators		
Head Sugar Stacker		
Mechanic & Electrician Helpers		
Electrical Engines & Turbines		
Fork Lift Operator		
Etc.		
STATION C	$4.41	$4.74
Beet Flume & Wet Hopper Man		
Beet Washer Operator		
Crystallizer		
Sugar Sacking Station--Weighing, Sewing, Packaging, Powdered Sugar		
Pulp Drier-Pressman, Weighing, Sacking, Sewing, Trucking, Stacking & Loading		
Truck Driver		
Water Tenders (Gas Fired Houses)		
Factory Yard Dump Foreman		
Etc.		
STATION D	$4.18	$4.49
Rock & Trash Helpers		
Beet Washer Helper, Trash Rolls & Picking Table		
Laboratory Sample Carrier, Stations & Helpers		
Thin & Thick Juice Filtration		
Sweepers & Janitors		
Steffens-Saccharate Mixers & Filter Helpers		
Cleaning Yard Helper		
Ditch & Pond Watchmen		
Sewer Screens		
Handling Molasses		
Miscellaneous Labor		
Factory Yard Beet Receiving		
Etc.		
NEW HIRES FOR STATION D	$3.87	$4.18

OFFICE EMPLOYEES	August 1, 1977	August 1, 1978
Storekeeper	$5.62-7.43	$6.04-7.99
Encoder	5.39	5.79
Assistant Encoder	4.41	4.74
Clerk-Shipping	4.13-6.97	4.44-7.49
Telephone Operator & Typist	4.13-4.58	4.44-4.92
Etc.		

(American Federation of Grain Millers 1977:46-53).

Increased mechanization in the factories is another means of increasing productivity. Machines can work faster and steadier than people. An official at the East Grand Forks factory said that less and less workers are being hired each year. Monitoring systems were installed in the Hillsboro plant and in the East Grand Forks plant in the new B side. Fewer employees are needed to operate the new addition. Each step of the production process is monitored by machine. When something goes wrong someone at the controls sends the appropriate worker to remedy the problem. More people are needed to run the old A side of the East Grand Forks plant which is not monitored by machine. Part of the centrifugal machine on the old A side is still manually run and is viewed as monotonous labor. Some antique equipment is also still in use, but new parts are introduced annually and it functions well with the larger labor force.

Compulsory overtime is a legal right of Crystal management according to federal law, but management has never had to exercise that right because factory employees have been cooperative and willing to accept overtime work. The union agreement of 1977-79 between the company and the workers rules that any worker who refused compulsory overtime work could be suspended from work for 5 days without pay. In the event of illness or a prairie blizzard or other emergency that causes a reduction in the labor force, management has several alternatives. Several miscellaneous workers per shift can cover some absences. Some workers have been trained per shift for backup. Utility workers on both the beet end and the sugar end know all the jobs and can fill in when necessary. Workers may be asked to work an extra 4 hours or to come in to work 4 hours early in order to cover the same position on the next shift. Workers receive time and a half pay for overtime work. Administrative Service Managers or Supervisors, who promote sanitation and safety in the factory complex, try to avoid having employees work more than 12 hours in a row because it is unsafe. The high-speed, continuous process operations that involve powerful machinery can contribute to accidents, especially when combined with the fatigue resulting from overtime work. An occasional serious injury or death does occur among Crystal factory workers.

Workers in the Drayton and East Grand Forks factories claim that the number of women workers is growing. Women work in the office, the lab, as sweepers, at the picking table and some other station jobs operating machines like the centrifugals, and sacking sugar in the warehouse. In 1978 two women were lab foremen at the Drayton plant and the Assistant Office Manager was a woman. One woman worker claimed that if women have the strength and training and are given a chance they can handle many of the station jobs, but that women working with the diffusers usually do not last long. Most women work in the mill and are members of the union. A few women are permanent workers.

At the East Grand Forks plant the office used to be full of men. When one worker began work as a sample carrier for the lab in the late 1960s there were no women anywhere in the mill or office or lab. Now, the worker said, they are doing all kinds of wage work as station foremen, control room operators, mill workers, shipping clerks and other office workers, and lab workers who run the same tests over and over again thousands of times. (The tests keep a check on impurities like metal and rubber, bacteria, sugar content, crystal size, temperature of liquid, sugar loss, ph, and the sediment from pond samples.) No women held the salaried positions of management in 1978. The worker commented that women haven't been working long enough to gain the experience necessary to know the business well enough to qualify for salaried management positions.

An interview with one factory worker reveals some of the impact of the social relations of American Crystal Sugar Company in concrete, human terms. A pseudonym is used. Eva has been a seasonal factory worker for the cooperative for almost 10 years. In 1978 she worked as a laboratory benchman. She worked on the beet bench and originally learned the variety of tests and timed runs on the job with the help of a manual. Before she got a job in the lab Eva carried samples for the lab. She spent her first four campaigns working at the picking table. She said that it was a hot, boring job up where the factory gases collected. An exhaust fan helped clear the air. Eva admitted that some jobs are not the best and some workers do not stay long. There is a certain amount of stress, and speed on the job is important. Every hour Eva gets a 5 to 10 minute break if she works fast enough to take it and keep up with her work. Certain tasks must be done each hour. It is a rigorous schedule with lots of work to do.

Eva liked the pay--$4.89 per hour in 1978. She said the "white hats" were easy to talk with and the head chemist and lab foreman she worked under were understanding. However, when management asked Eva to work overtime because someone was ill she said that she did not feel free to refuse, even though she said, "I've had it after 8 hours and want to leave." She usually agreed to work because she wanted someone to work for her when she needed some time off. Also, she knew compulsory overtime could be enforced if too many people refused. Because Eva knew how hard it was to stay and put in those extra hours she remained reluctant to stay home from work herself when necessary. Also, she said that a lab worker comes to work a half hour early without pay and if she works overtime for someone who is ill she works a total of 13 hours--only 12 hours for pay.

Eva said, "I like my work" but "it gets to the point where you feel like a robot." Her contradictory statements indicate considerable ambivalence. Good working relations with a well trained sample carrier improved the situation. The old work schedule of five days of work and time off was preferred by Eva and some of the women she worked with in the lab. Seven days of work and time off seemed much more tiring to them. They also had work to do at home. The five days off in a row each month just did not compensate. Eva was convinced that the union was responsible for the most beneficial changes at the factory where she worked, not the co-op. She was "100 percent for the union" and said it had definitely been beneficial to herself and other workers and had "done a lot of good." She was certain that management and the farmers would not always agree. Eva did say that the co-op gave women a real chance to try the harder, permanent mill jobs, but that women usually found them to be too difficult and left such jobs.

A couple of other workers thought that the organization of the cooperative had led to a number of positive changes in the factories. More technological and environmental improvements had been made. In general, maintenance of the factories was better. However, the same types of jobs and similar working relations and conditions existed.

One worker did note that it was easier to get along with the personnel who run the factory from offices and to communicate concerns to them. It was also noted that some of the new owners, the sugarbeet farmers, didn't seem to know very much about the process or problems of the industrial end of beet sugar production but were gradually learning.

Information regarding agricultural research, new methods, and technological advances in the cultivation of sugarbeets, along with news of the cooperative, the factory operations, and personal highlights from the lives of some of the factory employees is published by American Crystal Sugar Company. These publications are distributed to the growers and some of the employees in the factories. The journals feature the sugarbeet queen and other promotional contests and announce awards to the top growers and the most efficient factory. Personal news items report marriages, births, graduations, special anniversaries, retirements, and deaths among some of the Crystal workers and their families. Special recreational activities related to Crystal employees are also reported, including sports events and teams organized among the workers. The former corporation began this practice of factory news long before the co-op was even a thought. It promotes the dominant ideology of industrial capitalism and producer cooperatives.

UNION AND STRIKES

The American Crystal cooperative inherited the factory worker's union, American Federation of Grain Millers, AFL-CIO Sugar Division, when it bought out the former American Crystal corporation. The union continues to negotiate wages, benefits, grievances, work schedules, and working conditions for the Crystal workers. When new factory workers are hired they fill out a union form along with all the company forms. In North Dakota there is an "open shop" law. A worker at the Drayton and Hillsboro factories can choose not to join the union by not filling out the union form. Union leaders recommend the union and most workers eventually join. All workers benefit from the union contracts, even if they are not members. Minnesota has a "closed shop" law. Each new worker at the East Grand Forks, Crookston, and Moorhead factories must fill out the union form and join the union within a certain period of time. The initiation fee of $15 and the monthly union fee of $7.50 (1977-79) are deducted from the worker's paycheck. Workers have input at the local factory level. They elect local factory union officers and vote on major issues and binding contract agreements. With its bargaining power, the union represents the interests (if somewhat unequally) of all the workers in the five factories. It is the only means the workers have of influencing change in the cooperative beyond suggestions or minor changes related to the worker's limited work area.

The wages paid by the Crystal co-op are comparable to and competitive with the wages offered by other large regional industries. The lowest starting wage has consistently been well above the minimum wage. In 1974 the lowest starting wage at the co-op was $3.21 per hour and in 1975 it was $3.47 per hour. It rose to $3.87 per hour in 1977 and to $4.18 per hour in 1978. Wages ranged from $5 to $10 per hour in 1980. Benefits have also gradually improved, but only for permanent workers.

The local factory union presidents gather input from their local members and meet together in order to decide which policies to present to the Board of Directors of the cooperative. Policies that are approved affect the workers at all the plants. Local factory problems and grievances are handled at the local level with the local factory management. Local, regional, and national union representatives also promote the interests of both growers and workers with their lobbying efforts for a strong federal farm program and sugar program that will halt the rash of factory shutdowns.

An attempt was made to unionize the 126 employees of the American Crystal corporate headquarters and research center in Moorhead in 1980. A number of the employees claimed that their wages were lower than the wages of the factory workers who have been unionized for many years. It was also claimed that American Crystal Sugar Company participated in unfair hiring practices and sexual discrimination. The company opposed the efforts to organize a union and held meetings with the employees in order to try to pacify them by meeting some of their demands before the vote. The employees rejected the American Federation of Grain Millers by a vote of 83 against and 38 in favor of the union. Crystal officials had no comment (Associated Press 1980).

A majority of the unionized workers at the Crystal processing plants approved a new two-year contract in early July 1982 between the union and the company. Improvements in wages, pensions, and a dental plan are part of the new contract which takes effect August 1, 1982 (Associated Press 1982b). Once the 1982-84 contract has been approved and is in effect there can be no strikes by the workers or lockouts by the company for its duration. The seasonal workers who work in the Crystal processing plants about six months out of the year do not have an opportunity to vote on the union contract because they have been laid off until the middle of September. Most of these workers are union members while they work in the factories.

The unity, strength, and effectiveness of the Crystal workers' voice and power are derived from their ability to collectively withhold their labor in the form of a strike. American Crystal workers who are members of the American Federation of Grain Millers have gone on strike three times in the past decade. The American Crystal factory workers struck the year before the cooperative was organized, and again in 1977. The latter strike was ended in a couple of weeks when a negotiated settlement was reached and accepted by the workers. When the workers went on strike at the California factory, American Crystal Sugar Company sent eight to twelve supervisory and non-union workers from each of the five cooperative plants to help operate Crystal's non-member business at Clarksburg (Koehler 1980h). This action by the company broke the effectiveness of the strike for the union workers.

The third strike by Crystal factory workers in the RRV began August 29, 1981 when the union members rejected the company's offer of a 10 percent pay raise by a vote of 583 to 192. The major issues being negotiated for the third year of a three-year contract were wages and bonuses. The union was demanding a 21 percent wage increase but came down to 17 percent. Wages started at $4.85 and ranged to $10.11 per hour at that time. The East Grand Forks plant continued to operate with only 35 supervisory workers, while its 160 full time workers who belonged to the union took turns marching on the picket line (Evans 1981a).

The grower-owners thought the company had made a fair offer, especially in view of the low sugar prices which were around 18 or 19 cents a pound. They were looking forward to more negotiations, which were being handled by a federal mediator, and a quick, reasonable settlement so that they could get on with the harvest and processing campaign. Some 2000 full time and seasonal production workers were union members and became involved in a strike that lasted four weeks. Just about all the Crystal workers in North Dakota are union members in spite of the fact that North Dakota is a "right-to-work" state (Hand 1981b). Burlington Northern union members acted in solidarity by refusing to cross the Crystal picket line. Their supervisors had to drive over to the East Grand Forks factory every day to switch the trains. Crystal officials said the East Grand Forks factory was just about ready for the campaign when the workers struck and the automated shipping process continued on schedule. Beet growers and co-op officials were not worried early in the strike because beets would continue to gain tonnage and sugar content until they were dug, but if the harvest was too late the ground would freeze or the factories would be unable to process all the beets before the spring thaw. This would lead to rotting sugarbeets and production losses. The union and Crystal management agreed to meet in Minneapolis on September 12 in order to continue negotiations (Hand 1981d).

The grower-owners became more worried when nothing was settled by September 17 and vowed that they would operate the factories themselves if necessary. One grower said he was willing to try to learn how to operate the factory equipment; he certainly could not afford to leave his sugarbeet crop to freeze in the ground. He said that he had invested more than $70,000 in 188 acres of beets and the only way he could get that money back was to harvest and process those beets (Associated Press 1981d).

Crystal union members voted on the company's second proposal on

September 18. They were urged by union leaders to reject the offer. The union was still holding out for a 12 percent wage increase (down from the earlier 21 and 17 percent increase) and a bonus for permanent workers equal to one month's pay and for seasonal workers equal to two weeks' pay. The bonuses to union workers were designed to balance the bonuses given to non-union workers in the past year. The cooperative's offer included the same 10 percent wage increase, only this time retroactive to April 1 instead of August 1, and reinstatement of the hospitalization plan. A co-op official considered the 10 percent pay raise reasonable because "they are the highest paid sugar plant workers in the nation now." Union leaders said that there is a sugarbeet factory in southern Minnesota that pays higher wages. The bonus compromise involved less money and was limited to permanent workers, and the hospital plan was already part of the three-year contract. American Crystal Sugar Company decided that it would start up its factory operations the following week regardless of the outcome of the vote by its production workers. Each grower-owner was asked to supply one worker. However, the company preferred to have its trained workers come back to work (Hand 1981e).

Crystal union workers voted a second time to reject the company's contract offer. Final voting figures were only available for two factories from the Associated Press. Union members at the East Grand Forks factory voted 90 to 55 and at the Drayton factory 106 to 14 not to accept the second offer. American Crystal continued to make plans to hire non-union workers and operate the plants. Both union leaders and union workers insisted that the factories could not be operated for long or at the desired level of efficiency without union labor (Evans 1981b).

Representatives of the American Federation of Grain Millers and the American Crystal Sugar Company were due to meet for the sixth time with a federal mediator in Minneapolis the same day the Drayton factory was due to start processing sugarbeets without its usual union production workers. The Drayton factory was chosen to begin operations because it is located in a right-to-work state. Both unionized and non-union workers could go back to work during a strike without losing their jobs later by being expelled from the union for crossing the picket line. North Dakota workers could keep their jobs even if they were not a union member, but Minnesota workers are required to be union members if they work in a union shop. They would lose their job when the strike ended. The workers who were running the Drayton plant included management from other Crystal plants, sugarbeet growers and their farmworkers, retired plant workers, and some new workers. The total number of workers hired was considered sufficient for the task at hand. One Crystal official said some workers were union members who crossed the picket line, but the president of the Drayton union local denied that any union members had crossed the picket line. A plant manager said that if the strike dragged on it would be several weeks before all the factories were slicing and processing beets. Both sides wanted the strike to end but the battle of interests raged on--the owners' interests versus the workers' interests. The company claimed that it had no intention of trying to break the union. It only wanted to end the strike and get the regular people back to work (Smetanka 1981).

The grower-owners supported the position of management throughout the strike, even with their labor in the factory. The factory manager at Drayton wanted the union workers back, but was managing the beginning of the production process quite well with the temporary workers. All these workers were paid union wages and were eligible for worker's compensation. Some 230 temporary workers were split between two 12 hour shifts. Usually 320 trained workers worked three 8 hour shifts. Management planned to change to three shifts later. A union worker on the picket line outside the Drayton plant said that just about anyone was being hired. One man arrived for work drunk and ran into a parked car. He was arrested by the county sheriff who came to the plant during each shift change in order to watch for potential violence. There was none, although the striking union members certainly felt angry and frustrated the longer their situation remained unresolved. Some of them were running out of money for daily living expenses since they received no wages or other compensation during the strike (Terhaar 1981a).

On the third day after the Drayton factory began slicing and processing beets, and 28 days after the strike began, union members voted to accept American Crystal's third offer 655 to 120. Some workers said they voted to accept the offer because they could no longer afford to wait for a better offer. It was a vote for financial and job security. Management's third contract proposal was very much like the previous offer. The 10 percent wage increase would cost growers 50 cents more per ton. Wages for union workers would range from $5.34 to $11.12 per hour. Retroactive pay would range from $300 to $700 for full time workers. Seasonal workers would receive no retroactive pay. A few concessions were made by the company. Permanent workers who were laid off in February would still receive the minimum retroactive pay of $300.

Workers would receive Labor Day holiday pay and insurance coverage during the strike. It was expected that there would be some impact on the RRV economy from the loss of wages. Grower-owners defended management decisions by saying that they had to do everything possible to protect their $400 per acre investment in production costs in the sugarbeet fields. Some costs per acre were even higher. The wage increase was going to cost one grower about $3,000 on 375 acres of sugarbeets (Terhaar 1981b). American Crystal officials said the total cost of the strike and its effects was $10 million, which translates into $2 per ton off the sugarbeet payment to the grower-owners. In case of another strike the non-union employees have been prepared to take over the basic operation of the factories (Hand 1982). With the strike over the union workers could return to the factories and begin production immediately. As long as there were no major plant breakdowns and the weather remained cold into March, American Crystal expected no further problems for the 1981-82 campaign (Terhaar 1981b).

ANALYSIS

The Minnesota cooperative, American Crystal Sugar Company, makes no deliberate effort to support other cooperative enterprises through its own purchasing and sales operations. The company looks for the best deal and promotes its own interests like any other U.S. business. American Crystal did provide managerial and financial assistance to a sugarbeet co-op at Renville, Minnesota at one time with an eye toward expansion through a possible merger that never occurred. The Renville co-op became totally independent. The concept of cooperation at American Crystal does not appear to extend beyond the collective effort of the grower-owners.

Even though American Crystal Sugar Company is the largest sugarbeet co-op in the U.S. and contributes millions of dollars to the economy of the RRV through the factory payrolls and beet payments to growers, the cooperative operates at the level of greatest economic risk and questionable profitability--the level of agricultural production and processing--in relationship to the larger processing and manufacturing corporations within the food industry. Co-op operations are subject, to a greater extent, to the uncertainties of nature, price fluctuations, and the cost-price squeeze of the economic crises of capitalism. The location and comparatively small size of American Crystal are added risk factors within the capitalist system. The American Crystal co-op depends upon freight rates set by large transportation companies and upon credit and interest rates from large financial institutions in urban areas. Sugar prices are set in the metropolis centers through a complex set of national and international events. Most of the Crystal products are exported to larger corporations in the industrial centers where the sugar and by-products are used to manufacture new and more profitable products. The larger industrial corporations experience fewer uncertainties, less risks, and greater control, flexibility, and options in their operations. Processed sugar is exchanged for machinery and industrial inputs and manufactured goods from these industrially developed centers. The Crystal factories and the co-op remain in a comparatively vulnerable position. The further development of the co-op depends on a number of external factors. Fear of plant closure is not unknown in times of crises when the price of sugar remains low.

The wage workers at the American Crystal factories in the RRV are producers for the cooperative along with the growers and the migrant workers. The factory production workers have not been integrated into the cooperative as full functioning members. The structural position of the workers in the factories remains unchanged since the organization of the co-op because the capitalist social relations of production of the former company have also remained fundamentally unchanged within the co-op. American Crystal factory workers continue to be exploited and oppressed by the social relations of production of American Crystal Sugar Company. It is true that working conditions and benefits keep improving and wages keep rising along with inflation and the cost of living, but these are minor changes and would be unnecessary if the workers shared more equally in the power and profits of the company. These changes and increases are due more to the efforts of the union than to the efforts of the co-op which is always concerned with keeping labor costs down. The workers must sell their labor-power in order to gain access to the means of production--the factories, labs, machines, tools, equipment, supplies, sugarbeets, and other resources that are owned by the grower-owners and controlled by them and their managers. The permanent workers have greater access to the means of production than the seasonal workers. Management combines skilled and unskilled labor, technology, and resources into the production process. The factory managers are allies of the grower-owners and manipulate and control the workforce and implement the appropriation of the surplus by the growers from the factory workers through a system of wages and the sale of the sugar and by-products that the workers produce. The products belong to the grower-owners, not to the factory workers who help produce them. The only commodity that belongs to the factory workers is their labor-power.

The only power that the factory workers have in the co-op comes from their common participation in their union, and even this power is limited. They do not even have the legal right to decide whether or not they will work overtime. The major decisions of the cooperative are made by the grower-owners. The decisions made by their top level and factory level managers generally reflect the decisions and goals of the owners. The grower-owners have the power to hire and fire the managers and the managers have the power to hire, fire, and lay off the factory workers. The workers have the power of their union and the strike. The owners and management have the power to circumvent the strike and weaken the union. The union leadership and members have not been progressive in their demands and actions. Energy, resources, and efforts have been focused on "bread and butter" issues and working conditions. Efforts that would lead to greater worker control, ownership, and participation in the co-op, and thus to greater economic and political equality and fewer contradictions are nonexistent. In fact, many agreements that are part of the union contract, that serve to divide and control the workers, reinforce the existing social relations of production and serve the interests of management and the owners rather than the interests of the workers.

The extensive hierarchy and division of labor that organize the production process in the Crystal factories also serve to divide and control the workforce. Each worker in the hierarchy controls and directs the workers below him/her in the hierarchy and is controlled and directed by workers and managers at higher levels in the hierarchy. The work process stifles the full use of the human intelligence and makes it difficult for workers to experience some genuine physical, emotional, and mental satisfaction in their work. Everyone becomes the loser, including the factory and co-op of which the workers are a part. Many individual jobs, that are very limited and routine, also isolate workers from the operations of the rest of the factory and the co-op as a whole. Union workers are divided from non-union workers--non-union management receives different compensation in the form of higher salaries and bonuses. Workers are divided from other workers by countless, arbitrary job and wage classifications from Technician I to Station D and a few pennies per hour difference between classifications. Workers literally compete for pennies. And finally, permanent workers are divided from seasonal workers. Seasonal workers have less access to the means of production, are sometimes treated differently by both management and the union, receive different benefits or none, and do not receive fair recognition for their part in winning the pennant award for factory efficiency. The workers compete and the factories compete. A strong class consciousness is lacking. The flexibility of factory operations to meet changing needs at a minimum cost lies in a well managed labor force.

However, all the divisions and competition and unequal social relations that exist in the factories create tensions and contradictions and lead to problems, grievances, and strikes. Because the interests of the grower-owners and their managers differ from the interests of the factory workers, what is good for the grower-owners and the factories and co-op may not be good for the workers and vice versa. The goal to accumulate sufficient capital and profits for the co-op and the grower-owners is promoted and realized at the expense of the wage workers. Increased mechanization in the factories improves productivity and efficiency in the factories; at the same time it eliminates jobs, and workers lose the means to their livelihood. While mechanization does make some jobs less tedious, it makes other jobs more tedious for workers. Continuous processing is good for the product, the factories, keeping costs down, the growers, and the co-op, but is it good for the workers who do not share in the full benefits of the co-op? The pace and 24 hour work schedule run the workers' lives. The other factors seem to be accepted as more important than the quality of the workers' lives. The tensions continue to exist and mount. The company publications portray the image of one big happy family through personal news of the workers and their families, factory awards and co-op contests. This practice helps bolster company loyalty and team spirit in an effort to reduce some of the tensions, by disguising the true nature of the exploitative and oppressive social relations of production in order to keep the factories running smoothly. Nonetheless, labor costs remain a constant and basic contradiction in the production process. Management strives to keep labor costs down, while the efforts of the workers to meet labor needs drives labor costs up. Their interests are in direct opposition. Strikes occur in which the class struggle for more equal political and economic conditions is acted out until one or both sides compromise. The immediate interests of the growers took priority when their crop became threatened by the 1981 strike. The growers and management used their greater power and resources to protect their own interests. The power and resources of the workers steadily dwindled, and they accepted far less than their original demands. This compromise resulted from the unequal social relations between the growers and factory workers. If all the people who work to produce beet sugar in the factories were members of the co-op with an equal say and an equal stake in all the benefits of the co-op, the contradictions and class struggle within the factories would dissolve and a true cooperative effort would have a better chance of developing. Since this is not the case in the factories of the American Crystal cooperative, class struggle persists against the existing social relations of production.

CHAPTER V

DRAYTON: SUMMARY OF FACTORY IMPACT

In April 1982 a couple of residents of the Drayton, North Dakota community began publishing the area's second weekly newspaper from the back of their clothing and furnishings store on Main Street. The goal of the new Valley News and Views is to cover the news and present the issues of the community better than the Drayton Express. The new editors are concerned that the readers remain well informed. One of the primary issues noted was the future of the cooperative, American Crystal Sugar Company, and its Drayton factory upon which the economy of the community, rural Drayton, and the surrounding region of northeastern North Dakota and northwestern Minnesota depend to a significant degree. This is particularly true given the poor conditions of the agricultural economy in the Red River Valley (RRV) and in the nation. People in the Drayton area are speculating on how long the Drayton factory will remain in operation, and on the consequences should a shutdown occur (Schmidt 1982). Residents who were interviewed said it would be "pretty tough," "a low blow to the town," and that "the factory keeps the town going." They have expressed concern regarding the low price of sugar and adverse weather that has damaged the sugarbeet crop (ibid.).

American Crystal has not indicated any plans to curtail production. The Crystal co-op in the RRV remains one of the leading sugarbeet producers in the U.S. The Drayton factory produced almost 1.5 million pounds of refined beet sugar every 24 hours in the mid-1970s. Some grower-owners claim that the co-op is responsible for keeping the sugarbeet industry alive and flourishing in the RRV, even during hard times, and that the production of beets and beet sugar would have been considerably diminished if the former company had been allowed to go out of businees eventually or to close some of its processing plants in the valley. Such was the fate of many beet sugar processing plants in the U.S. during the 1970s.

DRAYTON FACTORY

American Crystal Sugar Company, the former corporation, constructed its Drayton factory about a mile and a half north of the Drayton city limits during 1963 and 1964. The construction workforce peaked at over 700 workers. Some of these workers had moved into the area with their families temporarily. Many other workers were area residents. Most of the construction materials and equipment were imported from outside the area. When the huge factory complex was completed at a cost of almost $20 million it included about 850 acres of buildings, giant storage tanks, a large factory yard with space for piling beets, and sewage lagoons (Drayton Express 1964b).

The Drayton factory underwent testing in July and August 1965 and began slicing beets in the 1965 campaign. At this time the temporary construction workers moved away from the Drayton area. At the same time approximately 50 permanent managerial and skilled workers were moving into Drayton in order to test and operate the factory (Drayton Express 1965a; Earthman 1965a). The managers and workers were transferred from other beet sugar factories in the valley and from Nebraska and California. The rest of the permanent workers and the seasonal factory workers came from the towns and farms of the Drayton factory district and continue to do so. It has been the policy of the company to hire as many local workers as possible and train them for the semi-skilled jobs. Residents from about ten Drayton households went to work for American Crystal. It has been estimated that 30 to 40 percent of the campaign workers at the Drayton factory are farmers, especially small grain farmers. Many of them hold important station jobs. The number of farmers seeking part time employment at the factory has increased slowly as the years have gone by. The Drayton factory employs about 120 permanent workers and some 320 workers during the campaign, many from across the river in Minnesota, including the husband, wife, and older children from some families. The total number of workers varies according to the current need for labor.

The number of sugarbeet acres in the Drayton area tripled the year the factory began processing beets. The Drayton area was allotted 31,000 acres of sugarbeets under the Sugar Act which was still in force in 1965. This beet acreage was divided among some 400 growers. None of the new beet growers received an allotment of more than 80 acres. About 1700 migrant workers moved into the Drayton area to fill the growing need for hand labor in the beet fields (Drayton Express 1964b; 1965a). That need has declined drastically in recent years due to increased mechanization and effective use of herbicides.

One retired farmer said he began growing sugarbeets near the community of Drayton in 1924. He shipped his sugarbeets by rail from the loading dock in Drayton to the Chaska and East Grand Forks processing facilities. The transportation costs discouraged many farmers from growing sugarbeets in the northern part of the valley until after the Drayton factory began operating and transportation costs were greatly reduced. The loading dock in Drayton was removed. Beets from the rural Drayton area were trucked directly to the factory yards, while beets grown at farther distances were trucked to outlying piling stations. The retired farmer said that he had promoted the establishment of a processing plant in the Drayton area in every way possible. Preliminary organization had been undertaken among the beet growers and town leaders in the area, and land had been selected as "an insurance program for sugarbeet growers" before American Crystal even planned construction on its Drayton factory. According to the retired farmer, having a beet processing facility near Drayton was good for the growers in the area, and owning it by 1973 was even better. The welfare of the rural town economy of Drayton has always been linked to the prosperity, or lack of it, of the area growers and of the farm economy.

DRAYTON COMMUNITY

The economy of the community of Drayton has been sustained by agriculture for many decades. This busy little agricultural service town watched the steamboats come and go on the Red River and industry passed it by. When the first and only major industry, American Crystal Sugar Company, arrived on the scene in 1963 and began full operations in 1965 it had a tremendous impact on Drayton and the surrounding area. There is only one other small industry in Drayton--Mity Red Potatoes, a potato packing firm which is operated by the Potato Growers Association. It employs about 20 workers in season in the fall. A number of small commercial enterprises that provide a variety of basic goods and services, the Drayton State Bank, the City Hall and a post office, several hundred homes and a variety of small housing units, a public school for all 12 grades, two small medical clinics, a city park with good recreational facilities, and several churches constitute the rest of Drayton. The city has an active volunteer fire department, a police department, a doctor, a dentist, and complete, modern ambulance service to the nearest hospital in Grafton, North Dakota and the major medical center in Grand Forks, North Dakota. The only library is the school library. Only one of the two weekly newspapers has an office in Drayton. A city council, mayor, and park board governs Drayton. A Farmers Union Oil Company, a Farmers Union Grain Elevator, and other services are also located in Drayton. Northern-Burlington Railway has a branch line that passes through the community of Drayton and runs adjacent to the American Crystal factory complex.

Since American Crystal's Drayton factory was built Drayton has experienced both direct and indirect changes and benefits from this major industry, as well as some demands and social tension. The operation of the Drayton factory resulted in more jobs for area residents. Retail trade increased due to the temporary construction workers, migrant workers, and new permanent factory workers in the Drayton area. Drayton's business district expanded. Most of the factory payroll of several million dollars, the sugarbeet payments to growers, and any profits after the cooperative was organized stayed in the Drayton area. However, many growers go to Grafton and Grand Forks, North Dakota in order to purchase farm machinery. Grafton is about 20 miles to the southwest and has a population of between 5,000 and 10,000. Grand Forks is located 45 miles south of Drayton and has a population of close to 45,000. The increased cultivation of sugarbeets for processing in the Drayton factory led to a greater diversification of crops, creating a healthier farm economy in the Drayton area. New homes were built for many of the 48 households that actually moved into the community of Drayton related to the operation of the sugar factory. The increased population contributed to the construction of a new school and increased services in Drayton.

The population of Drayton increased by about 200 people from about 900 to 1,100 when the Crystal factory opened in 1965. Official figures reported by the 1973 North Dakota Blue Book published by legislative authority under the direction of the North Dakota Secretary of State are:

1950	875
1960	940
1970	1,095

The city of Drayton requested a special census in 1964 due to the sudden and substantial increase in the number of people living in Drayton during the construction of the factory. The U.S. Bureau of Census reported the official population of the city of Drayton at 1,278 as of November 17, 1964 (Drayton Express 1964d). On July 1, 1976 the population of Drayton was estimated at 1,118 in the 1979 Statistical Abstract of North Dakota which was prepared by the University of North Dakota Bureau of Business and Economic Research. The major part of the population increase was connected with American Crystal Sugar Company and related service workers and the growth of small business (Earthman 1965c).

The American Crystal factory at Drayton enlarged the tax base of the Drayton area. The factory property is taxed through the township and the taxes are shared with Pembina County and the city of Drayton. The 1976 American Crystal Sugar Company property tax on its Drayton factory complex included:

Township	$ 38,944.40
Drayton School District 19	146,301.82
State and County	161,851.81
Total	347,098.03.

A partial breakdown of the 1976 American Crystal state and county taxes included:

State	$ 2,168.81
County General	35,267.51
Roads and Bridges	14,501.92
Bookmobiles	2,168.81
Water Management	6,490.26
County Agent	3,576.93
Special Education	6,490.26
Poor Relief	11,896.11
Senior Citizens	2,168.81
Farm to Market Roads	21,639.59.

A breakdown of the 1976 American Crystal taxes for Drayton School District 19 included:

General Fund	$ 90,868.06
Sinking Fund	22,896.23
Building Fund	21,638.04
Special Assessment	2,165.27
Social Security	3,204.01
Teachers' Retirement	5,530.21.

These tax figures were obtained from the office of the Drayton City Auditor through the Pembina County Treasurer's office. They indicate the financial support that American Crystal provided for the local school district, community and area services, and maintenance of roads and bridges used to transport sugarbeets to the factory.

While the Crystal factory was being built the Drayton school experienced serious overcrowding. Children from the families of temporary construction workers residing in Drayton and a few of the permanent factory personnel who had already arrived were the primary source of increased enrollments. Enrollment increased by 136 students in one year to a record of 504 students in the fall of 1964. The school was already short of space before the increase. The school board worked out arrangements with the city council to use part of the Drayton City Hall for classrooms. The Drayton School District also increased its area and assessed valuation the same year. A school survey and steering committee investigated the potential for future school enrollment. A total of 443 students enrolled in the Drayton Public School on the first day of classes in 1965. Enrollment stabilized after the temporary families moved out and the permanent families finished moving into the community, but crowding was still a problem (Drayton Express 1964a; 1965b).

The school board eventually decided to build a new school building which opened in 1968. The school survey report urged the school board to keep close contact with the management at the American Crystal factory as to any planned changes in employment or employment policies that might affect the enrollment of the Drayton school and create additional service and business employees in the community. The increase of migrant workers in the area was not expected to affect school enrollment because most migrant workers arrive after school closes for the summer and leave before school opens in the fall (Earthman 1965a; 1965c).

The tax base of the Drayton School District was seriously depleted in 1979 when the Red River Valley Sugarbeet Growers Association successfully lobbied for American Crystal Sugar Company in the North Dakota legislature against the personal property tax on sugar refineries in the state. The Drayton factory had been operating at a disadvantage since it was the only sugar factory in North Dakota subject to the heavy tax. Most of its factory complex was classified as personal property for tax purposes. The sugar refineries at Hillsboro and Wahpeton, North Dakota were built in the mid-1970s and were exempt from the personal property tax under a law designed to promote industrial development in the state. A bill that exempts all sugar refineries in North Dakota from the personal property tax was signed into law in 1979. This was a financial blow to the Drayton School District which had figured American Crystal's factory tax contribution into the financing of the new school building which was built, at least in part, to accommodate the families of factory personnel (Koehler 1979f).

The current financial difficulties in the 1981-82 school year have also been partially attributed to the loss in tax revenues from American Crystal's sugar refinery at Drayton. The $1.5 million reduction in the taxable valuation of the sugar plant has definitely made the financial situation worse for the Drayton school. Enrollment has gradually declined to 322 students. The teaching staff may have to be reduced. A variety of other steps are being taken to reduce operating costs. Recovery from the 1979 tax legislation and consequent loss of revenues has been moving very slowly for the school district (Schmidt 1981), even though the Board of Directors of American Crystal Sugar Company agreed to make a cash concession of $25,000 to $30,000 payments for eight years to the school district in order to help make up for the loss (Koehler 1979f).

Several Drayton citizens, both factory workers and non-factory townspeople, agreed that the American Crystal factory has had a positive impact on Drayton and has generally improved the town. In November 1964 Drayton's entry in the North Dakota Community Betterment Contest won a $300 prize for the town for its "industrial development effort" with the promotion and construction of the American Crystal beet sugar factory just outside its borders (Drayton Express 1964c). The relationship between the factory and the community and between the factory personnel and townspeople is viewed by those interviewed as basically cooperative. One factory worker who resides in Drayton said that the townspeople were reluctant to accept the newcomers at first, but as time went by the original problems were overcome. People are "mixing good now." Another Drayton resident who does not work at the sugar factory said that an "average good feeling" exists. Some of the people who moved to Drayton to work in the factory complain about life in the small town, and others enjoy participating in the school, church, and community activities. A few people who work at the factory share their managerial and leadership skills by serving on the Drayton Park Board and School Board and as leaders in local business organizations. All of the Crystal factory personnel who live in Drayton have the opportunity to serve on the Drayton City Council. Sugarbeet growers also serve as school board members.

INFRASTRUCTURE

American Crystal's Drayton factory complex was built parallel to the existing railroad line and Interstate Highway 29; both lie to the west and run north and south. The access road to the factory entrance is old Highway 44 which lies parallel to the other roads. The township reshaped and resurfaced the old highway with asphalt as far as the factory entrance during the summer of 1964 while the factory was being built (Drayton Express 1964b). The factory is located between the roads on the west and the river on the east. The access road connects the factory complex with the city of Drayton and its access to Interstate 29. Both Interstate 29 and the access road along with other township and county roads are used to haul sugarbeets by truck to the factory yard for storage and eventual processing. American Crystal contributes to the maintenance of these roads through township, county, and state taxes levied on the Drayton factory.

The Drayton beet sugar factory generates most of its own power. Coal fires the boilers which produce steam, some of which is used directly in the production process and some to power the turbo-generators that generate electrical power for both production and general plant use.

The Drayton factory uses enormous amounts of water during the campaign in order to process sugarbeets. The water is provided by the city of Drayton and comes from the Red River of the North. The factory has been recycling some of its own water for washing beets. It still uses more water each year than the whole city of Drayton. Some of the factory's waste water is now clean enough to return to the river, according to the standards of the Environmental Protection Agency (EPA). The lime sludge waste is disposed of in the large factory lagoons. Before the factory opened, the Red River Dam, a pump house, and a water intake in the river channel that transports water to the factory were constructed in order to provide enough water for factory operations. American Crystal Sugar Company shared the costs of the dam with the city of Drayton (Drayton Express 1964b).

Water is the only service that the city of Drayton provides for the processing plant. On November 1, 1977 the Crystal factory was sent its highest monthly bill in the past 12 months of $5,419.12 for 7,741,600 gallons of water. The lowest monthly bill for the past year was $217.14 for 310,200 gallons of water on August 1, 1977. During the summer of 1977, the EPA raised the water and sewer rates for everyone using city water in order to meet increased maintenance standards and costs. Water and sewer (and garbage) were billed separately. The lime sludge project and the sewer project were also separate. The additional sewer cells were financed by an EPA grant and a special assessment on all property owners in Drayton. The assessment did not include the sugar factory which takes care of the lime sludge in its own lagoons.

The Drayton factory pays a lower rate than the rest of the users of city water. Before the new rates went into affect the factory paid the industrial rate of $20.60 for the first 20,000 gallons of water and a reduced rate of $.50 per 1000 gallons thereafter. The new residential water rate was set at $1.35 per 1,000 gallons. The commercial rate was set at $1.10 per 1,000 gallons, and the industrial rate was finally set at $.70 per 1,000 gallons. American Crystal is the only industry that pays the industrial rate. When the corporate officers of the cooperative discovered not only that the water rates were going to be increased, but also that there no longer would be a decrease in the rate after the first 20,000 gallons, they met with appropriate city officials to register their displeasure and complaints and promote the interests of the Drayton factory and co-op. They even talked of putting in their own water system. In the words of one Drayton citizen they were upset and made "a big to do." In view of the factory's strategic economic position it is not surprising that the factory obtained special dispensation in the form of continued lower rates for the large amounts of water it utilizes. However, there is now no decrease in the rate after a certain amount of water has been used. The new rates set in 1977 do cover the costs of providing water for the town and factory and for the increased maintenance requirements.

ANALYSIS

The American Crystal factory has had an important impact on the town of Drayton. The factory uses local labor but depends on managers who transfer in and out of the area; this tends to sharpen their loyalty to the company more than to the community. Factory supplies are imported, but local sugarbeets are processed into refined sugar for export. Just about all the products that the Drayton factory produces leave the area. Some farmers purchase the beet pulp feed and a few small bags of sugar return for consumer sales in local retail stores. These bags of sugar are not even produced at the Drayton factory as it produces only loose bulk sugar and hundred weight bags. American Crystal has not generated the development of related industry in the area that would use refined sugar to manufacture other products. The Drayton area is too isolated from the financial, political, and industrial centers and transportation is a costly problem. Crystal's Drayton factory remains the only major industry near the community of Drayton. The profits return to the grower-owners of the co-op in the Drayton area and along with the factory payroll and beet payments support local business and services.

Power relations between the Drayton community and the factory exist. The power struggle is most evident regarding the school tax issue and the issue of city water rates. The interests of the co-op and factory took priority over the interests of the school and community in both cases in the persistent effort by grower-owners and management to keep factory production costs down. Some grower-owners of the American Crystal factory and factory managers have conflicting interests, since they rely to some degree upon the community of Drayton and their children attend the Drayton school. This can serve to modify the response of the co-op, e.g., the cash payments to the school district after the personal property tax on sugar refineries was eliminated. The factory managers at Drayton also have the potential and actual power to maintain the conditions in the area that serve the interests of the co-op and local factory by providing political leadership for the Drayton community of which they are citizens.

The community of Drayton has developed a dependent relationship with the American Crystal factory for its present economic status, but not total dependence. Drayton and the surrounding area would definitely suffer economically if the processing plant were closed for some reason, which is unlikely at this time (1982). Such a decision would rest with the grower-owners and management of the co-op, including the Drayton factory managers, and not with the Drayton community. The economic impact of a factory closure at Drayton, the area's single major industry, would be widely felt and create a depressed economy. The population of Drayton would suddenly decline by about 200 people. Some of the managers and skilled workers would be transferred to other factories. Others would have to move with their families to other developing communities or urban centers in search of new jobs. A few factory workers would be able to stay and manage on less income from a previously owned small business or some land that could be cultivated or rented. Unemployment would rise. Some of the farmers who worked for the factory during the campaign and who depended on the extra wage income to keep their farms from going under might face foreclosures or be forced to sell their farms and join the swelling ranks of the full time wage workers of the working class or the unemployed. The sugarbeet industry in the Drayton area would become negligible. Most growers would stop growing beets and plant other crops. A few growers would probably continue to grow beets and ship them to regional processing plants from Drayton. Business and services, in general, in the city of Drayton would decline. Fewer migrant workers in the area would mean less retail trade in June and July. The city water system would have a lighter load and a smaller income. The industrial water rate would become irrelevant. The road through Drayton and other roads in the area would be subject to less wear and tear. It would be difficult to sell homes. The number of vacant homes in the city would increase. The Drayton bank would lose some of its deposit gains from earlier years. The Drayton school would experience a sudden and substantial decrease in student enrollment and continue to struggle financially. Not only would its industrial tax base be gone but its cash payments as well. This process would occur rapidly and cause considerable economic hardship for many people and the community. The town would revert to a less prosperous economic level and a slower pace set by agriculture rather than industry.

However, the American Crystal Sugar Company co-op at Drayton still dominates the horizon and the community--ready for yet another campaign. The sugarbeet industry plays a significant economic role in the Drayton area, but agriculture still dominates the economy. The agricultural economy supports both the Drayton factory and the Drayton community.

CHAPTER VI

SUMMARY AND CONCLUSIONS

SUMMARY

The American Crystal cooperative in the Red River Valley does improve the economic situation of the new grower-owners of the American Crystal Sugar Company within the capitalist system, but it does not change the social relations of the company in any fundamental way by changing the system of ownership and the power structure. The Crystal cooperative accumulates capital and profits and benefits the shareholders who are the owners, just like the former capitalist corporation. Power within the co-op and the means and benefits of production are not equally distributed among all the producers.

American Crystal Sugar Company, an agricultural and industrial producer co-op, has achieved some quantitative social change but very little qualitative social change in the system of production and distribution. Some of the producers, the growers, now share the profits and are assured a market for their sugarbeets since they are the new owners of the processing plants. This is certainly an improvement for the growers, and the only major social change, but it simply involves a shift in the same system of property relations away from distant stockholders, who do not participate in any way in the production of beet sugar, to the growers of the sugarbeets. The co-op resolves one set of contradictory relations--the negotiations between the former owners and their managers and the beet farmers who are the new owners of the sugar factories.

The American Crystal cooperative operates within the same capitalist system as the former company, and its operations are essentially no different than the former New Jersey corporation. It is run like a capitalist industrial corporation by its new capitalist owners. It is a capitalist co-op and generates its own fundamental contradictions. It functions as an integral part of the world capitalist economy. Fundamental and revolutionary changes in the capitalist political economy itself must occur more widely before this producer co-op can function for the full participation and benefit of all the workers. This goal might better be served by a smaller co-op venture. The farmers' vision stopped short of including all of the workers involved in the process of production as members of the cooperative. Only farmers have access to the co-op shares. Only beet growers can be members and share the profits when the prices are right. In order to survive in the capitalist industrial market economy and remain capital intensive the new owners of the American Crystal cooperative must expand and keep the costs of production down. The organization of the cooperative allows one group of producers to exploit the labor of other producers. The migrant workers and factory workers do not receive a fair share of the surplus that they help produce. It is appropriated by the grower-owners of the co-op as profit. The distribution of surplus will only be felt in a very marginal way among the workers in the processing plants or the migrant workers in the beet fields through small increments in their wages or benefits.

Industrial expansion, mechanization, and the profit motive are central to the operations of the Crystal co-op and not viable employment, human nutritional needs, or a more equitable distribution of the surplus. People are in competition with machines in the co-op. The machines produce more capital in a shorter period of time. The controversy surrounding the consumption of refined sugar and human nutritional requirements for whole and fresh foods for optimum physical and mental health are not serious considerations in plans for factory expansion and increased sugar production. Crop expansion depends on the capacity of the factories to process a certain tonnage of beets within a certain length of time while the beets remain frozen during the winter in the outdoor storage piles. The ultimate motivation of growth and progress is the artifically induced demand for refined sugar, the need for capital, and profits.

The growers, who are seeking greater control over their product through the producer co-op in order to increase capital and profits, eventually lose control in the capitalist market system where monopoly capital and other external factors influence prices and the co-op operations.

The American Crystal cooperative contributes to the economy of the RRV of North Dakota and Minnesota by providing over 2000 permanent and seasonal jobs annually. Most of the millions of dollars from the factory payrolls and grower-owner beet payments and profits remain in the valley.

The small town of Drayton, North Dakota and a portion of the surrounding rural population, including a number of farmers who do not grow sugarbeets, have become economically dependent upon the single major industry of American Crystal Sugar Company in order to maintain the present (1982) level of economic health. The Drayton factory holds a dominant position of power in relation to the town of Drayton and the rural area. The fact that the grower-owners are local residents modifies that position somewhat. The factory jobs and payroll and grower-owner beet payments and profits are good for the local economy. If the factory were to close for some reason (which is not likely as of 1982), over 300 people would lose their jobs and suffer economic hardship. The bankruptcy rate would probably increase among struggling farmers, who relied on their wage income in order to avoid foreclosure, and small business owners in the town. The number of full time wage workers among former farmers would increase slightly along with unemployment. Some people would be forced to move in order to seek jobs elsewhere. The economy of Drayton would go downhill along with the population, which would adversely affect the local school system. However, the town of Drayton would undoubtedly survive because of the agricultural diversification that exists in the area, even though the agricultural economy is experiencing a time of crisis with low commodity prices. Drayton has weathered many agricultural crises.

The American Crystal cooperative is dominated, controlled, and run by men. Most farmers are men and only men are on the Board of Directors, in top level management positions, and acting as factory managers and supervisors. Women do play an active role in farm operations, particularly on incorporated farms. The position of women has not been advanced by the American Crystal co-op. Women who work for the co-op are most prominent among migrant workers, the less skilled and unskilled workers in the plants and labs, and routine office help. These are the lower paying, less skilled, helper, and routine manual labor positions in field and factory traditionally open to women. Some women juggle the work of reproduction in the home with the wage work of production in the field or factory. As a rule, Crystal factories neither encourage nor discourage female workers. The increase in the number of women workers is probably due more to the general increase of women in the workforce--a result of economic necessity and perhaps some influence from the women's movement in the past decade. Participation of women in the process of social production in the American Crystal cooperative and in the RRV deserves further study. The issue of women in the labor force related to regional and national development (particularly in the Third World) involves inequalities of both class and sex (Nash 1976; Fernandez Kelly 1981; Gonzalez 1979; Wellesley Editorial Committee 1977).

The capitalist relations of production of the co-op and the larger capitalist economy within which it operates perpetuate class antagonisms and the class struggle among the co-op producers--the growers and the field and factory workers--and increasingly push large farmers into the role of capitalist and larger numbers of small and medium-sized farmers in the RRV into the role of wage laborers. Class divisions are sharpening and widening within the co-op and between large and small farmers in the RRV. The smaller farmers are literally losing ground and becoming alienated from the means of production by being forced into the wage labor force--the working class. The class divisions and the extensive, highly controlled division of labor divide the producer-workers from one another and from the total operations, which makes the existence of a truly cooperative effort difficult.

Farm and factory workers have little control over their own work and no control over the means or process of production, the products they help produce, the surplus, or investment decisions.

The American Crystal cooperative is part of the movement toward capitalist agribusiness relations of production in the RRV. Capitalist agriculture in the RRV is a process of internal development and expansion and will not come primarily from large outside agribusiness corporations as many farmers in North Dakota and Minnesota fear.

CONCLUSIONS

American Crystal Sugar Company, a capitalist co-op in the Red River Valley, is succeeding reasonably well in protecting the interests of its capitalist grower-owners who produce the sugarbeets. The co-op succeeds only at the expense of its other production workers in the beet fields and factories and the smaller farmers in the valley. The social structure of American Crystal works against the interests of these producers and wage workers by concentrating the power, resources, control of labor, capital, and profits in the hands of the capitalist sugarbeet producers--the grower-owners of the cooperative.

The larger capitalist system supports the capitalist cooperative effort with its state and federal institutions, its agencies and programs, and its dominant ideas regarding the benevolent nature of co-ops in general. Nonetheless, the sugarbeet growers and their co-op remain at the most vulnerable end of the industrial food chain within the capitalist system. American Crystal Sugar Company and other agricultural producer co-ops are increasingly assuming the position of greatest economic risk at the level of agricultural production with all its uncertainties, while larger private corporations and multinational corporations purchase the processed sugar and other products in order to manufacture more profitable goods and expand into areas of production involving fewer economic uncertainties and greater opportunities for control of the market and prices and continued survival. "Big capital" exploits "smaller capital"--the American Crystal cooperative--and the capitalist class of grower-owners exploits the workers within the capitalist structure of the co-op. In this way the development of capitalism is served. The difficulties surrounding further expansion for the American Crystal cooperative will undoubtedly lead to increased exploitation of labor and labor tensions.

This study suggests that the increasing number of grower-owned producer co-ops is leading to the emergence of a new class organization within the agricultural sector. The organization of the American Crystal producer co-op benefits the class of larger capitalist farmers who are agricultural producers in the cooperative processing industry. The American Crystal cooperative is a class organization.

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