

THE INFLUENCE OF THE BIG THREE - ADM, CARGILL AND CONAGRA

by

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COOPERATIVES FOR FARMER POWER

Most farm organizations and farmers' movements originated from farmers' beliefs that they were treated unfairly in the marketplace (Taylor, 1953). For over a century, farmers have felt that suppliers of certain inputs needed by farmers, such as bankers and farm equipment manufacturers, received a disproportionate share of the profits from food production. They also believed that the buyers of their products, the processing firms and the transportation firms which moved the farm products from the farm to the consumer --- a group often referred to as "middlemen," earned an unfair share of the consumer's dollar relative to what farmers received for their contribution. When farmers joined in collective action, they were taking action against the economic power the firms had over them.

Today, as we witness prices at below the cost of production on most of the commodities produced in the Midwest, as well as the involuntary exiting of farm families from production agriculture, the proportion of the food dollar that goes to the farmer relative to that which goes to the food firms in the value-added stages is again receiving much attention. Farmers receive about four and one-half percent return on their equity while the more dominant food firms expect to generate at least a twenty percent return to their equity. Farmers and others who understand the food system realize that many of the large food firms have a disproportionate amount of economic power in the marketplace. From the farmers' point of view, the playing field is not level. Much of that economic power comes from what is called "exit power." In a relationship between two or more individuals, groups, or organizations, the party that has the least to lose from ending the relationship has the most power in the relationship. A food firm needs farmers, but not an individual farmer. If an individual farmer has reasonable access to only one buyer or seller, the farmer must continue that economic relationship by accepting almost any contractual terms the food firm offers and hope it assures the survival of the farm. Such a farmer is at a great disadvantage in negotiating with a national or global food firm, because the firm has access to farmers in other places where it can get the same goods or service.

When local farmers used to sell to local butchers, they had relatively equal power. The butchers needed the farmers and the farmers needed the butchers. However, when there were several farmers and only one butcher or when the butchers had access to a supply outside the local area, the relationships between farmers and butchers began to change. The butchers had a definite advantage in negotiating terms of the economic exchange, unless the farmers closed ranks and agreed to negotiate as one.

For many farmers, the unequal power balance between farmers and food firms in the system began when farmers changed from being subsistence farmers to commercial farmers. Most specifically, unequal power evolved when farmers began selling beyond their own local communities to which they could transport their own farm products to the consumer. Commercial farmers in many parts of the country had to negotiate with monopolies from the very start. When the national government provided encouragement and subsidies for the transportation systems into the heartland of the country (i.e. railroads, barge lines and roads), most farmers were thrust into an unequal power relationship, because there was little alternative to offer competition for the one railroad in a community. Soon, other firms saw opportunities such as developing elevators along the transportation systems to move the farm product, especially grain, from the farmers' transportation system to a national transportation system. Some of the transnational corporations of today began in local markets along railroads that gave them a monopoly in certain limited geographic markets. Cargill, that may soon handle from 35 to 50 percent of the grain that is exchanged in the global market, is one such example.

The history of farmer cooperatives began as groups of local farmers organized collectively so they could even the playing field with the middlemen with whom they had to negotiate if they were to have economically viable farms. Writing in 1962, rural sociologist Walter Slocum said, "Almost without exception, farmer cooperatives have been established and are maintained for the principal purpose of enabling the members to compete more successfully with other segments of the economy. They may be regarded as a form of economic democracy" (Slocum, 1962). I would note that today the question is increasingly being raised whether we can have political democracy in the world without economic democracy.

From their beginnings, cooperatives have had to make major adjustments as the larger economy in which they were positioned changed. In many ways, cooperatives tried to duplicate the behavior of the private investment firms. Like those firms, cooperatives usually began as more locally-orientated operations. As the private investment firms saw opportunities to grow, gain economic power, and increase their profits by moving beyond local markets, they expanded into state and regional markets. Cooperatives soon did likewise in an effort to remain competitive (i.e. maintain their economic power and capture the economies of size) with the private investment firms. Eventually many private investment firms expanded into the national arena. Recently, we have witnessed regional cooperatives develop a national alliance to do likewise.

Beginning in the 1970's (some would pinpoint the event as the Russian wheat deal), the food system in this country began to merge with the global food system. The farm economic crisis of the 1980's pushed cooperatives into considering how they fit into the emerging globalized, industrialized food system. Once again some cooperatives tried to be competitive with private investment firms by following their lead and developing operations in other countries of the world. Some of our earlier research showed that cooperatives have some advantages in the global arena, because firms in other countries trusted cooperatives more than most of the private investment firms (Seipel and Heffernan, 1997). But cooperatives also face major challenges when they develop operations in other countries. One such problem is justifying to cooperative members why the capital of members

should be used in other countries to build facilities, i.e. grain facilities, which will probably never handle United States grain.

This global, industrialized system is still evolving as we go into the twenty-first century and these changes bring major challenges to the cooperative system. The movement from local to regional to national organizations was a quantitative change and did indeed create the need for some major organizational changes. However, moving to the global level is a qualitative change. For example, what is the relationships between the cooperatives and the local farmers in the other countries? In the process of searching for some of those opportunities, some cooperatives have triggered major debates in farm country. I am not sure there has ever been a time when strong cooperative members have raised their voices in such a harsh manner in response to some of the new activities their cooperatives have undertaken.

We are here to look at the role cooperatives could play in the next century. To provide context for this, I wish to briefly outline the structure of the globalized, industrialized food system as we close out this century and suggest the trend as we enter the twenty-first century. I will describe how the processes of change in industrialization, especially horizontal and vertical integration and globalization, are interacting to form the new globalized, industrialized food system. I will then note some of the challenges cooperatives must face in this developing context.

CONCENTRATION OF THE MARKETS

For over a decade, some of us at the University of Missouri have been documenting the growing concentration of ownership and control by a few firms in the processing stages of the major farm commodities produced in the Midwest (Heffernan et.al., 1999). Increasingly, the food system began to resemble an hour glass with thousands of farmers producing the farm products which had to pass through a relatively few processing firms before becoming available to the millions of consumers in this and other countries.

The extent of horizontal integration, that is the concentration of ownership and control in the processing stage of selected crop and meat commodities, is shown in Table 1. In the meat sectors, about 80 percent of the beef cattle are slaughtered by the four largest firms which includes Farmland National Beef. Fifty-seven percent of hogs are slaughtered by the four largest firms. Farmland Industries is the fifth largest slaughterer of hogs. About one-half of the broilers (chickens produced for meat) are produced and processed by the four largest firms with Tyson Foods now producing and processing almost one-third of the broilers in the United States. Gold Kist, a cooperative, ranks second in size. In the crop sectors, the four largest firms process from 57 to 76 percent of the corn, wheat, and soybeans in the United States. AG Processors, a cooperative, ranks fourth as a soybean processor and Minnesota Corn Processors ranks third in ethanol production, but Archer Daniels Midland (ADM) owns 32 percent of their shares as non-voting shares.

Although debate continues as to what constitutes an oligopolistic or near monopolistic

market, much of the literature suggests that when four firms control 40 percent or more of any market, these few firms are able to exert influence on the market unlike that in a competitive system. Just as the narrow opening of an hour glass controls the flow of sand from top to bottom, the processing firms are able to exert considerable influence on the quantity, type, and quality of the product, the location of production, as well as the price of the product at the production stage and throughout the entire food system. The only stages remaining in the food system where there is competition between firms of equal economic power is between processing and retailing stages. In the past year, the retail stores have become much more concentrated with the largest ten firms now controlling half of the retail trade.

A quick review of the names of the four largest firms in the processing stage of farm commodities from Table 1 suggests that the same names appear on the list of processors of more than one commodity. Names such as Cargill, ADM, ConAgra, Bunge, and Iowa Beef Processors (IBP) appear more than once. ConAgra ranks in the top four processing firms for beef, pork, sheep, turkeys and seafood which is not listed. Until last year, they were in the top four in broiler production and processing. They have now dropped into fifth place.

A second means to the concentration of the food system is what is referred to as "vertical integration" which is joining two or more stages in the food system. For example, ConAgra is one of the largest distributor of agricultural chemicals and fertilizers in North America (ConAgra's Annual Report). A decade ago they developed their own line of seeds and today they have several joint ventures with DuPont which owns Pioneer. They own and operate 100 elevators (both local and terminal), 1000 barges and 2000 railroad cars. They manufacture animal feed, and produce and process their own broilers. The broilers can be purchased as whole fryers or as further processed foods such as Banquet TV dinners. ConAgra is the second largest processor of food in the United States, behind Philip Morris.

A third means to concentrate the food system is to expand beyond national borders and become part of the globalized, industrialized food system. Slogans like "Supermarket to the world" and "world without borders" indicate the global reach of a relatively small number of food firms. Cargill has operations in 70 countries, but its economic transactions extend to many other countries. In fact, the food systems of the world are becoming so integrated by the transnational corporations (TNCs) that it often makes little sense to speak of the food system of a single country.

With the passage of the North American Free Trade Agreement (NAFTA), beef cattle easily travel back and forth across the borders. IBP, Cargill and ConAgra which slaughter three-fourths of the beef in United States, have feedlots and processing facilities in Canada and about the same market dominance there. It is possible for them to purchase a feeder calf in one country move it across the border as a stocker animal, send it back across the border to their feedlot and back across the border one more time to have it processed. In fact, a firm could purchase the feeder calf in Mexico, feed it in its feedlot in the United States, and slaughter it in Canada. The question then is --- in which country was it produced? This question has taken on great significance given the efforts of many cattle producers and their organizations to legislate "country of origin labeling" for red meat.

The same firms identified above also have production and slaughtering facilities in many countries of the world.

Cooperatives were able to compete at the national level by expanding vertically and horizontally to maintain relatively equal economic power in the market place for their members. Globalization created some new challenges for the cooperatives.

THE EMERGING GLOBAL FOOD SYSTEM

In the past, most of the global grain firms were family-held operations that tried to maintain low visibility and were quite secretive about their transactions (Morgan 1972). These firms operated in one or two stages of the food system and in a very few commodities. Today that system is breaking down as the three processes of horizontal integration, vertical integration and globalization are combining to develop the globalized, industrialized food system. The emerging global food system is characterized by a few dominant firms that have developed a variety of different alliances with other firms in the system. Acquisition is still a common method of combining two or more firms, but mergers, joint ventures, partnerships, contracts, and less formalized relationships and side agreements are also utilized. We have used the concept of *Food system clusters*⁴ to represent these new economic arrangements within which cooperatives now operate.

Diagrams 1, 2, and 3 suggest three food system clusters that appear to be emerging. We speculate that one to three more such clusters might develop in the globalized food system, because some of the major life science, chemical and processing firms are not yet included in the clusters we have identified. Firms like Evertis, which is a new joint venture of existing alliances of former European life science and chemical firms, will clearly be a major firm along with firms like Zeneca, Dow (Mycogen), and DuPont (Pioneer). Other processing firms like Tyson Foods, Smithfield and Farmland Industries, a farmer cooperative, and some of the others listed on Table 1 are not included in the diagramed three food system clusters. In addition, major firms from other countries are involved in the food system. The Japanese firm, Mitsubishi, one of the largest banks in the world, is an example. Nestle and Unilever, with world headquarters are in Europe, along with Philip Morris make up the three largest food processors in the world. We keep watching for other firms from countries other than the United States to formalize relationships with firms either in the clusters we have identified or one which might well emerge. (Note that Novartis is based in Switzerland.)

The introduction of biotechnology and the patent rights the firms have been given is reshaping the hour glass analogy we used in the past. Increasingly we see the constraining of competition in the food system on the input side of agricultural production to be at least as great as the constraints of a few dominant firms at the processing stage. I often have interesting discussions with my agricultural economists colleagues about whether the lack of competition in the system is the result of economic (and political) power acquired by the dominant firms or whether it is the result of *Economies of size*.⁴ In the case of biotechnology, the lack of competition is assured by government-granted patent rights. We feel that each of our food system clusters will include a firm that has access to biotechnology. Those firms, because of exclusive patent rights, will be a dominant

firm in the food system cluster. It will be noted that in Diagram 2, which identifies ConAgra as a dominant firm, we did not include a biotechnology firm in the cluster. Today ConAgra and Dupont have several joint ventures linking biotechnology to the cluster.

As we leave this century, the pattern of a few food system clusters seems quite clear, but it is an evolving system that is not yet set in stone. The trend in the food system for the beginning of the next century appears to be predictable --- at least in the short term -- but we must be very careful about assuming it is a given. For example, the system we have described is very much related to assumptions about the future of biotechnology. A year ago the future looked very bright in this country. Events in the past couple of months have clouded that future.

The numerous alliances in each cluster lead to what is often called a seamless system which describes the emerging, fully-integrated food system from the gene to the supermarket shelf. Within this emerging system there will be no markets and thus no price discovery from gene to shelf. The first time the price of any input in the food system will be public information will be at the supermarket. As this system evolves, even the price of animal feed and its ingredients, such as the corn, will not be known to the public, because like today's broilers, the product will not be sold. The firm owns the chick and sends it to their processing facility from which it emerges, perhaps as a TV dinner. In a food system cluster, the food product is passed along from stage to stage, but the major decision makers do not change and seldom does ownership of, or title to, the product change. Starting with the intellectual property rights that governments give to the biotechnology firms, the food product always remains the property of a firm or cluster of firms with close working relationships. The farmer becomes a grower, providing the labor and often some of the capital, but never having clear title to the product as it moves through the food system and never making the major decisions.

In the long term, I think the system is not sustainable. Organizationally speaking, our system is beginning to look a lot like the organization of the food system in the former Soviet Union with many of the problems inherent in such a large organization, i.e. inflexibility, difficulties with communication and with distribution of rewards. Also, the emerging food system, production, processing and distribution, is built on cheap petroleum. Much argument is generated concerning when the world will exhaust its petroleum supply, but few deny that the costs of petroleum could soon increase dramatically. This would undoubtedly lead to a restructuring of the food system. Another major shock to the globalized, industrialized food system could come from major chaos in the national or global economic system. We can only imagine what might happen to the food system in this country if we would ever experience such economic disorganization as that experienced in the Great Depression.

QUESTIONS AND OPPORTUNITIES

So, what options are available for cooperatives? First, they could call it quits and enter the history books as an interesting form of economic organization that farmers in the United States used

in the twentieth century. I doubt anyone here would accept this solution.

Secondly, farmer cooperatives could join one of the current evolving food system clusters as it appears some cooperatives are already doing. In this scenario, the cooperatives serve as the organizer of farmers for the dominant firms in the clusters. Instead of the dominant firms having to establish working relationships with each farmer (usually in the form of a contract), the firm can develop the conditions of the economic transaction with the cooperative that directly interacts with the farmer. This will provide only limited assistance to the farmer, because the dominant firm will have groups of farmers in this and other competing countries with whom they can develop a similar economic relationship. The concept of exit power suggests farmer cooperatives will still be in a weak power position. Only if producers in all countries are committed members of cooperatives and all cooperatives cooperate will producers be able to collectively bargain with firms in other stages of the food system from a position of relatively equal power. If this type of collective action evolved, then we would include the farmers' cooperatives as a dominant firm in the food system cluster. Lacking a few such dominant organizations that can influence inventories of commodities and the supply that goes on the market, like the dominant firms are able to do, the cooperatives will not be major actors in the food system clusters and will not be able to greatly influence the proportion of return to equity that goes to the producer stage of the food system. (Most of the firms in the nonproduction stages of the food system expect a return to equity of at least 20 percent, but farmers are fortunate to exceed 4.5 percent return.)

A third alternative is to ask whether the cooperatives can establish their own food system cluster? Looking up and down the food system it is clear that there are cooperatives involved in most of the stages. The major problem right now is that cooperatives do not have access to biotechnology; neither did Cargill when it sold its extensive global seed operation and formed a joint venture with Monsanto. Several cooperatives already have a joint venture with Novartis and there are still a couple major biotechnology firms that are not committed to a food system cluster. In addition, there is the question of whether biotechnology is going to be accepted by the world. Early in 1999, it appeared that biotechnology was fully embraced in United States and gaining acceptance in other countries. That future of biotechnology in the food system is now in question.

If cooperatives develop their own food system cluster, the old questions will be raised again. Are cooperatives different from private investment firms and how would this alternative differ from alternative two? The food system I have described is using as a model the organizational structure of firms in other economic sectors of the economy developed during the industrial era. Futurologists such as Alvin Toffler, Peter Drucker and others argue that a very different organizational structure is needed for the information era. Could cooperatives be in position to design the food system organization of the future?

As I watch cooperatives increase their market power through mergers and other forms of alliances, I fear that more of the decision-making will move further from the federated locals to the upper levels of the organizational hierarchy. This is the opposite of the structure predicted to be successful in the future. The cooperative alliance that is forming across the country still has within

its system the decentralized organizational structure of the future. The old federated system with each local having their own local board of directors is the structure from which many of the cooperatives grew and this decentralized structure is very close to what is predicted for the future. Could the current cooperative system break from the centralized pattern of the industrial era and try new organizational arrangements? It is a bit ironic that the food system is continuing toward increased concentration of control as other economic sectors begin to explore other forms of organization.

Could local cooperatives develop closer relationships between farmers and consumers in this country and around the world? This would not be a mass food distribution system. This would be a much more personalized food system that would try to more closely link the farmer and the consumer and provide the food products the consumer prefers. Surely with container shipping and lots of local cooperative facilities, cooperatives have a real opportunity to develop the organizational structure for the food system of the Information Age.

There are about two million farms in United States. One-half of them have sales of less than \$10,000. Another one-fourth of the farms are relatively small by today standards. In fact, many argue there are only about 300,00 (or maybe 500,000) commercial farms. Thus, over three-fourths of the farms will not be included in the food system we have described. Increasingly, I hear it suggested that the major food firms need only about 30,000 farms producing for the globalized system. Many of the smaller farms will go out of existence, but many will not, even though they are shut out of the global markets. Could some of the smaller cooperative locals serve the needs of these farmers while still being under the umbrella of the larger cooperative structure? With the renewed interest in alternative food systems, many farm families find they have increased net farm incomes selling through alternative food systems than selling through the global system. Will the conventional cooperatives be response to the needs of these farmers or must these farm families establish new cooperatives to meet their needs while the current cooperatives compete with the transnational firms to serve the needs of 30,000 farms? A more decentralized system could allow such flexibility.

The entry point for the cooperative food system cluster is to think in terms of becoming a specialist in niche marketing in the food system. We are told that the consumers of the future will expect a more diverse selection. The dominant firms I have described will have difficulty meeting this challenge. The industrialized model said that the product and the process needed to be standardized. The Information Age model says that the product and process must be diversified. Might this be the expanding opportunity for cooperatives in the new century?

The replacing of family businesses, such as family-operated farms, grocery stores and elevators by corporations has a major economic impact on local rural communities. The profit the family receives is distributed among the three factors of production --- namely, labor, management and capital. Because the family most often lives in the community if they provide a significant portion of the labor, much if not most of the return to labor, management and capital is spent in the local community. When a corporation gains ownership and control of production operations in rural

communities, they see labor as another expense to be bought as cheaply as possible, either as wage labor or through piece rate by using production contracts. Now the profit, return to management and capital, is taken from the rural community and sent to the firm's headquarters, perhaps to be invested in other parts of the world. Cooperatives are often seen as an alternative to the corporate model because the cooperative's net income is returned to the farm families living in rural communities.

In practice many cooperatives retain about 75 to 80 percent of their capital to maintain the cooperative's economic viability or finance growth. Research indicates that equity redemption does not occur for an average of 16 years (Rathbone and Wissman, 1993). Sometimes the family's equity redemption does not occur until the farm couple's estate is settled. By then, most (maybe all) of the heirs no longer live in that community. So the equity redemption does not go to the rural community where it was originally created. If the farmer and/or spouse recipient of the fund is still living in the rural area, that person(s) may not necessarily use the funds for the immediate needs of the family or the farming operation. The funds often arrive at a stage in the couple's life when they are investing in non-farm investments. Unless the funds are deliberately invested in the community, they will probably be invested in ways that contribute little to the economic well-being of the local community where they were generated.

Would it be possible to interest the recipients in reinvesting their equity redemption funds for another decade in a community economic opportunity fund at minimum interest rates? The funds could be managed by the local cooperative board to be used for the advancement of the local community. The equity redemption funds might be used as a capital pool from which financing could be borrowed to create new economic enterprises and opportunities in the community. Because farming is a major economic enterprise and because the local cooperative would be responsible for distributing the funds, we could expect opportunities related to agriculture to receive a high priority. My guess is that many heirs would be interested in helping the community in which they grew up and retired persons might like to be apart of an activity which would enhance their community.

The globalizing, industrializing food system challenges farmer cooperatives to revisit their reasons for being. If they choose to form alliances with the transnational corporations in existing food system clusters, the special role they have played in rural communities in the past will decline. Choosing from other alternatives, however, could position farmer cooperatives to continue their historic importance in the lives of farm families and rural communities well into the twenty-first century.

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