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Foreword

Definitional and Classification Issues in Analyzing Cooperative Organizational Forms

Michael L. Cook and Leland Tong

Torgerson, Reynolds and Gray (this volume) and J. Fulton (this volume) suggest the path for the future of cooperatives is complex and indeterminate. They review the multitude of complicating factors of industrialization, globalization and dynamic structural change and conclude that member and public education efforts are critical if producers are to control their own destinies through cooperative ownership and control.

Sporleder (this volume) is more conclusive in his vision when he posits that for producers to augment economic rents in the increasingly complex and global agrifood chain they must not only vertically integrate, but pursue the positioning strategy of differentiation. Sexton (this volume) and Rogers (this volume) expand on Sporleder's premise by arguing that pursuing vertical integration, especially if combined with the positioning strategy of differentiation, is extremely capital intensive. Sexton's conclusion is that cooperatives will have limited potential in this increasingly capital-intensive agrifood system unless incentives for risk capital infusion are improved and the horizon problem solved.

The general purpose of this paper is to complement these papers by introducing preliminary empirical observations about how producers might be reacting to the challenges laid out by the aforementioned authors. More specifically, our objectives are 1) to briefly present an overview of the rise of what appears to be a new form of agricultural producer collective action; 2) to more specifically define this emerging organizational form and briefly address the question of whether this innovation corrects for the "vaguely defined property rights" dilemmas existent in classical forms of agricultural cooperatives; and 3) to challenge the academic community to explore more meaningful approaches to classifying and defining alternative forms of collective action.

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Overview: The Rise of a New Form of Agricultural Collective Action

Johnson, and Egerstrom, describe an emergence of a "new" kind of agricultural cooperative in the Upper Midwest. They date the beginning of this organizational innovation as the post 1980s agricultural crisis. Harris et al., Stefanson et al., and Cook (1993) have attempted to place this organizational form into a taxonomic and/or theoretical framework. Lawless et al. (p. 3) and the aforementioned describe these new organizations as "new generation cooperatives (NGC)." Lawless et al. go on to state:

> An NGC differs from most traditional marketing cooperatives in the following ways: It is market-driven, in that market demand for the processed end product determines the appropriate scale of the business—and that, in turn limits the size of the membership, so that these become "closed" cooperatives. Furthermore, tradable membership shares not only allocate rights to deliver units of the farms' raw products, but these shares also spread "up-front" capitalization responsibilities equitably among members.

What do we know about this market-driven, defined-membership, member-financed, capital-intensive, value-added new form of agricultural producer collective action? Very little. Except for the few aforementioned conceptual papers, most of our information comes from the trade press or industry leaders such as Lee Estenson, a senior officer with the St. Paul Bank for Cooperatives:

> According to Mr. Estenson, the roots of the fever are in the Upper Midwest and encompass all types of commodities, including soybeans, durum, spring wheat, sunflower seeds, alfalfa, hogs, beef, fish, and edible beans as well as corn and sugar beets. In Minnesota and the Dakotas the 1990s have generated in excess of 50 projects, most of them cooperatively structured, creating more than $2 billion in capacity to convert farm commodities into food and non-food products. "This co-op fever is spreading, " he said. "I've been communicating with farmers and businesses in approximately 20 states that have witnessed this co-op fever and want to transfer it to their commodities."...Mr. Estenson noted that the new cooperatives were different from those that came into being from the 1920's into the 1940's, when the main thrust was defensive—"to keep the big boys honest." The new cooperatives require closed membership. Once the stock offering is over, someone new cannot come in without purchasing a member's stock, he said. The new cooperative,

> unlike older entities, requires significant up-front investment and a pooling arrangement in which members share equitably on a per-unit basis in the revenue stream that has been created. Farmers are required to deliver according to plan regardless of the open market. It is an offensive strategy, Mr. Estenson emphasized. "They are not simply trying to keep input prices and basic commodities fair. They are trying to share in more of the food system revenue stream..." (*Milling and Banking News*, pp. 16-18.).

Recently, we concluded an in-depth survey of 55 "new generation" cooperatives referred to in the Estenson quote. In forthcoming publications we analyze the dynamic and complex process of evolution of this form of collective action. We also discuss the specific stages and simultaneous and group decision making through which the organizers of this new institution progress. However, for this paper, we next concentrate on a more conceptual set of issues.

A New Form of Collective Action?

This section of the paper presents selected preliminary results of a study initiated to develop a better understanding of the causes of formation and characteristics of the new generation cooperative. Our study argues that classic cooperatives confront operational and strategic constraints associated with vaguely defined property rights. These vaguely defined property rights were institutionalized into cooperative practice by adaptation of cooperative principles (especially democratic control, limited return on equity capital, and service at cost), by early 20th century state incorporation laws, and by federal statutes such as Capper-Volstead.

Property rights are defined as a socially and legally enforced right to select uses of an economic good. Practically speaking, property rights give owners claim to the residual returns of the firm and a part in the decision process. Legal constraints regarding the asset's use or the assignment of rights to others through contracts prevent the owner from exercising all the rights associated with ownership of an asset.

Fundamental contracts within an organization specify 1) the nature of the residual claims and 2) the allocation of the steps of the decision process among agents (Fama and Jensen). Since "contracting man" is limited in foresight, knowledge, skill and time and displays opportunistic tendencies, contracts are incomplete (Williamson). It becomes impossible to construct a contract ex ante that accounts for every possible future event, determines how each party will respond and divides any net income resulting from the event. The costs involved to monitor and enforce these contracts become considerable as well.

Determining who receives the residual property rights, which are the rights not specified in a contract, becomes critical. The transaction cost school of economics argues that clearly defined, enforceable and tradeable property rights produce a socially efficient outcome. In fact, "If no one clearly owns a valuable asset, then no one has an incentive to guard its value properly. If property rights are not tradeable, then there is little hope that assets will end up with those people who can make the best use of them and so value them most. If property rights are not secure, then owners will not invest great amounts in assets that they may lose with no compensation, or they may sink valuable resources into protecting their claims" (Milgrom and Roberts, p. 294). Vaguely defined property rights create losses in efficiency because the decision maker no longer bears the full impact of his or her choices.

Numerous scholars of cooperative theory (Peterson, H.C.; Centner; Cook 1995; Vitaliano; Hendrikse and Veerman) have observed and identified organizational limitations in traditional cooperatives. These limitations, they suggest, are the result of vaguely defined property rights.

According to these authors, the four major vaguely defined property rights problems include: the free-rider problem, the portfolio problem, the horizon problem, and the control problem.

How might each of these problems be overcome or corrected? Jensen and Meckling argue that "specification of individual rights determines how costs and rewards will be allocated among the participants in any organization" (pp. 307-308). Hence, the free-rider and horizon problems require a solution that aligns members' investments with their level of patronage. These investments must also reflect changes in the value of the cooperative's current and future cash flows. An answer to the portfolio problems, on the other hand, must align members' investment with their preferred level of risk and reward. To correct the control problem, a vehicle must be designed that reduces the agency problem and permits the board of directors to oversee management's performance without costly monitoring and enforcement measures. The bottom line is: solutions to these problems necessitate a clearer specification of each member's property rights.

In our theoretical analysis we hypothesize that a cooperative business structure that reduces the efficiency-robbing effects of vaguely defined property rights would possess some of the following characteristics:

1. Transferable equity shares.
2. Appreciable equity shares.
3. Defined membership.
4. Legally binding delivery contract or a uniform grower agreement.
5. Minimum up front equity investment requirement.

These organizational characteristics provide the skeleton of a new type of agricultural cooperative. Cooperatives possessing these attributes meet the aforementioned definition of a New Generation Cooperative. Thus, a New Generation Cooperative is a defined membership organization requiring an up front equity investment in equity shares possessing both tradeable and appreciable properties. Investment in the cooperative is based on a member's anticipated level of patronage and all members adhere to a legally binding uniform marketing agreement.

With this type of cooperative, a renewed interest in collective action is taking place in the Upper Midwest. A renaissance of cooperative activity that is borne out of producers' desire to increase their wealth and the inspiration provided by successful value-added cooperative ventures in the area (Torgerson et al., this volume). Perhaps the objective of increasing the net worth of the farmers through extracting rents at other levels of the food chain necessitates a more clearly defined set of property rights. In addition, the property rights constraints of traditional cooperatives appear to make them less attractive to producers while the New Generation Cooperative appears to be a more favorable collective action alternative.

The interviews in our study provided a wealth of information regarding the overall structure of the cooperatives in the study and their ability to address issues associated with vaguely defined property rights. A few of the preliminary results from our study appear in Table 1.

1. More than 80 percent of cooperative formations in the Upper Midwest since 1990 have adopted unique cooperative organizational characteristics.
2. Why? According to the results of this survey, to solve for a set of problems caused by vaguely defined property rights.
3. A coordinated set of simple organizational policies appears to solve for vaguely defined property rights: transferable and appreciable equity shares, defined membership, uniform grower agreements, and a minimum upfront equity investment requirement.

Table 1. Descriptive Characteristics of Agricultural Cooperatives Incorporated in North Dakota and Minnesota Between 1988 and 1996

Characteristics	Percentage
Incorporated as stock cooperative	96%
Control: one person-one vote	100%
Defined membership	94%
Upfront risk capital	94%
Delivery rights: required	94%
Delivery rights: transferable	94%
Delivery rights: appreciable	94%
Member agreements/contracts mandatory and enforceable	96%

4. Ninety-six percent of the cooperatives reduce the free-rider problem by linking member investment to use.
5. Ninety-four percent give members the ability to adjust their asset portfolio to meet their risk preferences by allowing the transfer of equity shares.
6. In addition, 93.6 percent of the cooperatives allow producers to realize changes in the cooperative's value when they sell their equity shares that are allowed to appreciate.
7. Defined membership policies are popular among newly organized agricultural cooperatives with 98 percent of the survey cooperatives implementing a defined membership structure.
8. Direct investment through the sale of nonvoting equity stock was overwhelmingly used to raise producer equity in these cooperatives. Nearly 98.7 percent of equity raised from producers took this form.

The Need for an Expanded Cooperative Taxonomy?

The preliminary results of this study suggest that the traditional classifications of cooperatives (LeVay; Murray; Cropp and Ingalsbe) need to be expanded into perhaps a more general typology. Typologies generally expand generic classifications to a more multidimensional and conceptual degree. Attempts at developing a broader more conceptual cooperative typology are in the embryo stage (Cook, 1993, 1995). In this study we call these six types of cooperatives "classic cooperatives."

Rural Utilities

The rural electric and telephone cooperatives were formed in 1936 and 1949 to provide a missing service due to the high per unit cost of serving a low density customer base.

Nourse I Cooperatives (Local Associations)

Local associations are economic units operating in a geographical space in which achieving scale economies in commodity assembly (usually grain or oilseeds) and input retailing might dictate the presence of a spatial monopolist or monopsonist. Founded to provide a missing service or to avoid a monopoly power or to reduce the risk or achieve economies of scale, they epitomize the Nourse philosophy of cooperation—that of a "competitive yardstick" with the objective to keep investor-oriented firms competitive.

Nourse II Cooperatives (Multi-functional Regional Cooperatives)

Competitive yardstick-driven regional cooperatives usually perform a combination of input procurement, service provision and/or product marketing functions. Many integrate forward or backward beyond the first handler or wholesaling levels. They might be organizationally structured as federated, centralized or a combination. They differ from Nourse I local cooperatives in that there is little probability of being a spatial monopolist or monopsonist in their geographic market. Nourse-driven regional cooperatives were originally founded to achieve scale economies or to provide missing services.

Sapiro I Cooperatives (Bargaining Cooperatives)

Bargaining cooperatives address market failures through horizontal integration. Producers organized these Sapiro-inspired associations in an attempt to affect the terms of trade in favor of members when negotiating with first handlers. The functions of bargaining cooperatives can be described as twofold: 1) to enhance margins and 2) to guarantee a market. These types of associations are found most often in perishable commodities in which temporal asset specificity creates a situation of potential post-contractual opportunism.

Sapiro II Cooperatives (Marketing Cooperatives)

Marketing cooperatives are a form of producer vertical integration pursuing a strategy of circumventing and competing with proprietary handlers. They usually can be categorized in one of two ways, single or multiple commodity. The objectives are similar—to bypass the investor-owned firm, enhance prices and, in general, pursue the Sapiro goals of increasing margin and avoiding market power.

Given the preliminary results of this study it appears that the New Generation Cooperative might become known as a Sapiro III Cooperative because of its marketing, value-added, offensive characteristics, but deserves separate categorization because of its unique approach to addressing the vaguely defined property rights.

Typologies are important because of the role they play in member, director and employee education; applied research; international collective action communication; and legislative/trade association positioning. The final objective of this brief paper is to encourage the academic profession to give thought to developing more conceptually powerful typologies, classifications and taxonomies.

Notes

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