# SOUTHERN JOURNAL OF AGRICULTURAL ECONOMICS

DECEMBER, 1973

# ROLE OF MARKETING AND PROCUREMENT SYSTEMS IN THE CONTROL OF AGRICULTURE\*

# V. James Rhodes

Issues ancient and modern in the structural organization of agriculture are newly being legitimized. As one evidence, hundreds of extension meetings this winter will utilize a new set of leaflets entitled, "Who Will Control Agriculture?" [8]. In popular articles, speeches, and research reports various aspects of the question are being examined. Even Secretary of Agriculture Earl Butz, himself an agricultural economist, has proclaimed the relevance of the subject [3], not to mention his chief economist, Don Paarlberg, who has addressed the same subject frequently [19].

Among these several sources the focus varies: optimal size of farm or feedlot [1, 13, 14, 20]; tax issues [5, 10]; the comparative advantage of the corporate and other forms of organization [6, 7, 21]; economies of vertical coordination [17, 26]; the nature of contractual integration [9, 12, 17]; and bargaining power for farmers and farm workers [2, 23].

This paper is confined to certain aspects of the role played by the agricultural marketing-procurement systems. Putting it in conceptual context takes us back to the elements of classical and neo-classical economics. Both are based on the blessings of specialization of process and the burden of its coordination, and of distribution of proceeds. But the early scholars were oriented to horizontal size and scale; their thinking fit the division of labor of the conveyor belt. Only later was sequential specialization and its greater problems recognized.

The economics of agriculture is notably

sequential, and its practitioners wrestle with transmission of value and directional control between consumer and farmer. It is now generally recognized that control is somewhat diffused, as decision-making in agriculture is divided among, at the least, consumers, agribusiness, farmers, and government. Consumers and the consumption function still are a favorite for analysis, while a whole school has arisen dedicated to examining the role of government. This paper will touch those two lightly, and concentrate instead on the control relationships between agribusiness and farmers – an area too often neglected.

Certainly, the macro influence of consumers in any market economy must be acknowledged. Whether one conceives of consumer sovereignty as nearly supreme or severely limited, it is evident that consumer influence is exerted mainly at the macro level, guiding whether more beef or pork is produced and consumed, or natural orange juice versus synthesized orange drink. Such consumer influence is important to farming situations, and sudden shifts in demand can be profitable or costly to farmers.

Even die-hard free enterprisers grant that U.S. agriculture is not going to be free from government influence so long as "reasonable" food prices, "reasonable" farm incomes, larger agricultural exports, and a reasonably pollution-free rural environment are important national goals. This influence too is directed more at the macro of production and price goals rather than dominating the detailed micro of individual farm decisions.

Although farmers may chafe under some

V. James Rhodes is professor of agricultural economics at the University of Missouri. Helpful comments of Harold Breimyer and Randall Torgerson are gratefully acknowledged. Stimulation by Bill Black of Texas A&M has also been helpful. \*Missouri Agricultural Experiment Station Journal Series No. 6840.

decisions by consumers and government and definitely would prefer to have more influence over, or freedom from them, in the face of these two groups they still clearly possess much freedom of decision-making in their own farming operations.

# FARMER-AGRIBUSINESS DIVISION OF CONTROL

Certain issues need to be sorted. An explanation of the role of the marketing system in the control of agriculture looks in two directions; (1) at transfer of control from farmers to the marketing system, and (2) at integration forward into agribusiness by farmers in an attempt to solidify and enhance their control. Some of the literature in business marketing may be helpful in perceiving the nature and implications of this two-way struggle for channel control. Discussion of channel control by cooperatives leads into questions about bargaining and the achieving of horizontal versus vertical market control. Here it is important to distinguish between our issue of who shall control decision making at farm level and that other hoary control issue: how shall aggregate farm production be controlled. It should be apparent that the individual control issue would persist even it the possibilities of aggregate over-and-under-production troubled us no longer.

Our discussion focuses on the division of control and terms of relationship between farmers and agribusiness. Significant transfers to decision-making from farmers to agribusiness have been publicized in recent years in certain instances such as contractual production of broilers, the entry of some large corporations into crop or livestock farming, and the very rapid growth of large corporate cattle feedlots.

Outmoded concepts of the nature of the marketing process may lead to misguided criticisms of farmers' resistance to losses of market power. Such farmers are sometimes pictured as lacking consumer or market orientation and the blame is placed on their holding an old fashioned view of farming "as a way of life" [15]. Such criticisms seem either to ignore the struggle for channel control or to assume that farmers should submit meekly to agribusiness control. It should be clear that being "market oriented" does not require that farmers transfer channel control to agribusiness corporations.

Both contractual integration and corporate farming may be perceived within the context of a developing struggle as to whether farmers shall have their own marketing system or whether they shall become raw material producers delivering to an agribusiness procurement system. It may be helpful to turn to the firm marketing concepts of our colleagues in the business schools.

A typical business school definition of marketing is that of Professor E. J. McCarthy: "Marketing is the performance of business activities which direct the flow of goods and services from producer to consumer or user in order to satisfy customers and accomplish the company's objectives" [16]. Do farmers have marketing systems which direct the flow of their goods and services and accomplish *their* (farmers') objectives? For most farm commodities, farmers do not have a marketing system. Instead they face processors and handlers who have a procurement system.

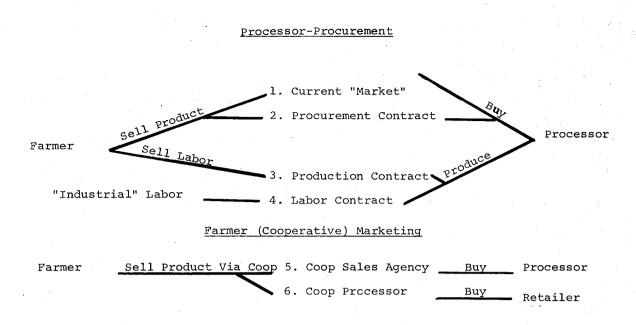
This distinction between farmers' marketing and processors' procurement is more than a play on words. It reflects an important aspect of the complex issue of control in agriculture. While a dispersed open market model of farming has had much appeal to farmers and to agricultural economists, it does not provide a marketing system *for farmers*.

## Agribusiness Procurement Systems

The distinction between agribusiness procurement and farmers' marketing is represented in Figure 1. The diagram also shows the variety of farmer-agribusiness relationships that can exist within each orientation. It is proper to look at the top section beginning from the right as the processor initiates procurement. In some commodities processors today face a "produce or buy" decision. Poultry, cattle, and some processing vegetables are examples. Within the "buy" route, there are two alternatives - to buy within a market context as the commoditiy is currently marketed, or to contract in advance for future delivery. The contractual delivery contract, shown in Figure 1 as a procurement contract, is more popularly known as a marketing contract or a future delivery contract. While there are several variations, it assures the processor of the receipt of a certain definite quantity at a specified time

The "produce" alternatives include either vertical integration via a production contract with farmers, or production in one's own facilities with hired labor. Perhaps the best known example of the production contract is the feed company integrator which pays the broiler grower a piece-wage to raise the integrator's birds. But some firms produce broilers in their own houses, using hired labor; this is the "labor contract" of Figure 1.

These first four options may be regarded as progressive steps from traditional agricultural markets to an industrialized agriculture – or to a total



# Figure 1, ALTERNATIVE PRODUCTION-MARKETING-PROCUREMENT OPTIONS

agribusiness system. In keeping with that industrialization, alternative No. 4 involves not farmers, but "industrial" laborers.

Although all four of these alternatives might operate simultaneously in a commodity area, one or two would be expected to be predominant in most cases.

The most important implication of the top section of Figure 1 is that the independent farmer is *no longer necessary*. He faces a procurement system which may be able to get along without him. Even though he may continue to produce and sell a product, he faces a procurement system that is increasingly controlled by others, that may be capable of shifting to its own internal production, and that operates by rules and objectives that may differ sharply from his own.

#### **Cooperative Marketing Systems**

The lower section of Figure 1 relates to an all-embracing cooperative marketing system that would in fact make farmers their own marketers, and not merely reactors to agribusiness procurement. But first, let it be clear that options 5 and 6 are not the familiar cooperatives.

If marketing cooperatives are only a minor part of the marketing of a commodity, they are included as part of options 1 and 2. A cooperative could even be fitted into option 3 of production contracts -- there are real-life examples in broilers.

A mandatory cooperative system, as described in the Who Will Control? series, puts the marketing system for a commodity in the hands of huge, farmer-controlled (presumably) cooperatives. This cooperative system represents an additional and different avenue – it is a farmer marketing system, not a processor procurement system.

In this system the farmer may sell either through a cooperative sales agency (option 5) or to a cooperative processor (option 6). The successes in building such encompassing cooperative systems by strictly voluntary means have been sufficiently spotty that questions may be raised as to the need for mandatory membership or additional incentives to voluntary participation if such cooperative systems are to be achieved.

# EFFICIENCY, SECURITY, AND CHANNEL CONTROL

Only in recent years has attention been directed to the economics of alternative systems of vertical coordination. More specifically, what are the attractions of options 3 and 4 in Figure 1, over 1 and 2? To date the preponderance of emphasis has been placed on the efficiencies of a system that assures the farmer of a specific market and the agribusiness processor of specific quantities and qualities of products [4, 15, 17]. Research has occasionally documented in poultry, or in specialty crops, that there are potential efficiencies in building a vertical system that is of the same optimal size at all levels so that the hatchery, broiler houses, feed mill and processing plant are all operating at optimal capacity [11].

The Who Will Control? series poses these questions to farmers: (1) are options 3 and 4 more or less attractive to them than options 1 and 2? (2) what about options 5 and 6, and 5 versus 6? In a more limited sense the relative attractiveness of these options to agribusiness, consumers and other groups is examined. Such an examination carries us beyond the usual efficiency considerations; it focuses upon the general motivations of the various actors on the economic scene.

It should enlarge our perspective further to consider the emphasis on the battle for channel control made by some of our colleagues in business marketing [25].

Non-integrated channels have a problem: what is optimal for one firm in the channel is not optimal for others. True, firms have many common interests and there is a premium upon their cooperation as long as they all co-exist. Nevertheless, any one of the firms in the market channel would do some things differently if it were in charge. The manufacturer may seek extensive distribution of his product to many retailers, whereas a retailer loses interest as his expected sales decline with more competitors. The retailer will seldom give a particular product the merchandising push which its maker considers justified. Even such a mundane detail as the size of the pallet on which merchandise is shipped may be a source of processor-wholesaler disagreement. These problems illustrate motivations for channel participants to seek channel control, which may or may not include attempts to integrate vertically.

In principle, control of the marketing-procurement channel may be exercised by firms at any point - i.e., by producers, manufacturers, wholesalers or retailers. For example, it is generally accepted that the breakfast cereal manufacturers dominate the marketing of their product. By virtue of their economic strength, their product image, and their massive advertising, cereals are sold on their terms with no effective competition from retail brands [18]. On the other hand, much fresh produce flows through a procurement system dominated by large retailers. Milk represents a third situation. Fluid milk distribution was once largely controlled by large handlers. In recent years, they have lost channel control to both retailers and farmer cooperatives. Some farmers are intrigued by the success of the dairy super-coops in achieving a degree of channel control, and they are asking if the lessons can be applied in other commodities.

## Market Security

The seeking of channel control relates also to the problem of market insecurity, which looms in the background of all. While channel control is ordinarily far from a complete solution to that problem, it has strong appeal. Many manufacturers and processors seek ways in which they can extend their influence and control all the way to the consumer. An example is General Motors' system of dealerships. Through control all the way to retail, GM is able to integrate auto design, production, promotion, and retail sales into an integrated system with the prime objective of selling the consumer on GM cars. Contrast the dairy farmer who watches helplessly while a processor develops a non-dairy creamer or a filled milk product that cuts off his market. Farmers are becoming more aware that they possess few consumer franchises that their markets can rise or fall according to decisions made unilaterally by firms that stand between them and the consumers.

Of course, this problem of insecure markets is not unique to farmers. Such a misfortune has distressed many a manufacturer who made excellent products, but lost his markets to another who obtained a better consumer franchise and better market control. The lesson to that manufacturer was to get as much control as he could all the way to the consumer. However, in a day of powerful retailers like Safeway, Sears, and K-Mart, which are developing their own brands and their own consumer followings, it is difficult for even strong manufacturers to break through to consumers and gain a firm consumer franchise. Thus farmers must realize that market insecurity can be reduced but can hardly be eliminated.

### A FARMER COOPERATIVE MARKETING SYSTEM

The cooperative model in the extension leaflets cloaks cooperatives with power to manage supplies. It is presumed that this system is able to reduce market price risks for the farmer and to provide some of that market security which is becoming more and more deficient in those open markets where pricemaking forces now work so poorly that farmers no longer have much confidence in them [22].

While the cooperative model assures considerable horizontal market power for cooperatives, they may or may not get much channel control. In some commodities, it is assumed that there would be forward integration into processing and distribution of the type practiced by cooperatives such as Land O' Lakes. In other commodities, a much lesser degree of forward integration is assumed. The author realizes that it may continue to be difficult to achieve much effective product differentiation with many food products. Therefore, in such cases channel control would often be shared with strong retail chains rather than being exercised solely by those super-coops.

Some possible theoretical objections to farmer-controlled marketing systems need to be entertained. Most economists are familiar with the theoretical demonstrations that horizontal power at one level of the market channel can generally extract as much gains from atomistic firms at other levels as if the powerful level were vertically integrated forward or backward [24]. The correlative argument is that vertical integration, when it occurs in a monopoly-atomistic market, must be motivated by prospects of efficiencies of coordination. Another part of the model infers that even the potential facing of power on one side of the market by power on the other side constitutes a motivation for vertical integration or other exercise of channel control to circumvent a bilateral power confrontation.

While convincing in a bilateral monopoly or a monopoly-atomism framework, these theoretical objections are seldom applicable in the melange of market structures in agriculture. In real-world agricultural markets, farmers' building of channel control may increase modestly their gains. Vertical integration is, in fact, often sought for reasons of power and for reasons other than prospective efficiencies. On the other hand, where power exists at two market levels, exchange often persists (example: fluid milk markets) rather than being superseded by vertical integration.

This paper has argued for a broad perspective in which both farmers and agribusiness are perceived to be motivated toward developing their own measures of channel control to serve their particular aims. Attempts to build a farmer cooperative system are as natural a consequence as the growing agribusiness procurement system. It is not a criticism of the extension leaflets to point out many important questions about the cooperative system which remain: (1) in which commodity areas can farmer cooperatives achieve significant measures of channel control? (2) can farmers retain effective control of such cooperatives so that they do effectively implement the goals of farmers and aid their retention of control of agriculture? (3) would it be better strategy in some commodity areas for farmers to strive merely for bargaining cooperatives or other horizontal control rather than striving to extend control forward? (4) what approaches are available for obtaining farmers' support for these all-inclusive marketing cooperatives? (5) what types of reconciliation are possible and feasible between agribusiness and farmer systems of control? (6) are the interests of various other societal groups involved significantly in these questions and how can conflicting interests be resolved?

#### SUMMARY

The basic situation remains: the contest for control between farmers and agribusiness now results in a variety of relationships. In most, processors dominate a procurement system. For farmers to gain more control they would have to join in effective cooperation. The extent to which cooperatives would pursue primarily horizontal power or would gain and exercise additional channel control cannot be generalized, if only for the reason that economists have not taken a good hard look at the questions.

### REFERENCES

- [1] Ball, A. Gordon and Earl O. Heady, eds., Size, Structure and Future of Farms, Ames, Ia., Iowa State Univ. Press, 1972.
- [2] Breimyer, Harold F., ed., Bargaining in Agriculture -- Potentials and Pitfalls in Collective Action, North Central Regional Ext. Pub. 30, Univ. of Mo., June 1971.
- [3] Butz, Earl L., "The Battle for Control," Address to FS Services Annual Meeting, Chicago, Ill., Sept. 22, 1972.
- [4] Collins, Norman R., "Changing Role of Price in Agricultural Marketing," Journal of Farm Economics, 41: 528-534, Aug. 1959.

35

- [5] Dean, Gerald W. and Harold O. Carter, "Some Effects of Income Taxes on Large-Scale Agriculture," Journal of Farm Economics, 44:745-768, Aug. 1962.
- [6] Dovring, Folke, "Variants and Invariants in Comparative Agricultural Systems," American Journal of Agricultural Economics, 51: 1263-1273, Dec. 1969.
- [7] Ginzel, J. A., E. W. Kehrberg and G. D. Irwin, "The Middle Sized Farming Operation: A Goods-and-Services Firm?" Southern Journal of Agricultural Economics, Volume 3, Number 1, pp. 123-128, Dec. 1971.
- [8] Guither, Harold, ed., Who Will Control U.S. Agriculture? North Central Regional Ext. Pub. 32-1 through 32-6. Univ. of Ill., March 1973.
- [9] Harris, Marshall and Dean T. Massey, Vertical Coordination Via Contract Farming, USDA Misc. Pub. 1073, March 1968.
- [10] Harrison, Virden L. and W. Fred Woods, "Nonfarm Investors and Beef Breeding Herds Incentives and Consequences," Southern Journal of Agricultural Economics, Volume 4, Number 1, pp. 165-170, July 1972.
- [11] Henry, William R. and James A. Seagraves, "Economic Aspects of Broiler Production Density," Journal of Farm Economics, 42:1-17, Feb. 1960.
- [12] Jesse, Edward and Aaron C. Johnson, Jr., "An Analysis of Vegetable Contracts," American Journal of Agricultural Economics, 52: 545-554, Nov. 1970.
- [13] Krause, Kenneth and Leonard R. Kyle, Midwestern Corn Farms: Economic Status and the Potential for Large and Family-Sized Units, USDA, ERS, Ag. Econ. Rep. 216, Nov. 1971.
- [14] Madden, J. Patrick, Economies of Size in Farming, USDA, ERS Ag. Econ. Rep. 107, Feb. 1967.
- [15] Manley, William T. and Donn A. Reimund, "Interrelations in Our Food System," USDA, ERS Marketing Economics Division paper at 1973 National Agricultural Outlook Conference, Feb. 21, 1973.
- [16] McCarthy, E. Jerome, *Basic Marketing: A Managerial Approach*, Homewood, Illinois, R. D. Irwin, 4th edition, 1971, p. 19.
- [17] Mighell, Ronald L. and Lawrence A. Jones, Vertical Coordination in Agriculture, USDA, ERS Ag. Econ. Rep. 19, Feb. 1963.
- [18] National Commission on Food Marketing, Food From Farmer to Consumer and related Technical Studies, Washington, D.C., June 1966.
- [19] Paarlberg, Don, "Farm Policy Implications and Alternatives," USDA, paper at 1973 National Agricultural Outlook Conference, Feb. 21, 1973.
- [20] Raup, Philip M., "Economies and Diseconomies of Large-Scale Agriculture," American Journal of Agricultural Economics, 51: 1274-1283, Dec. 1969.
- [21] Raup, Philip M., "Corporate Farming in the United States," The Journal of Economic History, 33: 274-290, March 1973.
- [22] Rogers, George B. and Leonard A. Voss, *Readings on Egg Pricing*, Univ. of Mo. College of Agriculture, Dec. 1971.
- [23] Ruttan, Vernon W., Arley D. Waldo, and James P. Houck, eds., Agricultural Policy in an Affluent Society, New York, W. W. Norton, 1969 (Part Four includes four papers by Donald Turner, Don Paarlberg, Varden Fuller, and the National Advisory Commission on Food and Fiber).
- [24] Singer, E. M., Anti-Trust Economics, Englewood Cliffs, New Jersey, Prentice-Hall, 1968, Ch. 18.
- [25] Thompson, Donald N., ed., Contractual Marketing Systems, Lexington, Mass., Heath Lexington Books, 1971.
- [26] Williamson, O. E., "The Vertical Integration of Production: Market Failure Considerations," American Economic Review, 61: 112-123, May 1971.