

HOW WILL PRODUCTION, MARKETING, AND CONSUMPTION BE COORDINATED?

From an Over-all Viewpoint

Harold F. Breimyer

Economist, Agricultural Marketing Service

U. S. Department of Agriculture

Few topics strike more to the heart of policy issues in U. S. agriculture than does the one that is to be discussed today. How production, marketing, and consumption are to be coordinated is a truly basic question. It is heartening to note that both economists and farm leaders are taking more interest in this and similar basic matters.

Within the U. S. Department of Agriculture definitive research on the subject of today's discussion is being done under a pioneering research project.¹

There is some irony in the timing of the emergence of this new area of interest. In the last few years the USDA and several land-grant universities have celebrated the first centennial of their existence. Now at the beginning of their second century serious question is being raised concerning the structural organization of agriculture itself—a question that was seldom raised during the first century. In other words, we begin our second century by digging into issues that were taken for granted throughout the first.

In these remarks I will build on previous papers I have given relative to changes taking place both in the production side of agriculture and in marketing.²

Our assigned title asks how production, marketing, and consumption will be *coordinated*. The choice of the verb, coordinated, is an

¹See Ronald L. Mighell and Lawrence A. Jones, *Vertical Coordination in Agriculture*, Agricultural Economic Report No. 19, Economic Research Service, U. S. Department of Agriculture, 1963.

²Harold F. Breimyer, "Future Organization and Control of United States Agricultural Production and Marketing," Talk at annual meeting of American Farm Economic Association, Purdue University, August 17, 1964; "Relations Between Agricultural Policy and Freedom," Talk at joint sessions of Marketing and Agricultural Economics—Rural Sociology Sections of the Association of Southern Agricultural Workers, Atlanta, Georgia, February 3, 1964; "The Changing Institutional Organization of Agriculture," Talk at the seminar sponsored by the Center for Agricultural and Economic Development, Iowa State University, Ames, May 13-16, 1963; and "The Emerging Structure of U. S. Agriculture: Traditional or Industrial?," *Illinois Agricultural Economics*, July 1964, pp. 1-6.

excellent one. As soon as primitive man abandoned self-sufficiency and joined in cooperative endeavor, so that specialization began, a need arose for coordination of economic activities. Mighell and Jones in their good work already referred to point out that various kinds of economic organization can be viewed in terms of how they meet the need for coordination.

Coordination must be systematic. It cannot be an improvised hodgepodge. Throughout early times most coordination took place through custom. In modern days we continue to use custom, but we add to it a great deal of formal organization through law and through administrative procedure.

About three centuries ago there was a wave of enthusiasm to regard most physical and human events as "natural." In economic matters only resources and man's biological needs are natural. All else is conventional. It is the product of the human brain. That is to say, the system by which economic processes are coordinated is a man-made system. Therefore, the question of how coordination is to be achieved in agricultural production and marketing is properly a subject for our attention.

HORIZONTAL AND VERTICAL COORDINATION

A convenient way to look at the structure of economic enterprise is to cast it in the geometry of a checkerboard or grid. Our economic system provides for coordination in a horizontal direction, and also for coordination vertically.

Horizontal coordination relates to the combining of factors of production (land, labor, capital, and management—together with, some say, research, education, and government) in order to produce a distinctive good or service. Vertical coordination pertains, on the other hand, to the system by which products move forward through the marketing sequence to final consumption.

This geometric scheme helps describe traditional agriculture. For the last hundred years or more the central unit in agriculture has been the individual independent farm. It combines the several factors of production, usually putting them in the hands of a single farmer.

This system had a dual origin. One reason for this system is that since farming is extensive and space-consuming, there is some efficiency in individual, detached farmsteads. But the second root was the age-old aspiration of farmers for land of their own, an aspiration that was fulfilled when land became freely available in new continents.

The economic advantages of independent-unit farms are usually

said to be: (1) the fluidity of management, free of bureaucratic overhead, and (2) the protection against land monopoly or creation of a separate landholding class. The first takes on importance in view of the biological nature of farming, the second by virtue of the limited area of land that is available. Viewed in other terms, the first advantage relates to efficiency, the second to national land policy. Farm policy usually includes—and should include—considerations of productiveness in a narrow sense, and of desirable agricultural institutions as judged from the standpoint of national welfare.

The salient feature of vertical coordination is of a different nature. In this sense, too, the individual farm has traditionally been independent. It has been essentially independent of both the suppliers of its inputs, and the markets for its products. The individual farm has normally been coordinated with its suppliers and its markets through the process of exchange.

Thus does the system by which farm products are produced and marketed conform to the general system of exchange of goods and services. Because the system is so common and familiar, its distinctive features and its recent origin in history are often overlooked. In reality, a system of guiding and rewarding economic activity by means of exchange is a product of the Industrial Revolution and of the Intellectual Enlightenment. Originally, thinkers put their trust in the office of a benevolent, enlightened, all powerful sovereign; and later, disillusioned, turned to the idea of impersonal, self-regulating markets by which to drive the economic engine.

The grid or geometric approach to coordination helps us to leap-frog pedestrian issues in farm policy and address ourselves to two alternate systems of organization—systems that could replace the independent small farms. The first alternate is the horizontal one of combining individual farms into multi-farm units. These would adopt corporate managerial structure. Economic functions would no longer coalesce in one man (or his family) but would be divided among specialists. There would be a managerial hierarchy and skilled and unskilled laboring classes. Most of the finance capital would be held by nonfarmers.

To date large units have appeared principally in poultry, cattle feeding, and some fruits and vegetables. In other parts of farming any trend toward horizontal combination into giant units is proceeding slowly.

Far more frequently seen these days are developments of the second alternate type. This is vertical combination, by the various methods usually grouped under the term of vertical integration. In

vertical integration, the production processes are coordinated with suppliers and with market outlets not solely through exchange—that is, by buying and selling—but through various arrangements of contracting or outright ownership.

THE PRESSURES FOR CHANGE

There are many forces pressing for change. Here are five:

1. Greater commercialization of farming. More costs are cash costs, thereby making farmers more sensitive to changes in their gross incomes.

2. Increasingly complex technology. This is the main factor leading to more specialization on present-day farms. Will it eventually require transition to multi-farm units, where a high degree of specialization of skills and tasks is possible?

3. New “free-wheeling” productivity of agriculture. Productivity is not merely higher than before, but it is more subject to managerial control. Control can rest at various places and be expressed in various ways. The question raised is whether traditional independent-unit agriculture can, unaided, achieve the quality of managerial control necessary to meet goals of adequate and stable incomes to farmers.

4. The ever growing size of the marketing sector and of firms within it. This is of concern to farmers not only because they individually lack bargaining strength but because the seasonal and perishable nature of many of their products puts them at a further disadvantage.³ This brings three related observations to mind:

- a. There is support in some circles for developing countervailing power among farmers, as a defensive measure. Except for a few specialty products multi-farm units will not generate effective countervailing power. Only some kind of group activity will do it.
- b. We can, therefore, expect more interest in bargaining associations, commodity-wide agreements, and similar measures.
- c. Generally, advocates of the bargaining power approach see their adversary as the marketing sector, not consumers. Furthermore, any “slack” in the marketing sector is not excess book profits but excess capacity, wasteful nonprice competition, and similar slippages. In other words, the argument is that a good system of negotiated relationships between producers

³On this point see my two-part article, “Issues of the Day in Marketing,” in the August and September 1963 issues of *Agricultural Marketing*, Agricultural Marketing Service.

and market firms, although not pursuing efficiency directly, would in reality improve it.

5. The ever greater differentiation of product. This arises partly from increasing sensitivity of consumers to quality in foods. It also reflects the efforts of individual firms to differentiate their product as a merchandising device. From this pressure comes the demand for "specific production and marketing." Vertical integration can help to achieve specification production, although the market exchange system can itself perform much better in this respect if given the necessary aids.

POSSIBLE COURSES OF ACTION

Finally we ask, how do we arrive at a judgment concerning what is a good farm policy for the future? What criteria can we use?

Progressive change in U. S. agriculture is foreordained. It neither can nor should be totally arrested. There is no cause to hold to an absolute *status quo*.

But if we have any concern for our agriculture and our nation the policy issues implicit in structural change cannot be disregarded. The question, restated, thus concerns how forces of change can be channeled into the directions we want them to go.

In addressing ourselves to this question, we often speak of contracting, yet we discuss vertical integration. Each embraces a wide array of arrangements. How can we distinguish the good from the bad?

The central idea in any evaluation of an integrative system, in my judgment, is the extent to which it may restrict an individual's freedom of choice.

The grand merit of the exchange system of economic relationships is that when functioning at its best it affords each individual a range of choice. Professor Milton Friedman of the University of Chicago says that "exchange is truly voluntary only when nearly equivalent alternatives exist."⁴ A market matching many buyers and many sellers, with good communication between them, has long been regarded as virtually ideal because it provides alternatives to both buyer and seller.

The test of alternatives of choice can be applied to various kinds of contracts. When done, a wide array of results will be obtained.

⁴Milton Friedman, *Capitalism and Freedom*, University of Chicago Press, Chicago, 1962, p. 28.

Contracts for canning tomatoes in the Midwest, and for broilers in the Southeast, illustrate opposite cases. Because the tomato harvest is seasonal and at most only a few canneries are available to any one producer, advance contracts in canning tomato production are not only acceptable but essential. Typically, the farmer can readily shift his land to corn or soybeans if the offering price for tomatoes is unsatisfactory. And since the cannery supplies most or all the special machinery needed, the farmer is free of heavy commitment of capital. By contrast, the broiler grower must provide a specialized broiler house costing many thousands of dollars but can usually get a contract for only one brood at a time. The tomato contract meets the test of genuine alternatives of choice rather well. The broiler contract does not.

Once again, there can be no disposition to halt all change. Yet in my opinion much is to be said in favor of preserving a substantial part of an exchange system. As an impersonal, decentralized system it still conforms to many of our democratic values. If it be public purpose to help assure fairness and equity in economic affairs, that can be done more readily in a system of exchange than an integrated system.

We have multiple goals for farm policy, and some are not economic ones. Sometimes both agricultural economists and farm leaders appear to assume that we are on the brink of privation and must pursue the last increment of productive efficiency to the disregard of all else. If ever a nation was endowed well enough to be able to strive after nonmaterial goals, that nation is the United States today. If economists feel uncomfortable studying the noneconomic portion of farm policy, they should seek help from other disciplines.