UNDERSTANDING THE CHANGING STRUCTURE OF AMERICAN AGRICULTURE

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The purpose of my paper is to examine what structural changes, short of basic land reform, might occur which would:

- Check the drift toward concentration of land ownership,
- Bring in needed income from non-farm sources, and
- Open up farming opportunities for qualified young persons, in addition to those who stand to inherit a going farm operation.

I list three such institutional changes.

Go for Off-Farm Income

Off-farm income is one way to solve the problem. If a farmer has substantial off-farm income, it helps him in three ways:

- It brings in needed money.
- It generally has greater year-to-year stability of income than farming.
- It permits him to get by with less capital.

Part-time farming is so attractive that more and more farmers go this route. In 1992, according to USDA's Fact Book (1994, p. 32), net cash farm income was $18.3 billion. Total off-farm income from all sources was $74 billion, four times as great as net cash farm income. Any of these off-farm dollars will buy as much goods and services, and pay as much taxes, as a dollar earned by the sale of crops and livestock.

Unlike the commodity programs, off-farm income is of most help precisely to those farmers with small-acreage, where the overall income problem is greatest. The great farm policy debate on commodity programs relates to products that supply about 15 percent of agricultural income, and that to the largest farms.

Part-time farmers had a better record of survival during the stress of the 1980s than did the full-time farmers

A farmer who earns $20,000 a year from an off-farm job can succeed on a farm that requires half as much capital as needed by a full-time farmer. He doesn't need as much land. He can hire much of his machinery needs.

We need to reexamine the popular idea that part-time farms are inefficient, high-cost operations. Part-time farmers may look on country living as a good way to raise a family. Work on their farms may be seen as having recreational value, and so a zero or a negative cost. For part-time farmers, we need to consider costs and returns as they do, not by the conventional accounting methods developed for large-scale, full-time farmers.

Full-time farmers contend that part-time farmers subsidize their farming operations with off-farm income, and thus are an unfair form of competition. Properly viewed, however, part-time farming is an overlooked income-earning opportunity. It might be better to think of part-time farming as a new and growing enterprise, capable of helping develop a new type of family farm, rather than considering it an intruder into the historic concept of what a farm should be. We have long thought of part-time farming as a transition into or out of farming. We may come to see it as a stable, viable, enduring institution.

Opportunities for part-time farming are admittedly poor in the Great Plains, where off-farm jobs are few. But we should be wary of characterizing the entire income-earning opportunity by what is clearly a sectoral problem.

Vertical Integration or Contract Farming

I consider vertical integration and contract farming to be synonymous terms, using the two indistinguishably. I distinguish contract/integration from direct-operation, large-scale farming corporations, modeled on the industrial form. I also distinguish contract/integration from family farming corporations, which are similar to ordinary family farms, but are incorporated for tax purposes and for facilitating the transfer of title between generations. Typically, the public makes no such distinction, labeling and indicting all these farms as corporate farms.

The old order in agriculture involved distinct sectors: the suppliers of input items, the farm operator, the processor of farm products, the grocer and the final consumer. Each of these sectors—indeed, each individual unit in each sector—made his or her own decision as to what and how to produce. Title changed hands between each of these sectors at a price independently and competitively determined.

The theory was that the consumer would express his/her preference through competition, bidding up the prices of preferred items. The message, reflected in price, would be passed back to the processor, then to the farmer, then to the supplier of input items, all of whom would respond to the price signal. The consumer, being supreme, would thus dictate the kind and type of product offered. Consumer sovereignty, it was called.

But all this worked slowly. The producer of "spring chickens" 50 years ago never got the message. Producers of hogs and beef clung to the old pattern, turning out animals with excessive fat. Dairymen, under the influence of price supports, continued to produce milk with more butterfat than the consumer wanted.

So now has come a new concept—centralized decision making responsibility, not under a government agency, but by private entrepreneurship. Integrate these formerly separate decision making sectors. Prescribe the input items, the production items and the flow to market. Instead of leaving to farmers the total initiative as to what and how to produce, begin at the other end, with the consumer's wish for product, and work backwards, using contracts to assure compliance, prescribing the decisions regarding inputs and production practices. The revolutionary consequences of this system are clearly evident. It is probably the most profound structural change that we agriculturalists have witnessed.

There are, of course, numerous variants of the contract/integration system, with the man on the land having a variety of roles as regards the supplying of input items, the use of production practices and the selling arrangements. The one indispensable attribute of the system is that the person on the land foregoes some of his/her free discretionary power. If the terms of the contract are unwise, the person on the land may become little more than a piece-worker. But this need not be so.

This system has already deeply invaded the old agricultural paradigm of the farm operator as independent decision maker, provider of all the factors of production.

Already in 1963, Ronald Mighell of USDA (1972) reported the following percentages of crop and livestock production that were then under integrated and/or contractual arrangements:

Milk for fresh market	95	Potatoes	40
Broilers	95	Fresh vegetables	30
Vegetable seeds	90	Dry beans and peas	25
Hybrid seed corn	75	Eggs	20
Sugar crops	75	Cotton	15
Citrus fruits	65	Cattle on feed	6
Processed vegetables	60	Hogs	6
Turkeys	50		

The contract/integration system has gone forward rapidly since then. By 1970, 22 percent of United States agriculture was under contracts or vertical integration. For eggs, cattle and hogs, the recent increase has been spectacular:

Contract/Integration as a Percentage of Total U.S. Farm Production

	1963	Recent
Eggs	20	85
Cattle feeding	6	50
Hogs	6	33

The increase in contract/integration appears to have advanced most rapidly where certain circumstances prevailed:

• Where there was unexploited knowledge, known in the laboratory but not applied on the farm, as in the poultry industry;

• Where there were potential economies of scale, as in the production of hybrid seed corn;

• Where standardization and steady flow to market of an improved product offered much promise, as in pork production;

• Where repetitive operations permitted the use of supervised, low-cost labor, as for processed fruits and vegetables;

• Where new products could be developed, not envisioned by the man on the land, as for potatoes;

• Where there was opportunity for product differentiation, as in brand names for canned peaches;

• Where the family farming tradition was weak, as in the far West and the deep South.

Very likely, contract/integration will proceed most rapidly where these conditions prevail. By the same token, it is likely to advance more slowly where the aforementioned forces are less influential—the great field crops of the Midwest—corn, soybeans and wheat.

A young man who has mastered his technical skills, and who has little capital, can sign an agreement with a contract/integrator, who may supply him with input items, guarantee him a per-unit return on his product, and reduce price risk to a minimum. The attractiveness of this system to a person with limited capital is entirely clear. He may be willing to surrender some of his decision making prerogatives in exchange for such advantages.

The growth of contract/integration may reach a point at which historic marketing institutions are virtually eliminated. This has already happened for broilers and eggs. And if alternative opportunities are closed out, an overly aggressive contractor/integrator may beat down the terms of the contract. Farmer-bargaining associations may help counter this threat.

The growth of contract/integration is said, by its adversaries, to deprive the farm operator of his right to make decisions. But the right to enter into a contract is a legitimate right for any decision maker.

Resistance to contract/integration will continue to come from those farmers who hold to the old idea that the farmer should supply all the factors of production. It will come from villages and rural people who resent the odors that come from confinement feeding of hogs and cattle. It will come from environmentalists who protest monoculture and the pollution associated with concentration of animal wastes. It will come from advocates of animal rights. It will come from people who dislike agribusiness and what they consider corporate farming. And it will come from people who think that agriculture might be monopolized, and that the monopolists would then jack up the price of food, or beat down the price to the farmer to make exorbitant profits. The case of the poultry industry, now almost totally integrated, with resulting reductions rather than increases in the consumer price of eggs and broilers, should allay such fears.

Public reaction to contract/integration appears to vary, dependent on the product involved. It appears to have become accepted in the poultry industry. Resistance appears to be greatest with regard to hog production.

The issue concerning contract/integration has to do with the decision-making role of farm operators, with the scale of operations, with the efficiency of the farming system, with environmental issues, with the cost and quality of food, with the ease of entry into agricultural production, and with the access to agriculture of off-farm capital. It has little to do with the probable number of farm operators, though the circumstances of the man on the land will be radically changed. Most forms of vertical integration involve some degree of entrepreneurship for the man on the land.

Perhaps no structural issue is more contentious than that of contract/integration.

Abolish the Corporate Farm

Unfortunately, the public tends to lump together all forms of corporate farms. In this section, I focus on direct operations owned and run by people outside the farming tradition. The nearest available quantification regarding such units is given by statistics on farming corporations with more than 10 stockholders. According to a report (1978) of the U.S. Congress, in 1969 there were 1,797 such corporations. Undoubtedly the number has increased since then. They totaled less than one-tenth of one percent of the total number of farms and produced three percent of total farm sales. Most of these corporate farms were in California, Texas, Hawaii and Florida, where the tradition of family farming is weakest.

The financial record of this type of corporate farming is not the best. Among the failures: Black Watch, Gates Rubber, CBD Agronomics, Multiphonics and Great Western Land Company (Paarlberg, 1980, p. 194). The Bonanza Farms of the Red River Valley disappeared. The huge Campbell Farms of Montana ran into trouble.

Large-scale corporate farms have major handicaps. Farming corporations often have to pay union wages for their laborers, who lack the motivation of a self-employed family operator. They have less resilience than a conventional family farmer, who has a higher ratio of income to cost; if times get hard, the family farmer is better able to take in his belt than is the corporate farmer. Farming is a biological operation. Much of it is less responsive to systemization than is a mechanical enterprise. In addition, farming corporations have to pay corporate taxes on their earnings, which a family farmer escapes.

There is smoldering resentment against farming corporations, against contract/integrators and against a wealthy hereditary landowning class. There is a remedy to check such drift: progressive inheritance taxes stiff enough to require the breakup of huge farming units in order to pay the tax. There is little inclination to do this. A few years ago Congress enacted legislation making it easier to pass big farms, intact, to the next generation.

If we are willing to accept the drift toward huge farming units and a wealthy hereditary landowning class, little need be done to modify existing agricultural institutions. We are on a track that leads inexorably toward that result.

What would be the effect on agriculture and on the cost of food if corporate farms were to be prohibited? Research shows that, at least in the Midwest, for most types of farming, the majority of farming efficiencies of size can be achieved on a farm with a labor force of two persons. If a farm is really large, it earns more income, not so much because of a lower unit cost of production, but because the operator receives the revenue from more acres. The operator has an interest in having a huge farm, but the society has no such interest. It is common to consider individual gains as synonymous with societal gains, but, in the language of the old spiritual, "It ain't necessarily so," Adam Smith to the contrary, notwithstanding.

The elimination of corporate farms, as I define them, would have little effect on the efficiency of farm operation or the cost of food (Paarlberg, 1986, p. 76).

The question regarding the prohibition of corporate farms, or a limitation on contract/integration, or curtailing the drift toward a wealthy hereditary landowning class, is not so much a question of efficiency as it is a social, ethical, political issue. Mainstream economists are qualified to comment on efficiency, but not on the deeper issues that are central to the problem. I am an institutional economist, so I am not limited to considerations of efficiency. I admit social, ethical and political considerations into the decision forum.

The major threat to the moderate-sized farm is not the few corporate farms; it is the many unincorporated super-large farms which, with the help of government payments, gobble up the smaller farms. Payment limitations are no help; the super-large farms are split up—on paper—so that each of the sub-units gets the maximum payment. The county committees are run by the big farmers, and are co-conspirators in evading payment limitations.

The attack on corporate farms results from an erroneous diagnosis of the problem. "Should we eliminate the corporate farms?" is the wrong question. It is hard to give the right answer to the wrong question.

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