



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

The Structure of Agriculture: Implications for Food Policy

Kenneth Clayton and Thomas Stucker
(202)447-4943

The policy of assuring "a supply of diverse, safe, and attractive foods that will meet the nutritional requirements of the population at reasonable costs" is still valid today, but most of the elements have very different meanings than they did 40 years ago.

While nutrition requirements once meant having enough to eat for a large portion of the population, today these requirements are focused more on eating the right foods and, in many instances, not eating too much. While reasonable cost once meant spending no more than an acceptable proportion of one's income for food, today it takes on a whole new meaning in light of the dietary guidelines and the concern over food safety.

Once cost might be measured in more nearly an economic sense, while today we would be remiss not to also attempt to incorporate human elements of cost.

When the overriding nutrition problem was having enough to eat, the human cost could be included in the calculation by assessing the value of lost work time or considering a shorter life span. Today, one must address these same kinds of issues, but within the context of dietary guidelines which reflect the links between diet composition and health.

Today, perhaps more than ever before, we must consider the human cost of food safety when deciding how safe is safe. We have made great strides in detecting unsafe substances in our food supply. Now, rather than finding traces of toxic substances in parts per million, we can find them in parts per billion, and some even in parts per trillion. Unfortunately we have made far less progress in understanding and quantifying the long-term morbidity and mortality effects, and threshold levels beyond which these ingredients are unsafe.

We cannot ignore these risks to human health because we do measure the costs in human lives as well as in dollars. But equally important, we are not justified in ignoring the potentially enormous economic cost of eliminating all risk.

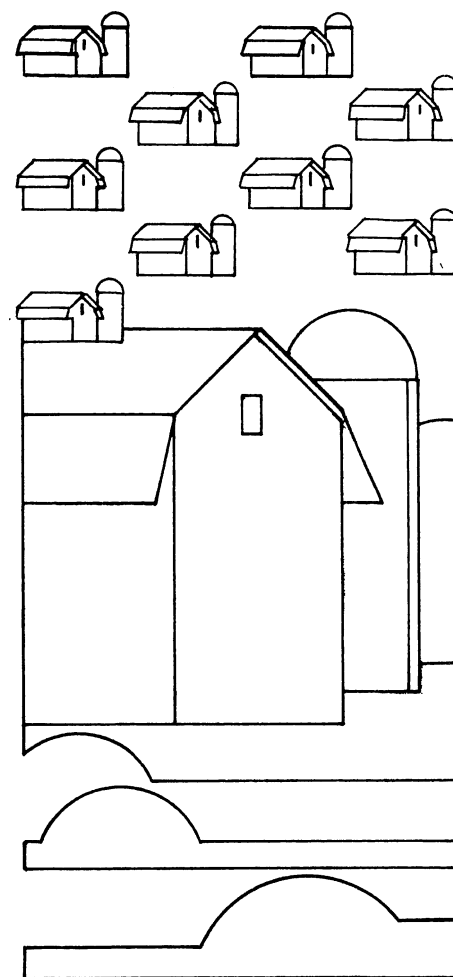
The increasing complexity of food and nutrition issues, the demands by the public for guidelines to better health, a growing awareness of the link between diet, health and food safety, and the potentially large economic dislocations of actions taken all point toward the need for a broadened public dialogue. ■

The structure of American agriculture now and in future years will directly affect both consumers and producers. As policymakers grapple with contemporary issues during the next several years, much of what they do will affect the structure of U.S. agriculture. This effect is not new, but our awareness of the relationship of policies to farm structure and the likelihood that food availability will be affected has increased. The issue is considered so important by USDA that since March 1979, a major project has been conducted to compile ideas, viewpoints, and information. The project has included a series of regional and national hearings at which the views of farmers, consumers, and others have been sought on the structure issue.

"Structure" refers to the organization and composition of the agricultural sector. It reflects such features as the:

- Number, size, and location of farms;
- Farm operator characteristics — such as age, and full-time or part-time status;
- Legal form of organization — single proprietorship, partnership, corporation, or cooperative;
- Conditions under which inputs are bought and output is sold;
- Ownership and control of resources — particularly land, which may be leased, owned, or share cropped;
- Source of financing — commercial banks, farm credit system, FmHA, and others;
- Individual operator's freedom in making resource and input management decisions; and
- Relationship between farmers and their suppliers, markets, and other institutions that influence how the agricultural system operates.

The current structure of American agriculture is the result of government policies, along with economic, technical, and institutional forces that have been at work since this country's beginnings. Structure of the basic production stage of the food system has far-reaching implications at the consumer level in terms of product availability, price, and food attributes.



Structural Changes in U.S. Agriculture

In recent years, a number of significant changes have occurred in the agricultural sector:

- Declining numbers and increasing size of farms: farm numbers have dropped from 5.6 million in 1950 to 2.7 million today;
- Increasing concentration of production: the largest 100,000 farms account for one-half of all farm output, and the largest 800,000 account for 90 percent;
- Changing ownership and control of resources: more farms rely on rental land than at any previous time;
- Increasing reliance on purchased inputs and on debt financing of farms.

large farms have debt-to-asset ratios of 23 percent compared with 16 percent for all farms; the largest farms have purchased input costs of 85 percent of gross sales, as compared to 71 percent for smaller farms (1978 data).

These and other structural changes will help shape the future of American agriculture. The performance of the agricultural sector in meeting the demand for U.S. food production is directly related to structural characteristics such as these. These structural characteristics affect the sector's ability to withstand periods of low return on investment and to maintain a viable relationship between ownership and operation. Structure also affects the opportunity for new operators to enter the industry. These changes influence the current income and wealth of farmers, and have the potential for increasing the wealth of established farmers with owned inputs to the possible detriment of their neighbors with smaller or more recently acquired production units. Rising land prices, for example, increase the equity of existing owners. However, these higher prices limit the potential for land acquisition. Growth in economical production unit size compounds this problem, as the amount of land needed makes capital requirements even larger. The ultimate result of these observable (and potential) changes affects the welfare of not only the food producing sector, but consumers as well through food prices and availability.

The Structure of Agriculture Project

Secretary of Agriculture Bob Bergland initiated what he termed a "Dialogue on the Structure of American Agriculture" in the spring of 1979. He wanted more attention focused on the direction of agriculture, on how potentially overlapping and inconsistent Government policies might contribute to the evolution of harmful trends, and what positive actions were needed to ensure the future of the family farm. A cornerstone in the structure project was a series of 10 regional hearings, presided over by Secretary Bergland, and a national hearing held in Washington, D.C. The regional hearings were held at: Montpelier, VT; Fayetteville, NC; Huntsville, Ala; Sioux City, Iowa; Sedalia, Mo; Wichita Falls, Tex; Denver, Colo; Spokane, Wash; Fresno, Calif; and Lafayette, Ind. Total attendance was approximately 7,500.

Some 575 scheduled panelists and open-microphone speakers — mostly farmers — participated. More than 2,500 other persons left written comments for the hearings record. Speakers represented farm women; racial and ethnic minorities, the banking community, farmer cooperatives, alternative farming and marketing advocates, State governments, the religious community, and farmers representing the various commodities and farm types throughout the country.

View on Structure

A summary of the views presented at each of the regional hearings has been published.¹ These views, plus those presented at the national hearing in Washington, D.C., provide insights into the problems affecting the production end of the food and fiber system.

Farm prices and income. — Many witnesses testified that farm income is inadequate. Without prices at parity levels (based on 1910-14 farm and nonfarm product prices), some participants argued that short-term viability and hence long-term survival were in doubt.

Inflation. — The effects of inflation on land, machinery, energy, capital, chemicals, and other input costs were especially noted. It was suggested that higher inflation and lower income were related.

Resource ownership. — Barriers to entry into farming, such as rising land prices, lack of credit availability, taxes, and the high cost of manufactured inputs relative to output prices, may prevent many individuals from becoming farmers. Past and present public policies may contribute to some of these problems. Income and inheritance tax laws are examples of policy variables that directly affect the organization of farm units. Economies of size have resulted in farm consolidation into larger units, and absentee or corporate ownership have been methods of capitalization. This ownership trend and its implications are an important public policy issue.

Preservation and improvement of agricultural potential. — This relates particularly to land ownership and possible changes from agricultural to some alternative use, such as housing, roads, shopping

centers, or reservoirs. Our production technology and export policies, moreover, may result in "exporting our topsoil"; that is, selling our farm products without fully recovering the cost of all inputs, specifically depletion of soil fertility.

Relationship of the structure of agriculture to auxiliary industries. — The number and relative size of farming units affect the structure of input-providing and market service industries in local communities. Thus, as the number of farms has declined in some areas through consolidation, the welfare of local business communities has been threatened.

Other issues. — Farmers remain divided, and in some cases uncertain, about the role of Government in agriculture. The ideals of the free market are held in great esteem, but often Government must intervene to limit downside price risk or to prevent "undesirable" structural trends from continuing. Government action to provide a "safety net" for agricultural product prices is a means to distribute market risks throughout the population rather than forcing producers to assume all the risk.

The structure of agriculture and its resultant impact on food availability and prices are important to the entire food system from producer to consumer. In the past, the United States has enjoyed abundant food supplies at reasonable prices under a food production sector characterized by many relatively small producers. This structure has evolved into one characterized by fewer, but larger, units. Larger capital requirements and the need for increased management skills have likewise changed the composition of the sector and its interaction with the food processing and manufacturing sector.

The opportunity for those in the food sector to yield more market power may grow with firm size. Conversely, economies of size achieved by larger units may increase the sector's efficiency. It is necessary that consumers as well as others in the food system monitor the changes that are occurring in production agriculture. It is up to the public, through its elected representatives, to determine whether these changes should be guided, and if so, in what direction. Particularly, the role that public policy should play in setting the level and distribution of returns to agriculture requires careful deliberation. ■

¹A Dialogue on the Structure of American Agriculture. Summary of Regional Meetings, USDA, April 1980.