

# Land Values Increased, Why Not Farm Incomes?

by Geoffrey Shepherd

**N**ET FARM INCOME per person has remained practically constant since 1950. Land values, however, rose 68 percent over the same period.

Why didn't net farm incomes rise? Many factors played a part. Among others, these include the effects of new technology, mechanization, rising costs, over-production, storage-support operations and, under the circumstances, an excess supply of farm labor and management, or farm operators.

The net farm income situation per person since 1950 is shown in table 1 and chart 1. Notice that net farm income per person from farm sources has been practically constant since 1950. The inclusion of farm income from non-farm sources causes only a relatively small rise.

These farm income figures include the return on farmers' own capital invested in their machinery, buildings and land. USDA data for commercial, owner-operated farms show that, for all but two of the 32 chief types of farming areas in the United States, a substantial decline took place

from 1947-49 to 1959 in the net return to operator and family labor and management after deduction of a charge for owner-operator capital used. The same sort of thing is shown in a study by two Purdue University economists, Ruttan and Stout. They estimate that the share of gross farm income going to labor and management on farms declined from about 44 percent in 1947-49 to about 24 percent in 1957.

From 1947-49 to 1959, however, the value of farm land and buildings per acre (which is based chiefly on the return to land) rose 68 percent (see chart 2 and chart 3).

Why did net farm income per person remain practically constant, while the value of farm land per acre rose 68 percent? If nonfarm per capita incomes also had remained about constant, that would indicate that some general factor had held down all incomes. But per capita nonfarm income rose 47 percent during the period.

## Why did land values rise?

Land values are determined by many factors—desire for protection against inflation, for prestige, for security, etc. But the chief factor usually is the *return* that a buyer *expects* to get from the land. These returns have been

affected by the use of new technology and the operation of the price support, acreage allotment and Soil Bank programs. These have had several kinds of effects.

Advances in technology contributed to a rapid expansion in farm output. With output growing faster than demand, this has depressed both farm income and commodity prices. This depressing effect has been retarded to some extent by the price-support and storage programs, but the over-all effect has still tended to reduce the returns to land.

The use of new technology and mechanization also made it profitable for farmers to operate larger farms than before. Pressure to enlarge existing farms frequently has been cited as a major force in raising or maintaining land values in recent years. In the year ending March 1, 1960, for example, 45 percent of all sales of farms or tracts of land were for adding to existing farms. In 1950, the figure was only 21 percent.

Acreage allotments rationed the right to plant acres to certain crops. The value of these allotments often was capitalized into land values. One study estimated that, in Pittsylvania County, Va., an acre of tobacco allotment accounted for \$962 of the selling price of a farm in 1954; \$1,673 of the selling price in 1957. The average sale price of the 203 farms studied was \$10,242; an estimated \$5,650, or 55 percent of the total value, was paid for the right to grow tobacco on a specified number of the acres purchased. For \$5,650, in other

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TABLE 1. Per capita income of farm and nonfarm population, United States, 1950-60.

Year	Average net income per capita of:			
	Farm population			Nonfarm population
	Farm sources	Nonfarm sources	All sources	All sources
1950	\$626	\$212	\$ 838	\$1,585
1951	751	232	983	1,763
1952	711	251	962	1,849
1953	666	265	931	1,902
1954	654	263	916	1,852
1955	602	281	883	1,979
1956	597	300	897	2,074
1957	627	306	933	2,116
1958	748	295	1,043	2,073
1959	644	321	965	2,216
1960	657	329	986	2,282

Source: Farm Income Situation, Agricultural Marketing Service, USDA.

words, the buyer received nothing tangible — only a franchise to grow tobacco. Similar evidence was found in Greene, Wilson and Pitt counties, N. C. Also, a study of land values in Kansas yielded similar information on the value of wheat allotments. According to the study there, the right to grow wheat added \$53 to the value of an acre of wheat land in the Anderson area and \$58 in the Logan-Wichita area in 1956.

The prices of farm products were high after World War II. But farmers could remember the drastic price decline that followed World War I and at first, couldn't be sure that price supports would be continued above short-run, free-market levels. Chart 3 shows how land prices rose much less

and much more slowly than farm incomes after World War II. Some of the increase in land values since 1950 has reflected the lag between land returns and land prices. After the Korean conflict, the continuation of price supports seemed more certain, and land prices rose to about the same relative levels as farm income.

Finally, a part of the rise in land values during the 1950's may be attributed to fear of inflation. During 1960, this fear eased to some extent, and this may have been partly responsible for the decline in land values that took place then.

**Why didn't per capita farm incomes rise?** There are two chief reasons for per capita net farm

incomes changing so little in the 1950's.

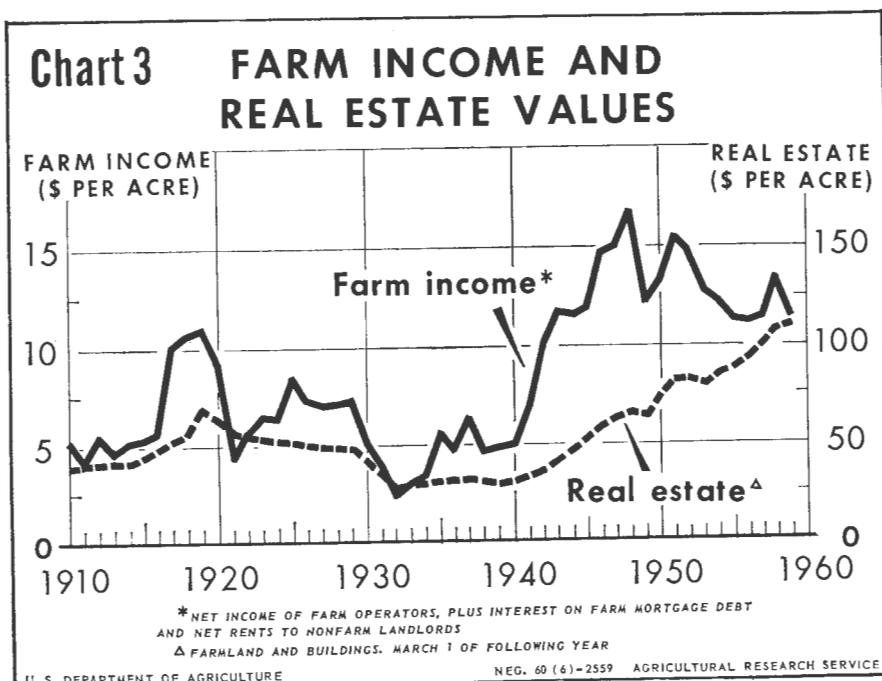
1. *Continued overproduction of farm products* relative to the demand for them is one reason. This kept total national farm income low.

This overproduction didn't result from any increase in acreage. Crop acreage has remained virtually unchanged at about 350 million crop acres since 1920, and the decline in the demand for feed for horses and mules had pretty well run its course by 1950. The overproduction resulted mainly from rapid advances in technology and the addition and substitution of capital resources — machinery, fertilizer, agricultural chemicals, etc. These were both added to and substituted for labor and land. This permitted (1) yields per acre to increase and (2) one man to handle more acres.

Production expenses changed, too. The use of more efficient production techniques has a tendency to lower some costs. But the greater use of commercial materials or resources such as fertilizer and the general inflationary trend tended to raise costs. The over-all effect was to decrease national net farm income. A corresponding decline in the number of farmers held per capita net farm income about constant.

The average yield of feed grains, for example, rose more than 33 percent from 1947-49 to 1957. Total farm output increased 21 percent, while population increased only 19 percent. Total production increased more rapidly than demand. In agriculture, even a small increase in supply causes a large decrease in the prices for farm products and almost as large a decrease in gross farm income.

Consumer income per person also increased. Some of this increase was merely inflationary. But relatively little of the real increase in consumer incomes went for food. Total food consumption tends to rise only as population increases, with consumption per person remaining remarkably steady. With national consumer incomes now at relatively high levels, further increases in income increase the demand for some



farm products but decrease it for others. This doesn't have much effect, then, on per capita food consumption.

Continued overproduction in relation to demand, thus, is the first reason that farm incomes didn't rise during the 50's. This kept national gross farm income low.

2. *Another kind of imbalance* is the second reason that per capita farm incomes didn't rise. Considering the circumstances that existed in terms of the number of farmers who could earn incomes comparable to those for similar ability in other occupations, this amounted to an oversupply or excess of labor and management in agriculture. Along with the oversupply of farm products, this kept incomes *per farmer* low.

The large supply of farm operators relative to the demand for them, resulted from two things: (1) the high farm birthrate and difficulties that impeded movement off farms—this kept the supply of farm operators high; and (2) the decline in the demand for farm labor, largely as a result of rapid technological advance and mechanization—this reduced the demand for farm operators and farm labor.

The farm population declined along with the decline in the number of farms. But it didn't decline fast enough to permit per capita farm incomes to rise in the 1950's. This relative oversupply of farmers meant dividing up the total farm income pie into relatively small pieces and bidding up the rent and price of land. This kept net income per farmer low. Considering the amount of total farm income to be shared, an oversupply of farmers depresses farm incomes per farmer just as surplus farm products depress farm product prices per bushel, bale, etc.

The farm birthrate alone is high enough to result in a continuous increase in the number of farmers if all boys born on farms stay in farming. Farm births exceeded farm deaths by about 400,000 per year. In 1950 the number of farm children was 68 percent higher than the number needed to maintain a stationary farm population.

The demand for *numbers* of farmers is declining, and farm practices have become much more labor saving. Increased mechanization and machinery size have increased the size of farm that a family can handle. The average size of farm in the United States increased from 174 acres in 1940 to 215 in 1950 to 302 in 1959. The number of commercial farms dropped 21 percent from 1947-49 to 1955-57.

**Why didn't the loan and storage programs work?** These programs simply couldn't deal with the basic overproduction problem. They did temporarily bolster farm income and provide a place to put some of the surplus. But they also acted to encourage further overproduction. They did withhold some of the excess from the market, and some of this excess was disposed of abroad with various effects. To the extent that the rest is eventually returned to the domestic market, however, it will depress prices about as much as withholding it raised prices in the first place.

**Programs to reduce farm production** more nearly in line with current demand come closer to grips with the real problem. These are receiving increasing interest and attention, particularly those of the land-retirement type.

But production control alone can solve only half of the problem. It can raise *total* national farm income. It can't deal effectively with the other part of the problem resulting from the excess supply of farm operators (farm labor and management) that keeps income *per farmer* low. This problem calls for a reduction in the number of farmers, and this is more difficult to handle.

The farm population in the United States has declined, but the decline hasn't been rapid enough to keep pace with the decline in the demand for farmers in terms of the incomes they can achieve. The problem for many families no longer is, "How to keep 'em down on the farm," but, "How to help them get off."

While farm incomes are low, urban incomes have been increas-

ing. There are a large number of good urban jobs for people with the necessary *training* to handle them. One of the big reasons that farm boys don't take these jobs is a lack of training for them. Farm boys—if they have the training, however—can compete for these jobs as well as urban boys.

Farm boys would be in a better position to compete if they knew about these jobs and the training needed to qualify for them while they were young—before they've trained themselves as farmers and put a good share of their capital and lives into farming. An established farm family finds it most difficult to wrench away from farming. Also, the established farm operator can't expect to get one of the higher-paying urban jobs when he hasn't had the training for it.

One way to deal with this problem would be to work more intensively with farm boys and girls while they're still in high school. This could show them what percentage can expect to find places in farming, help them compare farm and nonfarm incomes and help those who decide on nonfarm jobs to take training for them.

This would call for a big change in our vocational-agriculture training program—with agricultural training concentrated on the fewer number of farm boys who'll actually become farmers. A greater number will need training and help to get nonfarm jobs.

A number of states now have area vocational schools, and Iowans are becoming more interested in this type of training (see "Situation Report on Vocational-Technical Training" in the January issue or reprint FS-893).

Until the surplus farm population problem is solved, it's unlikely that incomes per farmer will increase much. Reducing farm production simply by taking acres of land out of production isn't likely to solve the farm-income-*per-person* problem. This is because land isn't the factor that's in greatest oversupply. Rather, it's the excess supply of farm labor and management in relation to the acres that can be handled and the amount that can now be produced per person.