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The Changing Economic Characteristics Of Idaho's Agriculture

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Agricultural Experiment Station

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Preface

This is one of two companion reports dealing with Idaho's agricultural industry. This publication is primarily concerned with the development and efficiency of Idaho's agriculture. It analyzes income, expenditures, and production trends of the agricultural industry in Idaho. The second publication in the series — Experiment Station Bulletin 536 — deals with the importance of the agricultural industry in Idaho relative to other states in the west and in the nation. It analyzes the economic contribution and national ranking of various agricultural commodities in Idaho and other states.

The first part of this study analyzes the importance of agriculture in Idaho relative to other sectors of the economy and the relative contribution of the various sectors within the agricultural industry. The following areas were studied: (1) value of sales, (2) farm income, and (3) some significant changes. The second part of this study investigates agricultural efficiency. The following efficiency criteria were used: (1) farm output and input, (2) farm outputs per unit of input, (3) crop production and cropland used for crops, (4) farm employment, and (5) expenditures for food relative to income. The third part of the study deals with the dynamics of Idaho's agriculture. It examines the direction of changes in Idaho agriculture for the past two decades.

Summary

Idaho has a total size of 83,557 square miles and contains 53,476,480 acres, which makes this state the 13th largest in acreage in the United States. Sixty-four percent of this land is government owned.

The total population of Idaho in 1970 was 712,567 with a rural population of 327,133 or 46 percent. The percent of rural population has declined steadily since 1920, when the rural population accounted for 73 percent of the total. Agriculture is the principal contributor to the state economy with cash receipts from farm marketing at about \$670 million and a realized gross farm income of over \$784 million. Value added from farm production amounted to \$232 million, representing 29 percent of the value added from farming and manufacturing only. Farm products plus processing of food and kindred products accounted for about 50 percent of the value added from farming and manufacturing.

Sales of cattle and calves produced more than half of all livestock and livestock product receipts and ranked first in total cash receipts among all agricultural commodities. While Idaho is famous for its potatoes, ranking first in potato production in the United States, cash receipts from potatoes ranked second to cattle and calves in recent years. In general, cash receipts from marketing livestock are increasing at a significantly higher rate than receipts from marketing crops. This is basically due to the sharp uptrend in cattle and calves marketings.

During the 21-year period, 1950-70, net farm income in Idaho increased by 83 percent, but total production expenses increased by 138 percent. Relative to the U.S., Idaho's production expenses and realized gross farm income showed a sharp uptrend. Despite the increase in realized gross farm income, the uptrend in production expenses forced out many of the marginal and small farms in the state. The number of all farms declined by 37 percent and the number of commercial farms declined by 37 percent. While the number of farms declined significantly, the number of farms in Class I, (those with total value of sales of \$40,000 or more), increased by 85 percent. For all farms reporting, an average of \$3,480 annual income was received from sources other than the farm operation.

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The Changing Economic Characteristics Of Idaho's Agriculture

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The total investment in Idaho farms and ranches reached \$3.5 billion in 1969. Agriculture is the most important industry in Idaho. It accounts for 28.7 percent of the value added by all industry groups. Agriculture and agriculturally related processing of food and kindred products account for 49.7 percent of the value added by the farming and manufacturing sectors of the Idaho economy¹ (Table 1).

Personal income from agriculture in Idaho accounts for a larger percent of total state personal income than any other single industry. In 1970, personal income from agriculture was 16.48 percent of Idaho's civilian personal income (excluding federal and state employees and transfer payments), compared to the U.S. average of 3.34 percent. Personal income from agriculture in Idaho represented 12.03 percent of total personal income as compared to the U.S. total of 2.3 percent.²

Farm Income

In 1969, 46 percent of the people in Idaho were classified as rural people, and farm income accounted for 16.42 percent of the state's civilian personal income. This situation prevails in spite of a relatively rapid decline in the number of farms and in the number of people living on farms.

During the 21 years from 1950 to 1970, the number of farms declined by 37 percent while average size of farms increased by 72.4 percent. In 1950, over 49 percent of Idaho's commercial farms, classes I-VI, and 59.3 percent of all farms yielded annual net incomes of less than \$3,000. In 1969, Idaho still had 39.5 percent of commercial farms and 51.8 percent of all farms that did not yield annual net income above \$3,000. Present trends with respect to number of farms, farm size, and number of people living on farms will probably continue. This will increase the problems of management and human adjustments. Research in this area is vital if the agricultural industry in Idaho is to optimize the utilization of its physical and human resources.

¹For information on Idaho Gross State Product and the relative importance of the agricultural sector, see the second publication in this series, Experiment Station Bulletin 536, "Agriculture - Idaho's Economic Cornerstone," by Joel Hamilton.

²Department of Commerce, Office of Business Economics; Survey of Current Business, August 1971.

Income from Other Sources

Farm operators in Idaho had an average annual income of \$3,486 from sources other than the farm operation in 1964. About 30 percent of farm operators averaged \$441 from outside sources and about 22 percent averaged \$8,775 from sources other than the farm operation (Fig. 1).

Total receipts from farm marketings have sustained a sharp uptrend. During the 1968-70 period total receipts from farm marketing increased by 19 percent and realized gross farm income increased by 25.28 percent (Table 2).

Total production expenses have increased at a higher rate than net farm income. During the 1950-70 period, total production expenses increased by 138 percent while net farm income increased by only 83 percent. Total operating expenses increased by 123 percent, while total fixed expenses increased by 176 percent. Taxes and interest on mortgages accounted for a significant increase in production expenses. Taxes have increased by 125 percent and interest on farm mortgages increased by 677 percent (Table 3).

Table 1: Value added of industry groups, Idaho, 1969

Industry group	Million dollars	Percent
Agriculture ¹	232	28.7
Food and Kindred Products ²	170	21.0
Lumber and Wood Products ²	150	18.5
Printing and Publishing ²	23	2.8
Chemical and Allied Products ²	108	13.3
Fabricated Metal Products ²	11	1.4
Machinery Except Electrical ²	8	.9
Misc. Manufacturing Industries ²	3	.4
All Others ²	106	13.0

¹Value added in agriculture was calculated as cash receipts from farm marketings plus value of home consumption less purchased inputs, except labor. Purchased inputs include feed, livestock, seed, fertilizer, repairs, and operation of capital items, and miscellaneous production expenses.

²Source: - U.S. Department of Commerce, Bureau of the Census, **Annual Survey of Manufacturers**, Washington, D.C., 1971.

Table 2: Idaho agricultural receipts from farm marketing, 1968-1970.¹

Commodities	1968		1969		1970	
	Million dollars	Percent of total sales	Million dollars	Percent of total sales	Million dollars	Percent of total sales
Livestock:						
Cattle and calves	146.1	25.9	164.8	25.4	187.3	28.0
Dairy products	60.5	10.7	62.4	9.6	69.5	10.4
Sheep and wool	24.1	4.3	28.0	4.3	24.2	3.6
Poultry and eggs	9.9	1.7	10.9	1.7	10.8	1.6
Hogs	7.0	1.2	8.5	1.3	8.5	1.2
Rainbow trout ²	3.8	.7	4.3	.6	5.0	.8
Total	251.4	44.5	278.9	42.9	305.3	45.5
Crops:						
Potatoes	96.9	17.2	137.3	21.1	134.7	20.1
Wheat	62.0	11.0	63.5	9.8	51.1	7.6
Sugar beets	47.3	8.4	48.9	7.5	45.9	6.8
Hay (all)	18.2	3.3	25.4	3.9	28.8	4.3
Barley	16.9	3.1	13.1	2.0	21.3	3.2
Dry beans	13.6	2.4	10.1	1.6	14.0	2.1
Dry peas	7.0	1.2	9.2	1.4	8.3	1.2
Alfalfa and clover seed	5.3	.9	6.3	1.0	6.3	.9
Fruit and nuts	4.8	.8	12.9	1.9	7.2	1.7
Onions	5.3	.9	4.7	.7	6.3	.9
Sweet corn	3.7	.6	3.6	.6	3.6	.5
Hops	2.7	.5	3.1	.5	2.9	.4
Total	283.7	50.3	338.1	52.0	330.4	49.4
All Others	28.8	5.2	32.0	5.1	33.6	5.1

Total sales	563.9		649.0		669.0	
Government payments	39.9		46.1		48.0	
Value of home consumption						
Items plus rental						
Value of farm						
Dwellings	33.6		35.4		38.2	
Net Change in						
Inventory	-11.3		16.5		28.9	

Realized Gross Farm						
Income	626.1		747.0		784.4	

¹Source: U.S. Department of Agriculture, Economic Research Service, "Farm Incomes—State Estimate".

²Data on rainbow trout is from a 1972 survey of the Idaho rainbow trout farming industry.

Table 3: Idaho farm production expenses, 1950, 1955, 1960, 1965, 1970.¹

Items	1950	1955	1960	1965	1970
	Million dollars	Million dollars	Million dollars	Million dollars	Million dollars
Fixed Costs					
Depreciation	33.2	46.4	53.1	69.3	97.0
Taxes	12.4	16.4	19.5	21.4	27.9
Interest on Farm Mortgages	3.9	7.4	13.5	19.9	30.3
Net Rent of Landlord	13.3	11.8	11.7	15.8	17.9
Total	62.7	81.9	97.8	126.3	173.1
Operating Expenses					
Feed	27.4	27.9	40.0	47.3	62.2
Livestock	14.3	6.9	16.5	24.9	43.6
Seed	6.2	6.3	8.0	15.5	18.6
Fertilizer & Lime	10.8	30.2	43.0	20.6	30.1
Repairs & Operation of Capital Items	36.6	44.8	52.8	61.2	78.9
Miscellaneous	28.5	33.1	42.5	59.1	85.5
Hired Labor	35.9	36.7	41.1	42.9	37.5
Total²	159.8	186.0	243.8	271.5	356.5
Total Production Expenses	222.5	267.9	341.6	397.8	529.6
Net Farm Income	136.5	113.9	119.8	207.2	249.5

¹Source: U.S. Department of Agriculture, Economic Research Service, "Farm Incomes—State Estimate".

²Individual items may not add to total due to rounding.

Table 4: Number of farms and percent of commercial farms by economic class, Idaho, 1950 and 1969.

Economic class ¹	1950		Economic class ¹	1969	
	No. of commercial farms	Percent of total farms		No. of commercial farms	Percent of total farms
I	1,700	4.21	I	3,152	12.37
II	5,546	13.75	II	4,251	16.68
III	9,171	22.75	III	4,870	19.11
IV	8,672	21.51	IV	4,022	15.78
V	5,379	13.34	V	3,210	12.60
VI	1,920	4.76	VI	786	3.08

¹Class I farms are those with total value of sales of \$40,000 or more

Class II farms are those with total value of sales of \$20,000-\$39,999

Class III farms are those with total value of sales of \$10,000-\$19,999

Class IV farms are those with total value of sales of \$5,000-\$9,999

Class V farms are those with total value of sales of \$2,500-\$4,999

Class VI farms are those with total value of sales of under \$2,500

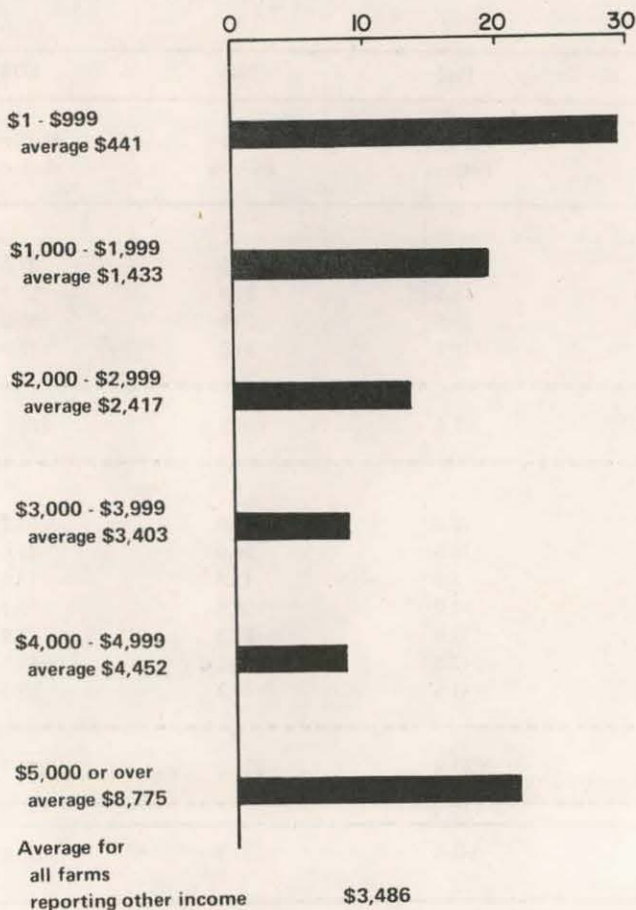


Fig. 1. Percentage of commercial farm operator households reporting income from sources other than the farm operation, by amount of income, Idaho, 1964.

Value of Sales

Sales per farm in Idaho in 1969 averaged \$25,476, and realized gross farm income averaged \$29,323.³ In 1969, 20,291 of the state's 25,475 farms — or nearly 80 percent — were classified as commercial farms. Farms in economic classes I-V accounted for 98 percent of the total value of sales. During the 1950-70 period, the number of farms with total value of sales of \$40,000 or more increased by 85 percent (Table 4).

Significant Changes

During the 1950-69 period, the value of farmland and buildings per farm in Idaho increased by 350 percent; the use of commercial fertilizer increased by about 800 percent; expenditures on feed and labor increased by 160 and 70 percent, and expenditures on seed, plants, etc., increased by 100 percent.

The number of farms with less than 50 acres declined by 50 percent and the number of farms with 500 acres or more increased by 10 percent. The number of farms selling dairy products declined by 70 percent, and the number of farms selling eggs decreased by 90 percent (Fig. 2).

³Realized gross farm income is total sales plus government payments, value of home consumption, rental value of farm dwellings, and net change in inventory.

Agricultural Efficiency

Agriculture should be considered one of the most efficient industries in the U.S. Only a few industries can match agriculture's performance of 49 percent increase in output with only an 8 percent increase in input in the 22-year period, 1950-1971. Agricultural efficiency has benefited both the consumer and other sectors of the economy by reducing the number of people needed to supply food and fibers and reducing the proportion of disposable income spent for food. While the efficiency measures used in this study are not available for individual states, the United States' figures are considered representative of what has happened in Idaho. The increase in agricultural efficiency is reflected in the following efficiency measures.

Farm Output and Input

Farm output increased significantly during the past two decades. From 1950 to 1971, overall farm output increased by 49 percent, including a 41 percent increase in livestock production and a 46 percent increase in crop production. During the same period farm inputs increased by 8 percent. In other words, for every 1 percent increase in farm inputs farm output increased by more than 6 percent. Both crop production and livestock production exceeded the 36 percent increase in U.S. population (Fig. 3).

Farm Outputs Per Unit of Input

Man-hours of farm work has declined significantly in the past two decades. Man-hours in agriculture decreased by 57 percent between 1950 and 1971, while output per man-hour increased by 246 percent. Output per unit of input increased by 38 percent (Fig. 4). The efficiency in input utilization is basically due to the research efforts carried on by the various state agricultural experiment stations and the United States Department of Agriculture.

Crop Production and Cropland Used for Crops

Crop production in the U.S. has increased by 46 percent since 1950, while cropland used for crops decreased by 8 percent. Crop production per acre increased by 59 percent (Fig. 5). Because of the efficient use of land in crop production, a significant amount of cropland is being diverted to other uses such as pasture for livestock production, recreational areas, or conserving the land for future uses.

Farm Employment

In 1971 total farm workers in the United States amounted to 4.2 million of which 76 percent were family workers and 24 percent were hired workers. During the 1950-1971 period, the number of farm workers declined by 57 percent, family workers by 58 percent, and hired workers by 56 percent (Fig. 6). In 1950, one agricultural worker produced enough food and fiber for himself and 15 other people; by 1970, one agricultural worker produced enough for himself and 46 other people. The agricultural industry in the United States released 5.7 million workers between 1950 and 1971 to other sectors of the economy.

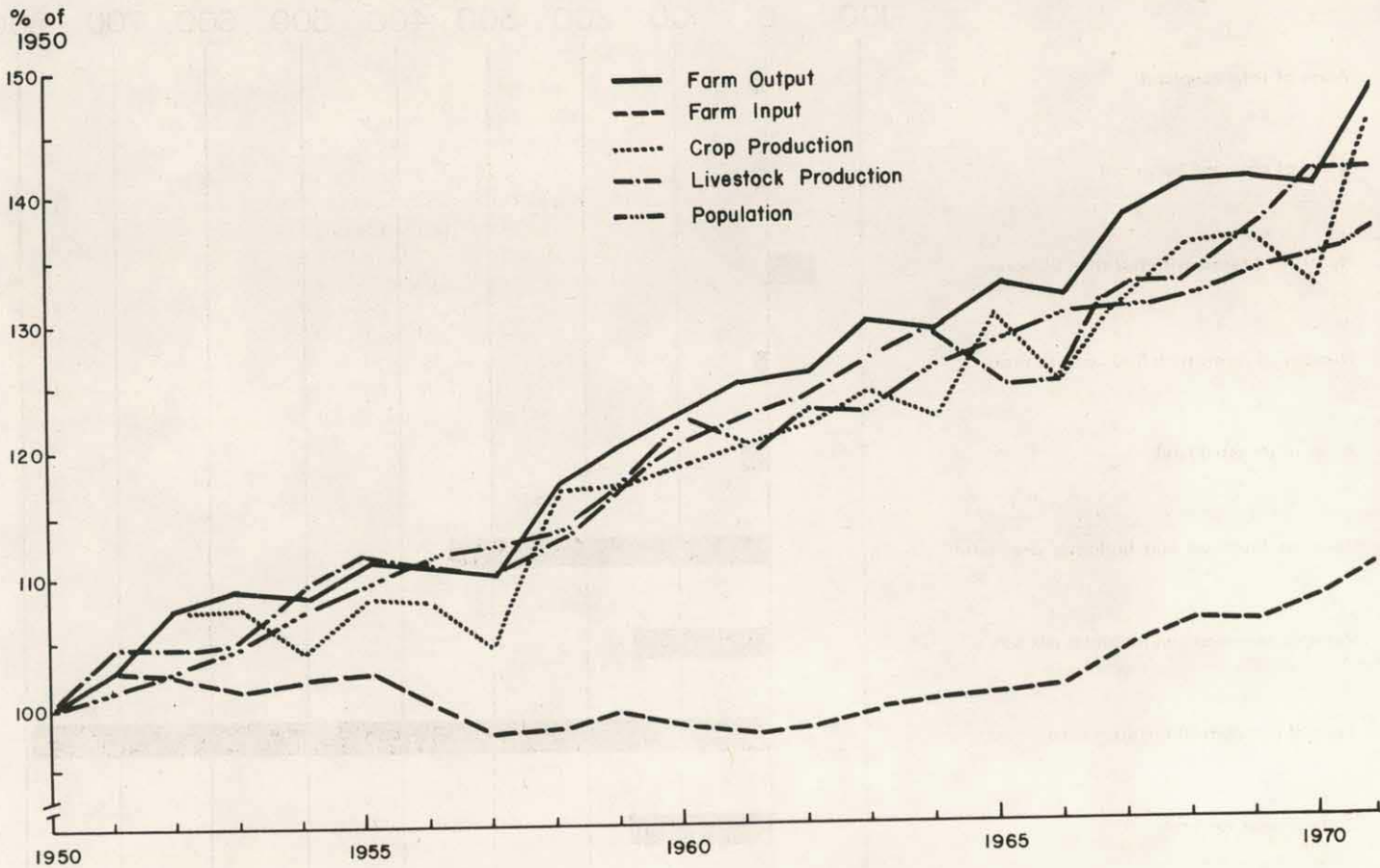


Fig. 3. Percentage changes in farm output, farm input, crop production, livestock production and population in the United States, 1950 to 1971.

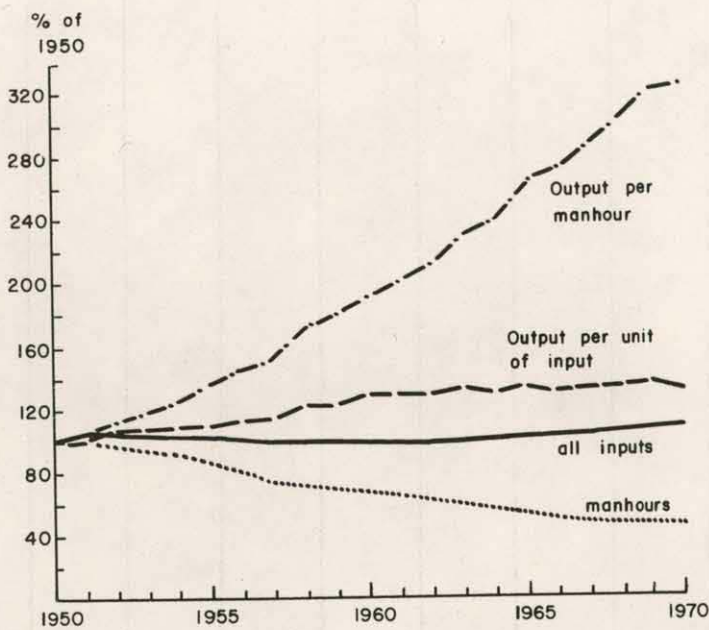


Fig. 4. Percentage changes in output per manhour and per unit of input for U.S. farms, 1950 to 1971.

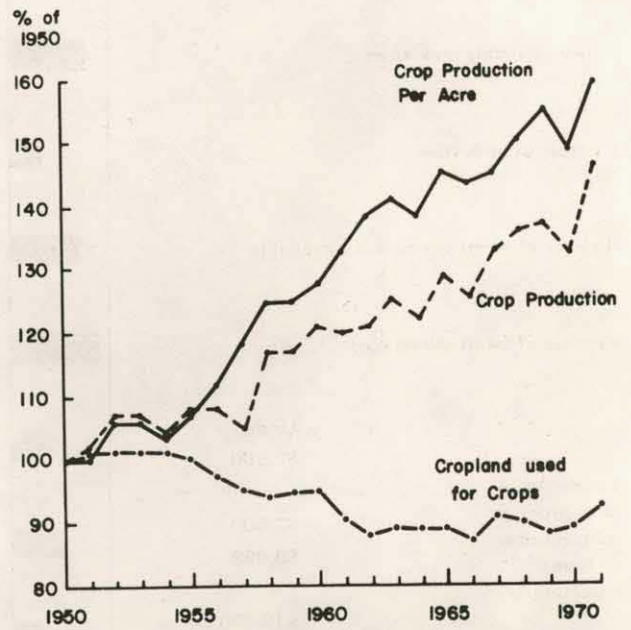


Fig. 5. Percentage change in crop production per acre and cropland used for crops, U.S., 1950 to 1971.

Million
Workers

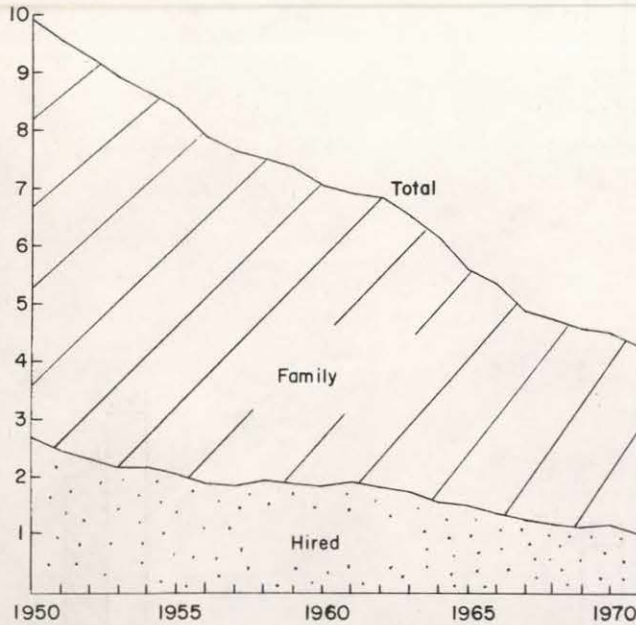


Fig. 6. Farm employment in the United States, 1950 to 1971.

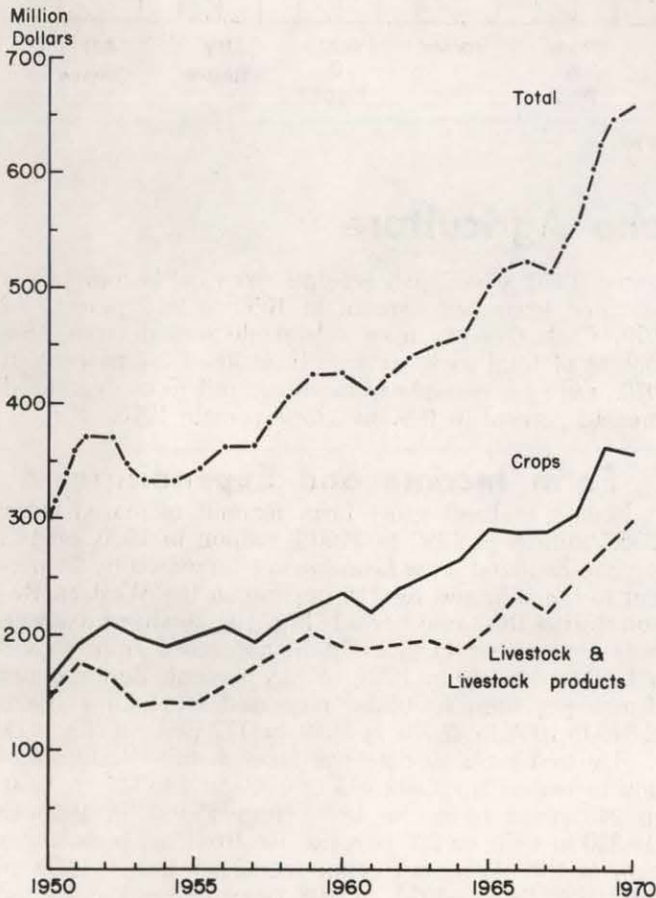


Fig. 8. Cash receipts from crops, livestock and total farm marketing in Idaho, 1950 to 1970.

Expenditures for Food Relative to Income

Consumer disposable income increased from \$302.2 billion in 1957 to \$669.9 billion in 1970, a gain of 55 percent. Expenditures on food, other goods, and services increased by 78.4 percent, 112.7 percent, and 150.3 percent respectively. Consumer savings increased by 161.3 percent. Food expenditures were the lowest among other consumer expenditures (Fig. 7).

In 1957, 21 cents of each consumer dollar went for food, 37 cents for other goods, 35 cents for services, and 7 cents for savings. In 1970, however, 17 cents of each consumer dollar went for food, 36 cents for other goods, 39 cents for services, and 8 cents for savings. In other words, the proportion of consumer dollar spent on food declined by 19 percent and that portion spent on other goods decreased by 2.7 percent, while the proportions used for services and for savings increased by 11.4 and 14.3 percent respectively. Efficiency in agricultural production and marketing provided for the increased consumer expenditures in other sectors of the economy.

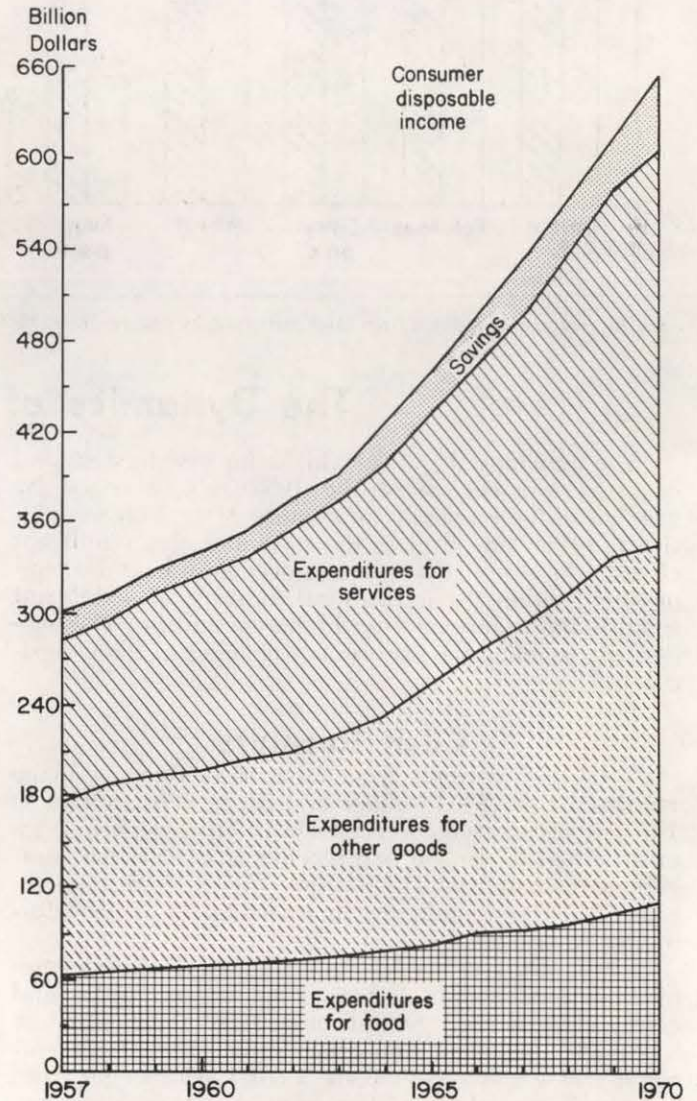


Fig. 7. Income and expenditures in the United States, 1957 to 1970.

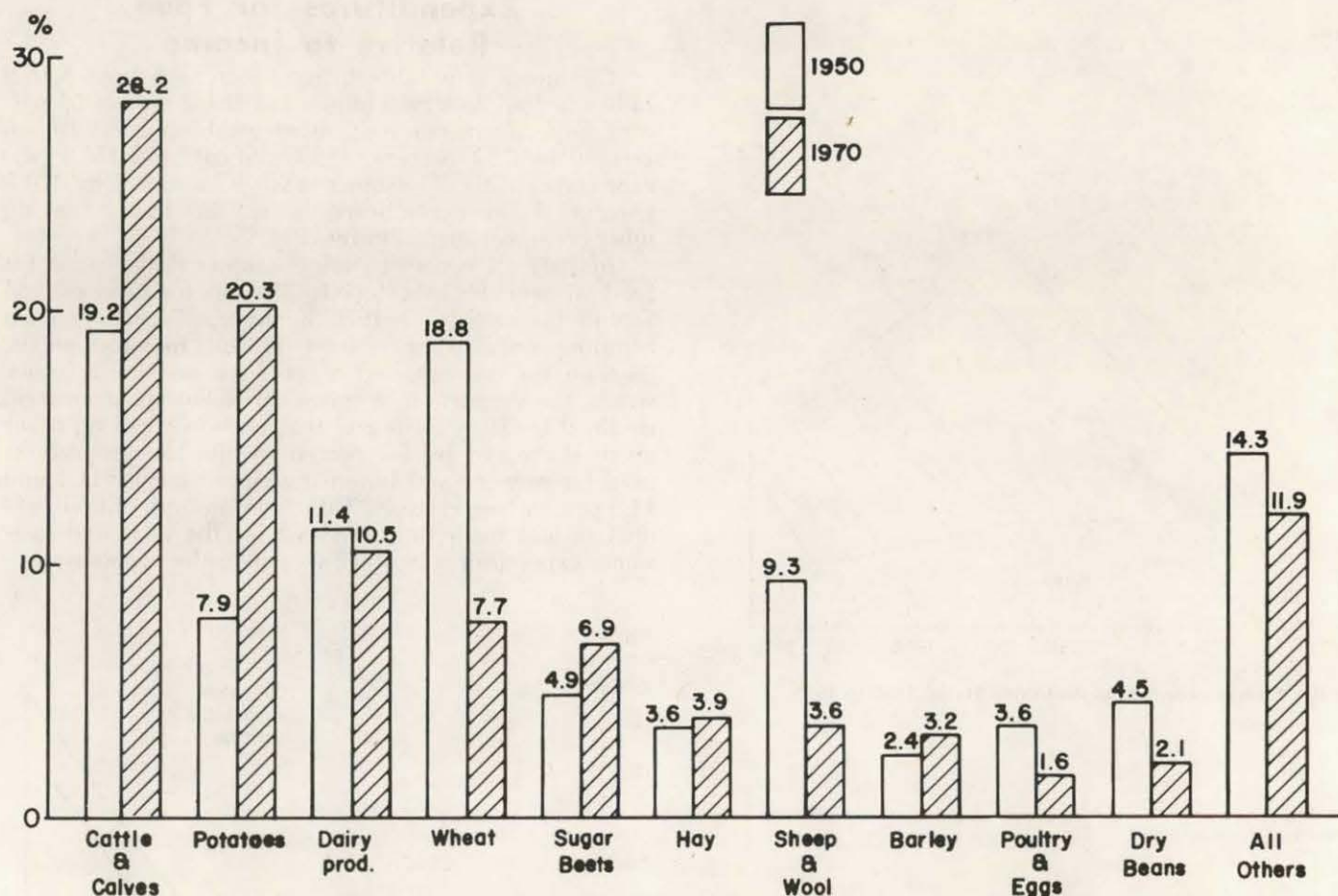


Fig. 9. Idaho cash receipts from farm marketing by commodities, 1950 and 1970.

The Dynamics of Idaho Agriculture

The agricultural industry in Idaho sustained significant developments since the 1950's characterized by changes in the economic importance of agriculture relative to other industries in the state and also significant changes in the relative importance of individual commodities within the agricultural industry. A significant trend has also developed in Idaho agriculture. This section will examine the direction of changes in Idaho agriculture.

Cash Receipts

Total cash receipts from farm marketings in Idaho increased from \$302 million in 1950 to \$664 million in 1970, or 120 percent. Receipts from crop marketing increased by 125 percent and receipts from livestock marketings increased by 113 percent (Fig. 8). U.S. total receipts from farm marketing increased by 73 percent during the same period.

Farm cash receipts for individual agricultural commodities is shown in Fig. 9. Potatoes and cattle and calves showed the greatest percentage increase while wheat and sheep and wool showed the greatest percentage decrease between 1950 and 1970. Cash receipts from potatoes increased from 7.9 percent of total cash receipts from all agricultural commodities in 1950 to 20.3 per-

cent in 1970, while cash receipts from cattle and calves increased from 19.2 percent in 1950 to 28.2 percent in 1970. Cash receipts from wheat decreased from 18.8 percent of total cash receipts in 1950 to 7.7 percent in 1970, and cash receipts from sheep and wool decreased from 9.3 percent in 1950 to 3.6 percent in 1970.

Farm Income and Expenditures

Idaho's realized gross farm income increased from \$336.7 million in 1950 to \$750.1 million in 1970, or 123 percent. Realized gross farm income increased by 78 percent in the U.S. and by 115 percent in the Western Region during the same period (Fig. 10). Realized average gross income per farm in Idaho increased from \$8,358 in 1950 to \$26,319 in 1970, or 215 percent. Realized net income per farm in Idaho increased from an average \$2,840 in 1950 to \$7,737 in 1970, or 172 percent (Fig. 11).

Realized gross income per farm in the Western Region increased from \$11,995 in 1950 to \$40,727 in 1970, up 240 percent; in the U.S., from \$5,995 in 1950 to \$19,350 in 1970, or 223 percent. Realized net income per farm in the Western Region increased from \$4,234 in 1950 to \$8,829 in 1970, or 108 percent; for the United States, the increase was from \$2,389 in 1950 to \$5,373 in 1970, or 125 percent.

Total net farm income⁴ in Idaho increased from \$136.5 million in 1950 to \$249.5 million in 1970, or 83 percent. The increase from 1960 to 1970 was significantly greater than from 1950 to 1960. Total net farm income increased by 1.2 percent during the 1950-1960 period and by 80.5 percent during the 1960-1970 period. The difference in the increase between the two periods is due to the significant increase in farm inventories in the 1960-1970 period relative to the 1950-1960 period. Total net income per farm in Idaho increased from \$3,267 in 1950 to \$8,753 in 1970, or 188 percent. For the Western Region the increase was from \$4,333 in 1950 to \$9,036 in 1970, or 108 percent; and for the U.S. the increase was from \$2,421 in 1950 to \$5,451 in 1970 or 125 percent.⁵

⁴Total net farm income is realized net income plus net change in farm inventories.

⁵U.S. Department of Agriculture, Economic Research Service, "Farm Income - State Estimates."

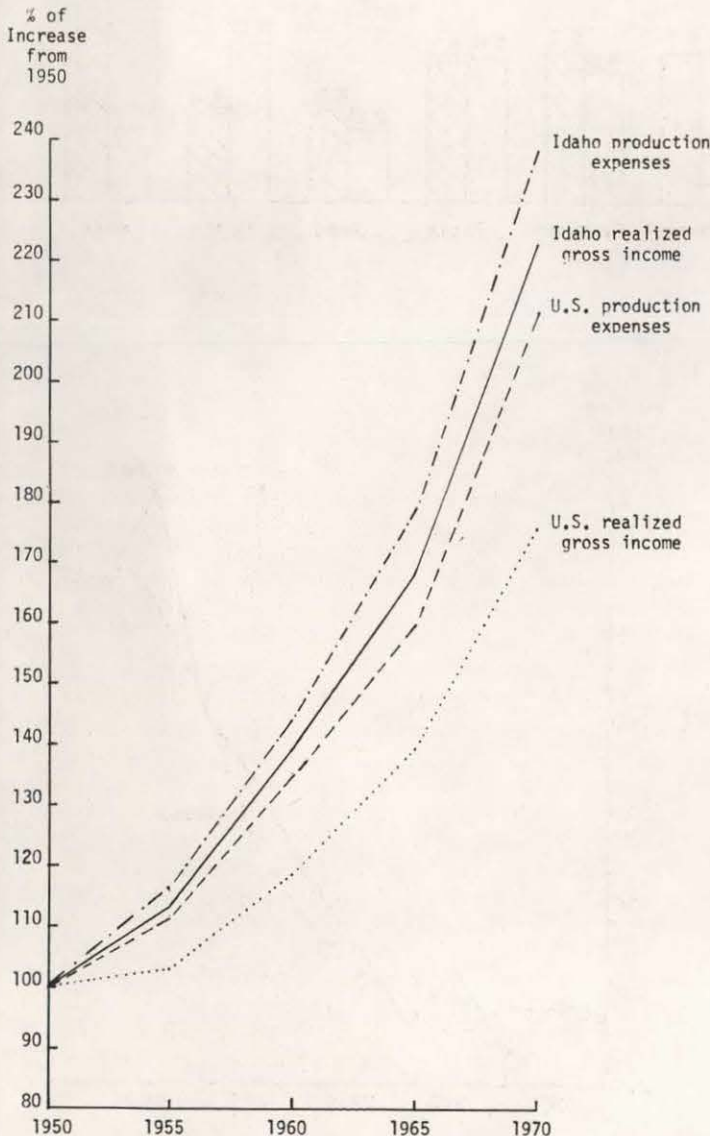


Fig. 10. Farm income and expenditures in Idaho and the United States, 1950 and 1970.

Idaho farm production expenses increased from \$222.3 million in 1950 to \$529.6 million in 1970, or 138 percent. U.S. farm production expenses increased by 110 percent, the Western Region by 143 percent, during the same period (Fig. 10). The higher increase in production expenses in the Western Region is basically due to the more rapid expansion of the agricultural industry in the West and to the more capital-intensive products in the region.

Fig. 12 shows farm production expenses in Idaho by types and proportion of expenses in 1950 and 1970. Farm operating expenses constitute over 67 percent of the total farm production expenses in Idaho. Between 1950 and 1970, farm operating expenses such as feed, seed, fertilizer, repairs, labor, etc., increased by 124 percent in Idaho compared to 94 percent for the U.S. Fixed expenses such as depreciation, taxes, and interest increased by 176 percent in Idaho and 155 percent in the U.S.

Taxes on farm property in Idaho increased from \$12.3 million in 1950 to \$27.9 million in 1970, or 127 percent. In the same period, taxes on farm property increased by 226 percent in the U.S. and by 246 percent in the Western Region. Taxes on farm property in Idaho

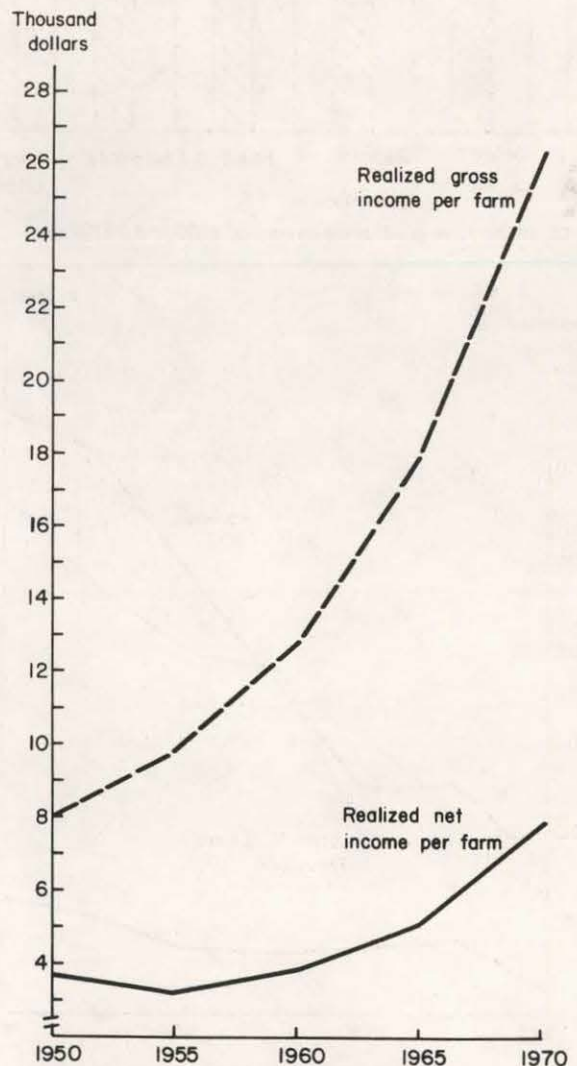


Fig. 11. Realized gross and realized net incomes per farm in Idaho, 1950 to 1970.

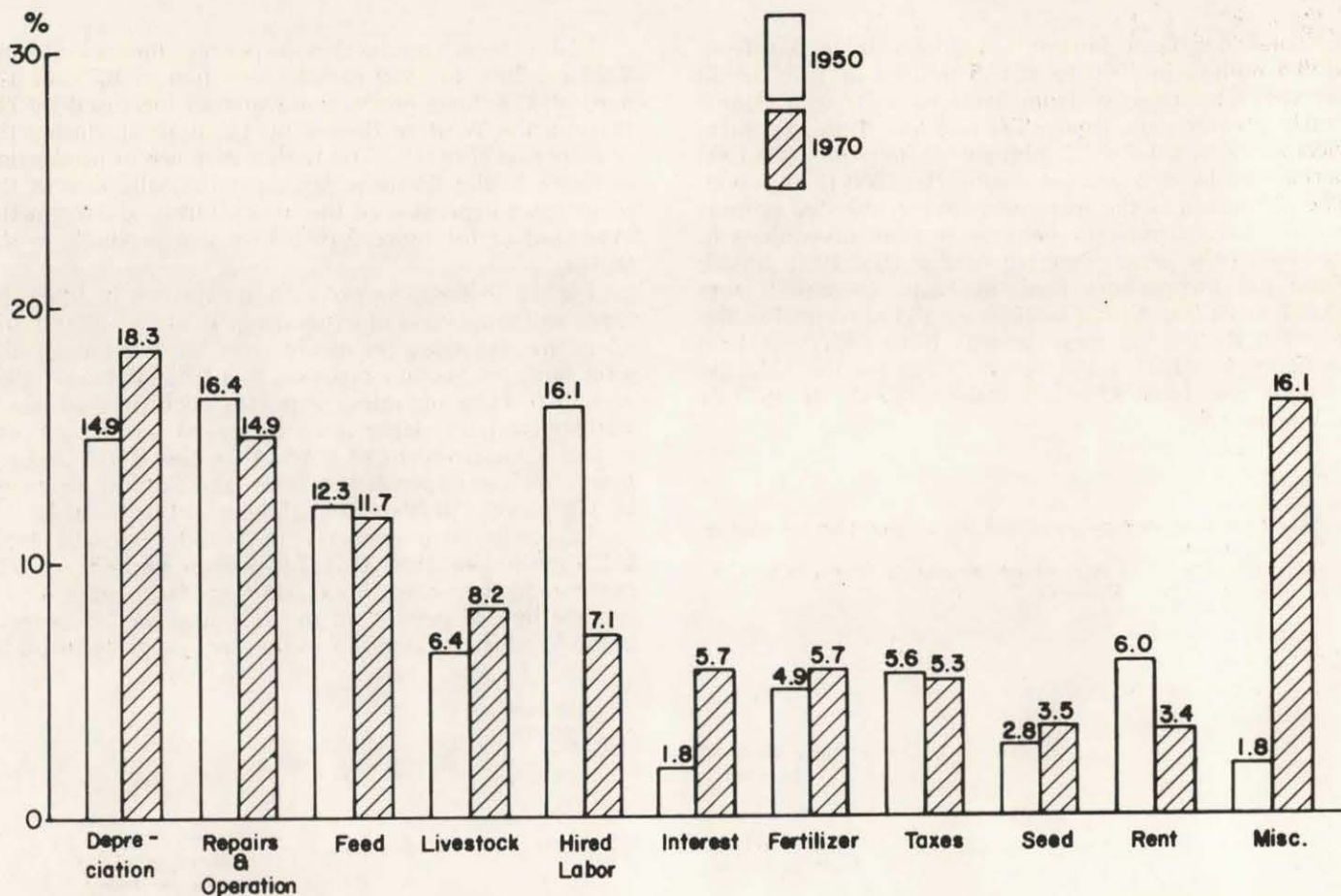


Fig. 12. Idaho farm production expenses, 1950 and 1970.

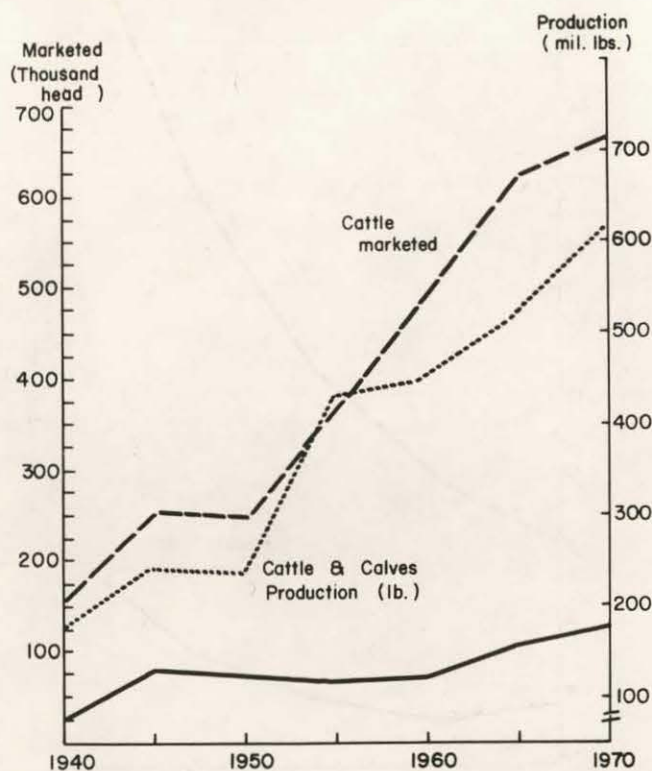


Fig. 13. Production and marketing of cattle and calves in Idaho, 1940 to 1970.

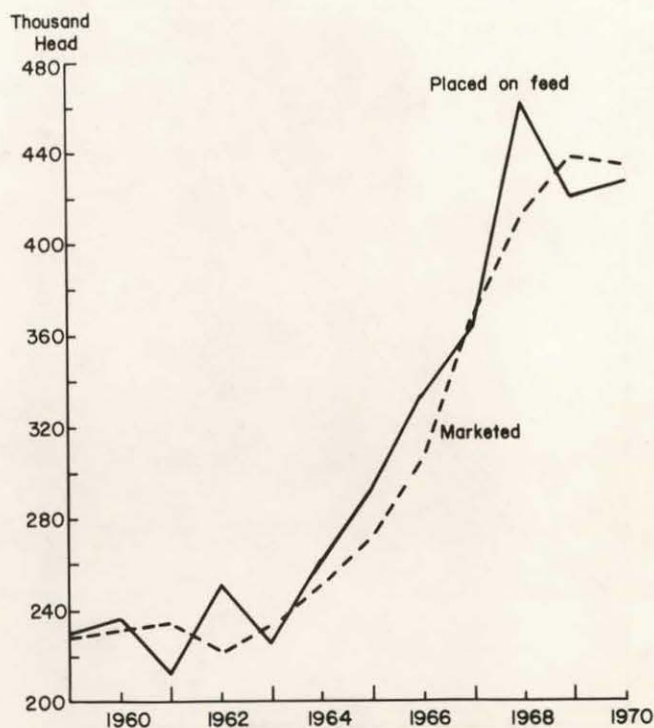


Fig. 14. Number of cattle and calves placed on feed and number of fed cattle marketed in Idaho, 1959 to 1970.

showed the lowest increase of any state in the Western Region. Property tax per farm in Idaho increased from \$305 in 1950 to \$979 in 1970, or 221 percent. But in the U.S., tax per farm increased from \$170 in 1950 to \$1,024 in 1970, or 502 percent, and in the Western Region, from \$374 in 1950 to \$2,824 in 1970, or 655 percent. The increase in property tax per farm is due not only to an increase in total taxes on farm property but also to the decrease in the number of farms. The number of farms declined by 29 percent in Idaho during this period, by 40 percent in the Western Region, and by 43 percent in the U.S.⁶

Farm Production

Agricultural production in Idaho sustained significant changes during the past two decades. Cattle and calves and potatoes emerged as the state's two principal agricultural commodities, accounting for about 50 percent of the total cash receipts from farm marketings.

Beef

Beef is the only livestock commodity that showed a significant increase in both quantity produced and marketed. In 1940, total production of cattle and calves amounted to 125 million pounds, while in 1970 cattle and calves production totalled 612 million pounds — an increase of 390 percent. The number of cattle marketed increased from 160,000 head in 1940 to 630,000 head in 1970 — an increase of 294 percent. The number of calves marketed increased from 25,000 head in 1940 to 150,000 head in 1970 — an increase of 500 percent (Fig. 13).

⁶U.S. Department of Agriculture. "Agricultural Statistics."

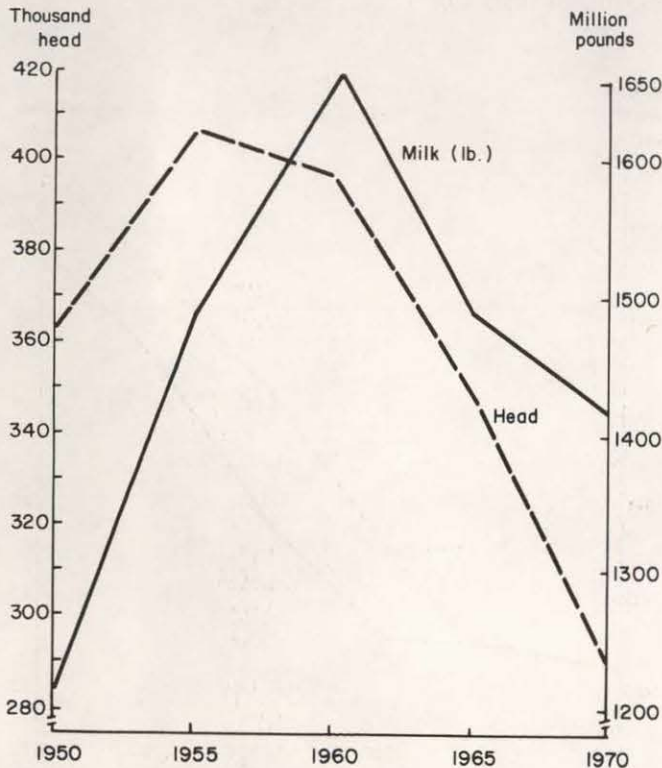


Fig. 15. Number of cows and heifers kept for milk and amount of milk production in Idaho, 1950 to 1969.

Cattle feeding is the fastest growing sector of the beef industry. The number of cattle placed on feed increased from 230,000 head in 1959 to 426,000 head in 1970 — an increase of 85 percent, while the number of fed cattle and calves marketed out of Idaho's feedlots increased from 227,000 head in 1959 to 434,000 head in 1970 — an increase of 91 percent.⁷ The number of fed cattle marketed decreased in 1970 for the first time since 1962 (Fig. 14).

Dairy

The number of cows and heifers kept for milk in Idaho dropped from 363,000 head in 1950 to 290,000 in 1969 — a decrease of 20 percent. These animals actually increased between 1950 and 1955, reaching a maximum of 407,000 head in 1955. Since then, numbers have steadily decreased. Despite this decrease, production of milk increased from 283 million pounds in 1950 to 1,430 million pounds in 1970 — an increase of 405 percent. Milk production reached the maximum of 1,646 million pounds in 1960 and since showed a continuous decrease (Fig. 15). The significant increase in milk production per animal is basically due to improved breeding and nutritional research carried out by the various agricultural experiment stations throughout the nation.

Sheep

Sheep is another livestock commodity that sustained a significant drop in the past two decades, declining from 1.8 million head in 1940 to 630,000 head in 1970, or 65 percent. Meat production also decreased from 112 million pounds in 1940 to 60 million pounds in 1970, or 46

⁷Yearly data prior to 1959 is not available.

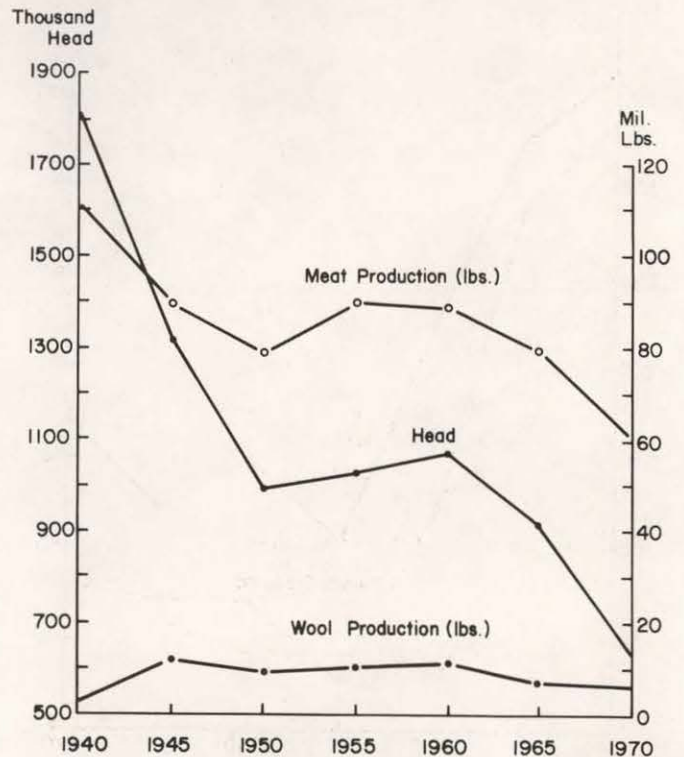


Fig. 16. Number of stock sheep on farms and pounds of meat and wool production in Idaho, 1940 to 1970.

percent. However, in spite of the decrease in number of sheep, wool production increased from 1.7 million pounds in 1940 to 6.8 million pounds in 1970, or 295 percent (Fig. 16). Wool production reached a maximum of 11.8 million pounds in 1945. The continuous decline in wool production in the 1960's is due to the decline in demand for wool in favor of cotton and synthetic fiber.

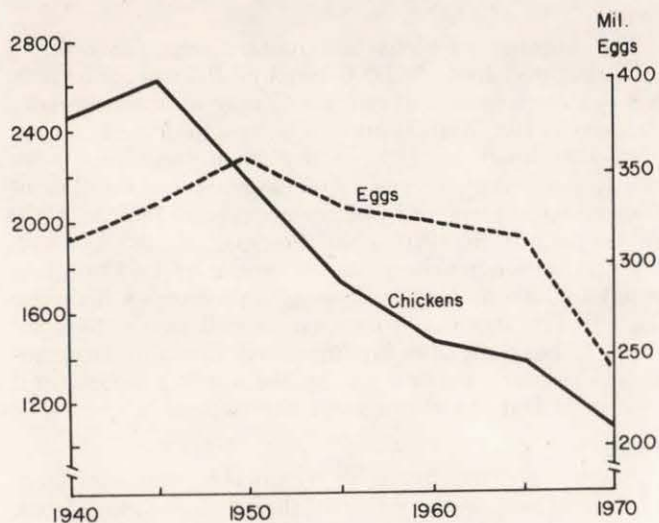


Fig. 17. Number of laying chickens on farms and total egg production in Idaho, 1940 to 1970.

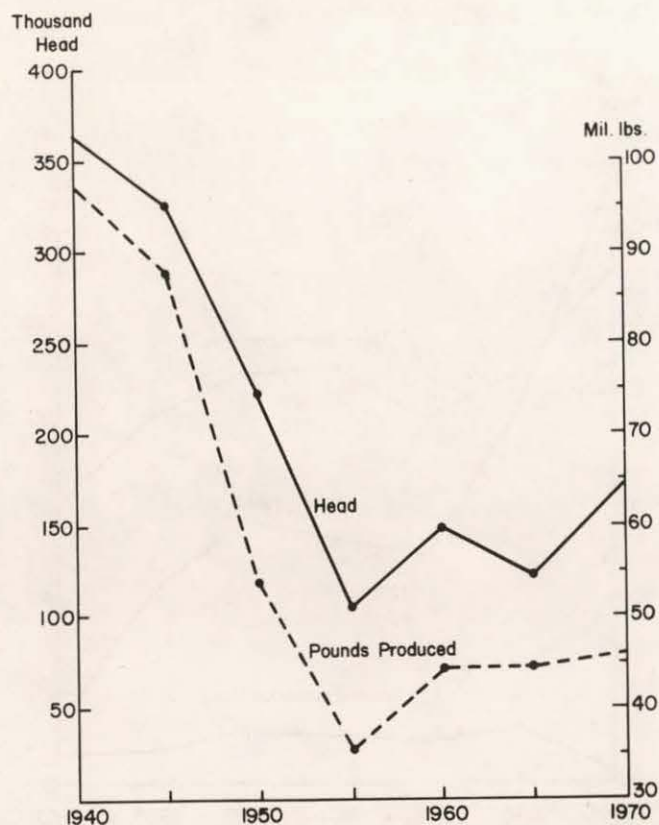


Fig. 18. Number of hogs on farms and pounds of pork produced in Idaho, 1940 to 1970.

Chickens and Eggs

Chickens and eggs have maintained a steady decline since 1940. The number of chickens on farms declined from 2.46 million in 1940 to 1.1 million in 1970, or 55 percent. Egg production reached a maximum of 312 million eggs in 1950 and dropped to a low of 188 million in 1970 — a decrease of 40 percent (Fig. 17). The decrease in chicken and egg production in Idaho is affected by the development of large scale integrated operations in the South and the Midwest which make it hard for the small-size Idaho producer to compete.

Hogs

Number of hogs on farms and the production of hogs declined continuously in Idaho and the U.S. during the 1940's and early 1950's. Number of hogs in Idaho declined from 363,000 head in 1940 to a low of 150,000 in 1955. Production of hogs decreased from 97.3 million pounds in 1940 to 35.4 million pounds in 1955. Since 1955 the number of hogs on farms and meat production became more stable with a slight upward trend, reaching a high of 173,000 head and 45.8 million pounds in 1970 (Fig. 18).

Potatoes

Potatoes is the leading crop in Idaho and second only to cattle and calves in terms of cash receipts from agricultural commodities. Idaho also leads the nation in potato production. Potato acreage harvested had a sharp uptrend since 1955 after a slight decrease between 1945 and 1955. The number of acres harvested went from 160,000 acres in 1955 to 325,000 acres in 1970 — an increase of 103 percent. Potato production increased from 31 million cwt. in 1955 to 82 million cwt. in 1970 — up 165 percent (Fig. 19).

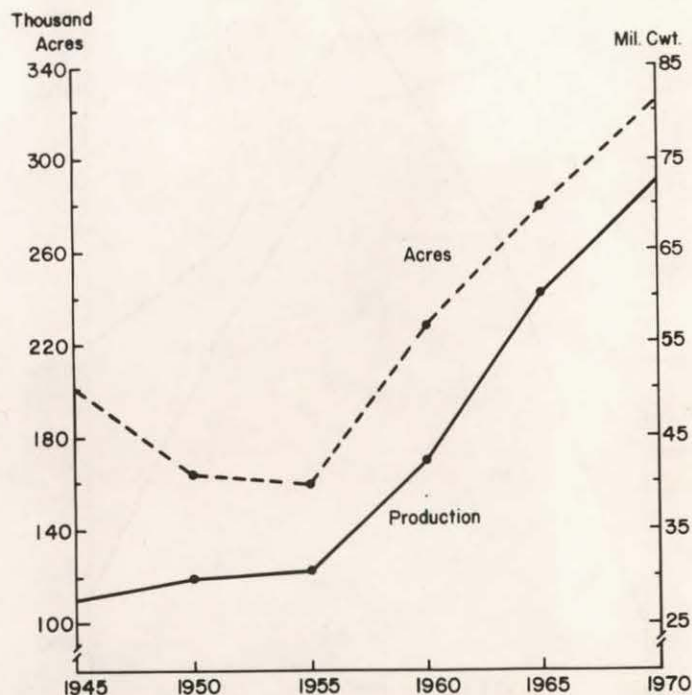


Fig. 19. Potato acreage harvested and total potato production in Idaho, 1945 to 1970.

Wheat

Among crops, wheat is second to potatoes in cash receipts. Harvested winter wheat acreage reached the peak of 820,000 acres in 1950 and declined to a low of 658,000 in 1960. In 1970, about 810,000 were harvested. Production of winter wheat showed a slow decline between 1945 and 1960 and reached a low of 17.5 million bushels in 1960. Winter wheat production increased sharply since 1960, reaching a high of 35.5 million bushels in 1970.

Harvested spring wheat acreage reached a high of 530,000 acres in 1950 and has decreased since, reaching a low of 293,000 acres in 1970, or 45 percent less. Production of spring wheat reached a high of 17.8 million bushels in 1960 and since then showed a continuous decline, reaching a low of 9.5 million bushels in 1970. Overall, Idaho's harvested wheat acreage declined from 1,350,000 acres in 1950 to 1,103,000 acres in 1970, or 18 percent decrease. Of this decrease, 237,000 acres is spring wheat and only 10,000 acres is winter wheat. Production of wheat increased from 37 million bushels in 1950 to 45 million bushels in 1970 — an increase of 22 percent (Fig. 20).

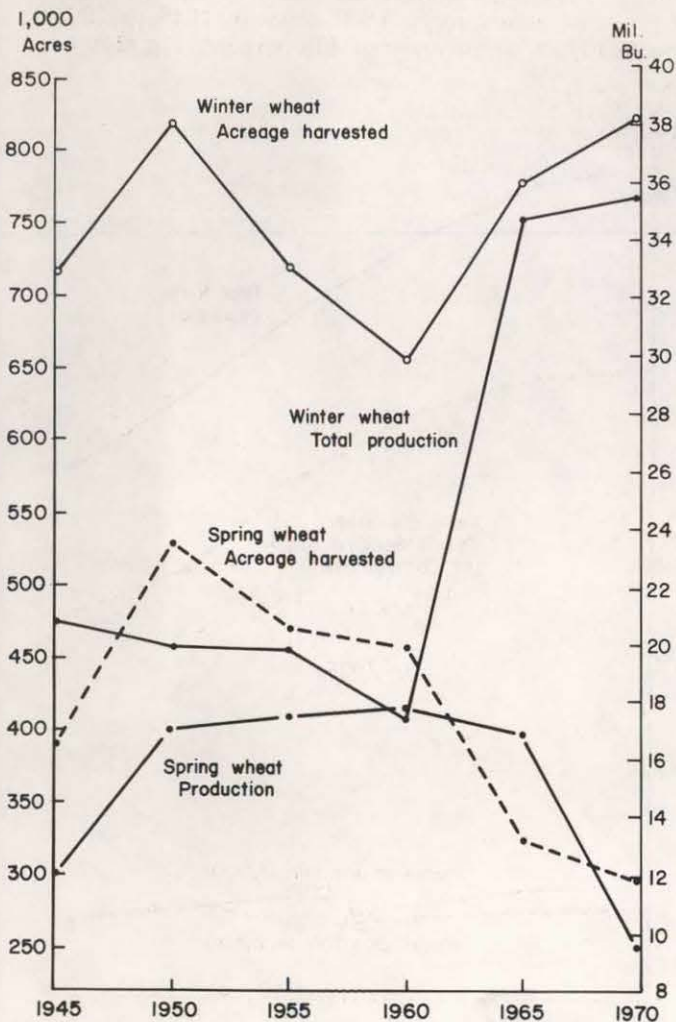


Fig. 20. Winter wheat and spring wheat acreage harvested and bushels produced in Idaho, 1945 to 1970.

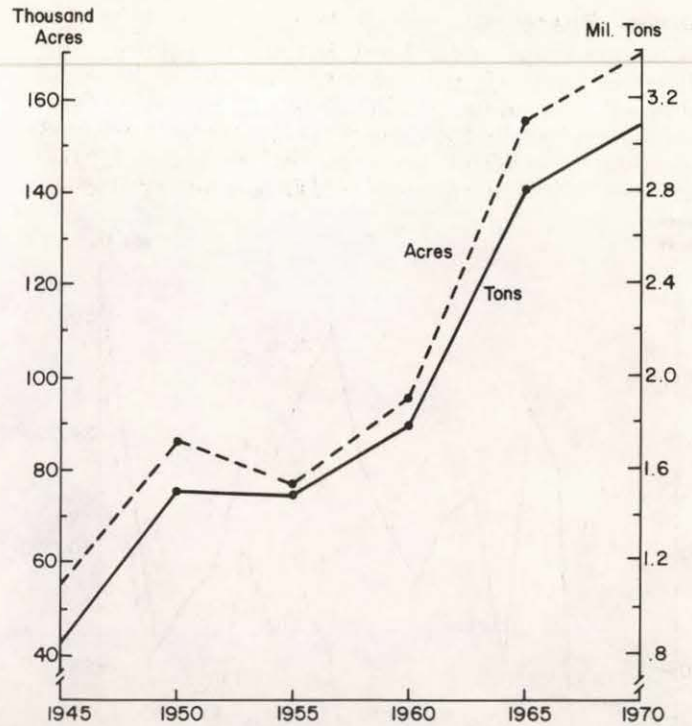


Fig. 21. Sugar beet acreage harvested and tonnage produced in Idaho, 1945 to 1970.

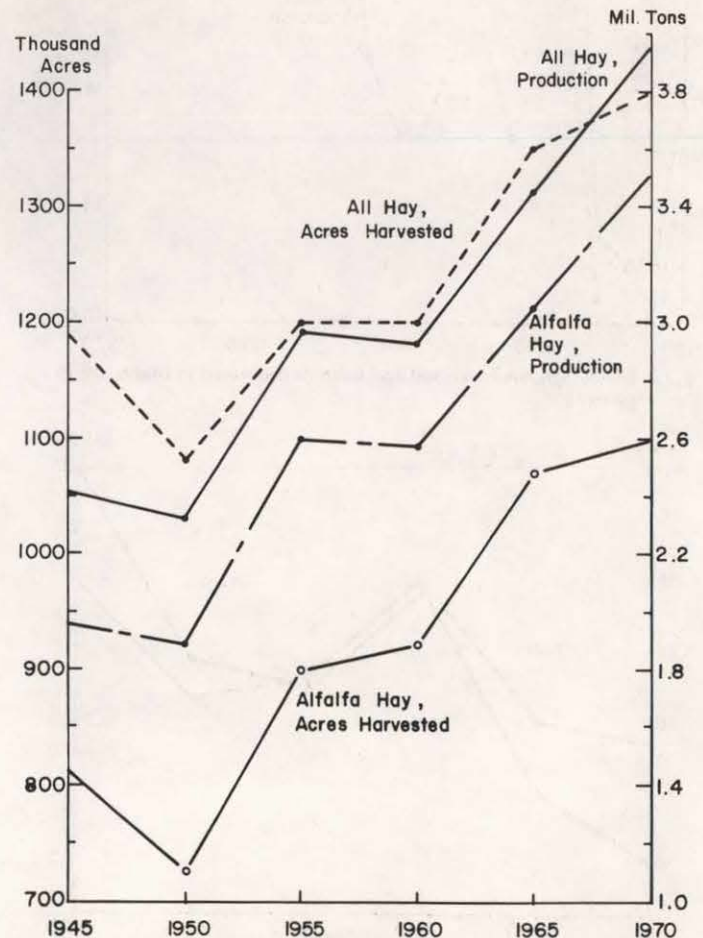


Fig. 22. Acreage harvested and total production of all hay and alfalfa hay in Idaho, 1945 to 1970.

Sugar Beets

Among crops, sugar beets is third to potatoes and wheat in terms of cash receipts. Both acres harvested and production of sugar beets show a sharp and continuous increase since 1945. Sugar beet acreage harvested increased from 50,300 acres in 1945 to about 170,000 acres in 1970 — an increase of 240 percent. Production

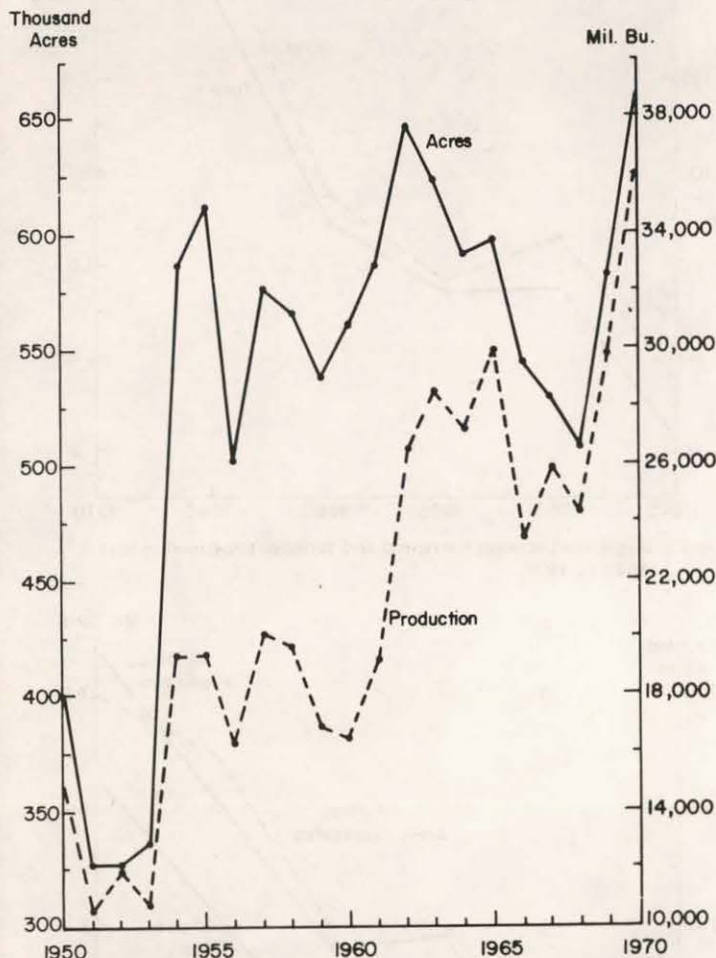


Fig. 23. Barley acreage harvested and bushels produced in Idaho, 1950 to 1970.

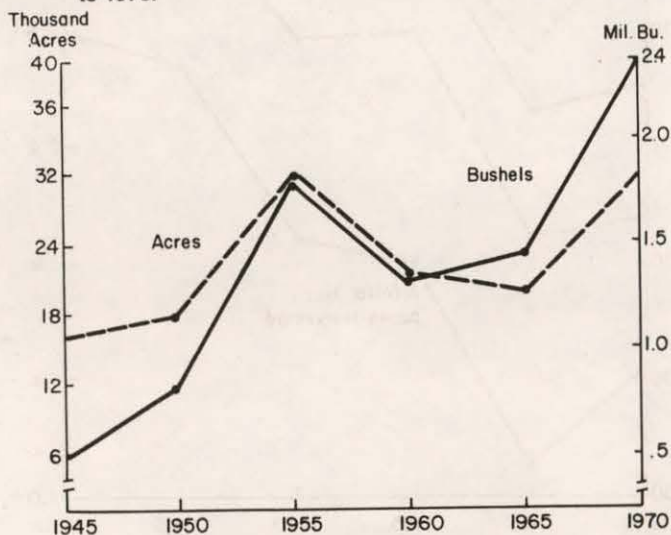


Fig. 24. Corn acreage harvested for grain and bushels produced in Idaho, 1945 to 1970.

increased from 870 thousand tons in 1945 to 3.1 million tons in 1970 — an increase of 256 percent (Fig. 21).

Hay

Hay is Idaho's fourth crop in terms of cash receipts. Hay acreage harvested was at a low of 1,080,000 acres in 1950, but since then has increased continuously to a total of 1,400,000 acres in 1970. That is a 30 percent increase. Hay production totaled only 2.35 million tons in 1950 but had increased to 3.95 million tons in 1970 — an increase of 68 percent. Alfalfa hay constitutes 8.8 percent of all hay production in Idaho (Fig. 22). The increase in hay production is influenced by the rigid increase in livestock production.

Barley

With the increase in livestock feeding, both barley acreage and barley production increased in the past two decades. Barley acreage harvested increased from 425,000 acres in 1950 to 660,000 in 1970 — an increase of 55 percent. Barley production increased from 15,000 million bushels in 1950 to 36,300 million bushels in 1970 — an increase of 142 percent (Fig. 23).

Corn

The production of corn for grain increased from 200 thousand bushels in 1945 to 2.4 million bushels in 1970 — an increase of 1,100 percent. Acres of corn harvested for grain increased from 5,800 acres in 1945 to 29,500 acres in 1970 — an increase of 408 percent (Fig. 24).

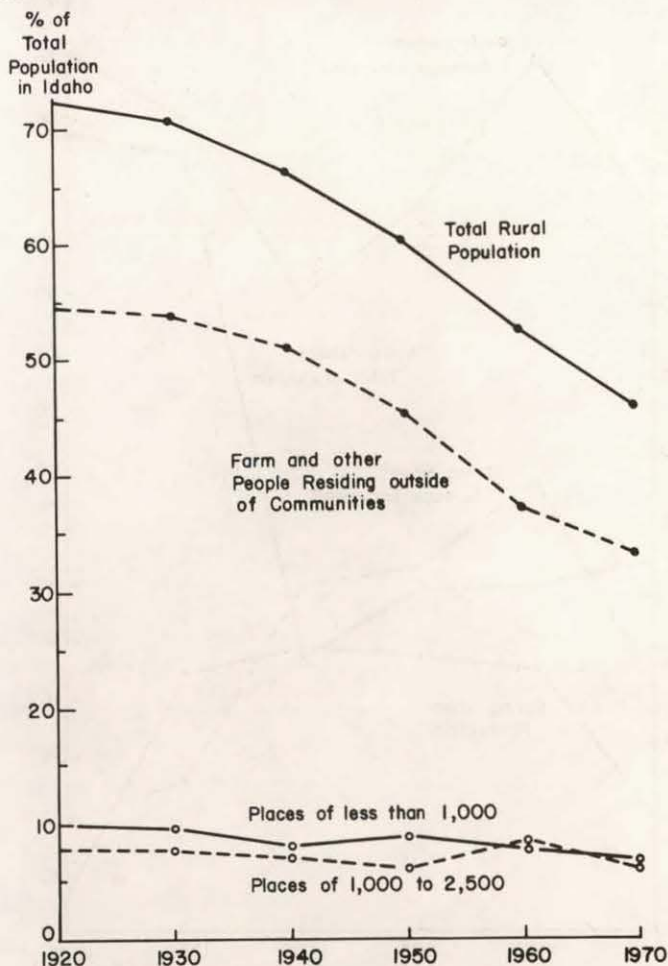


Fig. 25. Percentage of Idaho population living in rural areas and on farms, 1920 to 1970.

Wheat

Among crops, wheat is second to potatoes in cash receipts. Harvested winter wheat acreage reached the peak of 820,000 acres in 1950 and declined to a low of 658,000 in 1960. In 1970, about 810,000 were harvested. Production of winter wheat showed a slow decline between 1945 and 1960 and reached a low of 17.5 million bushels in 1960. Winter wheat production increased sharply since 1960, reaching a high of 35.5 million bushels in 1970.

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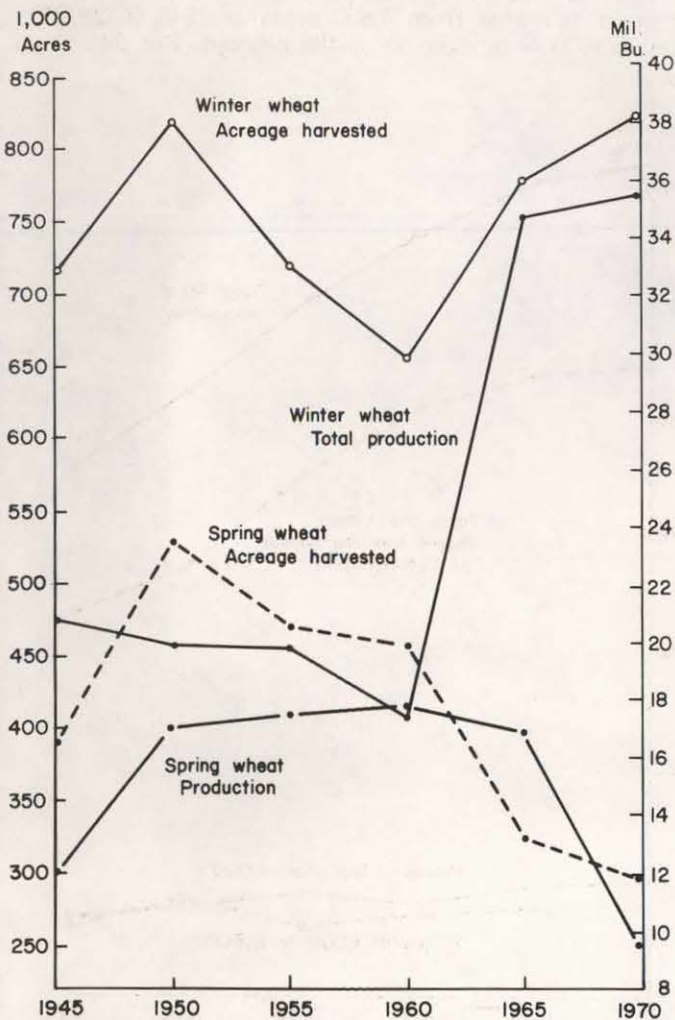


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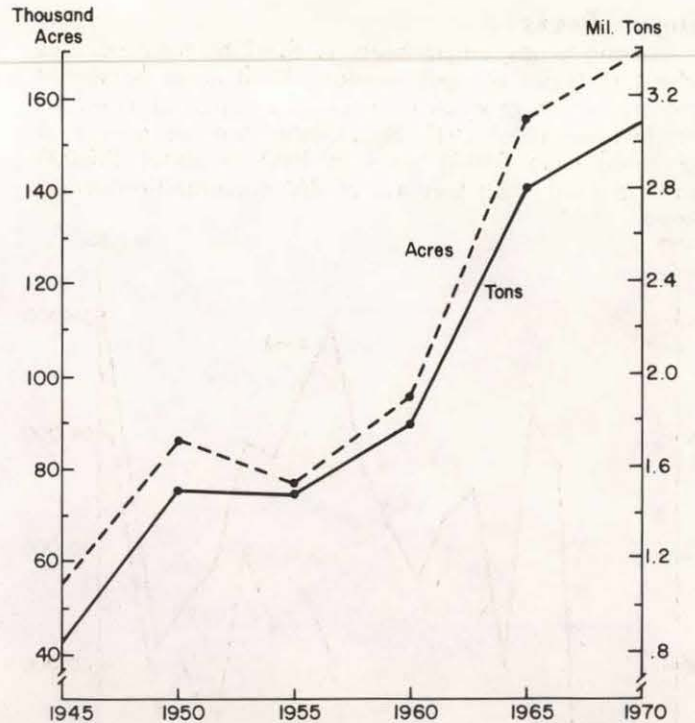


Fig. 21. Sugar beet acreage harvested and tonnage produced in Idaho, 1945 to 1970.

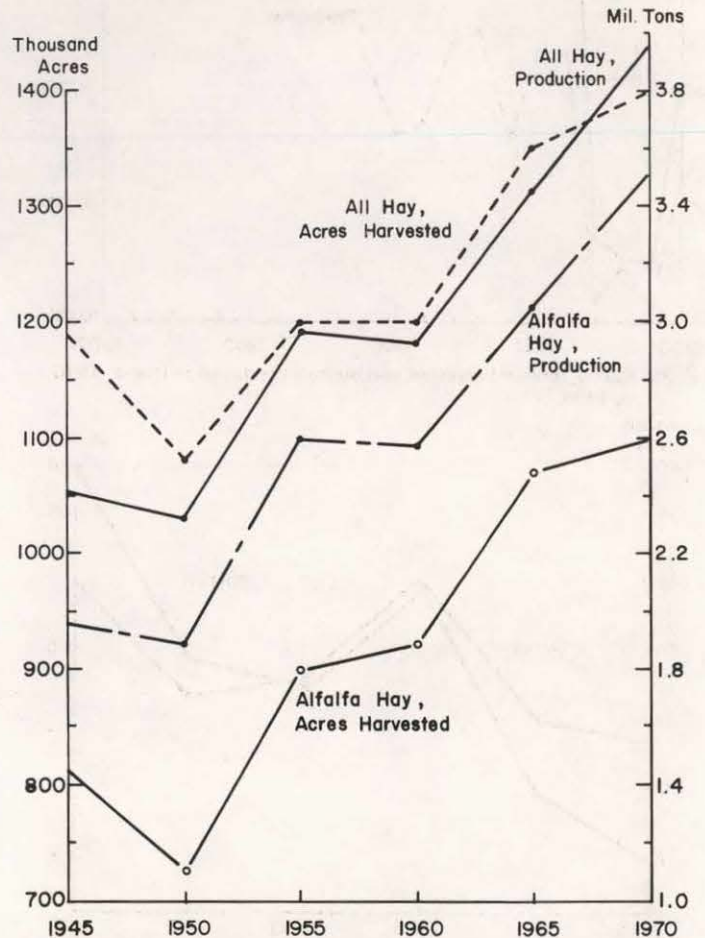


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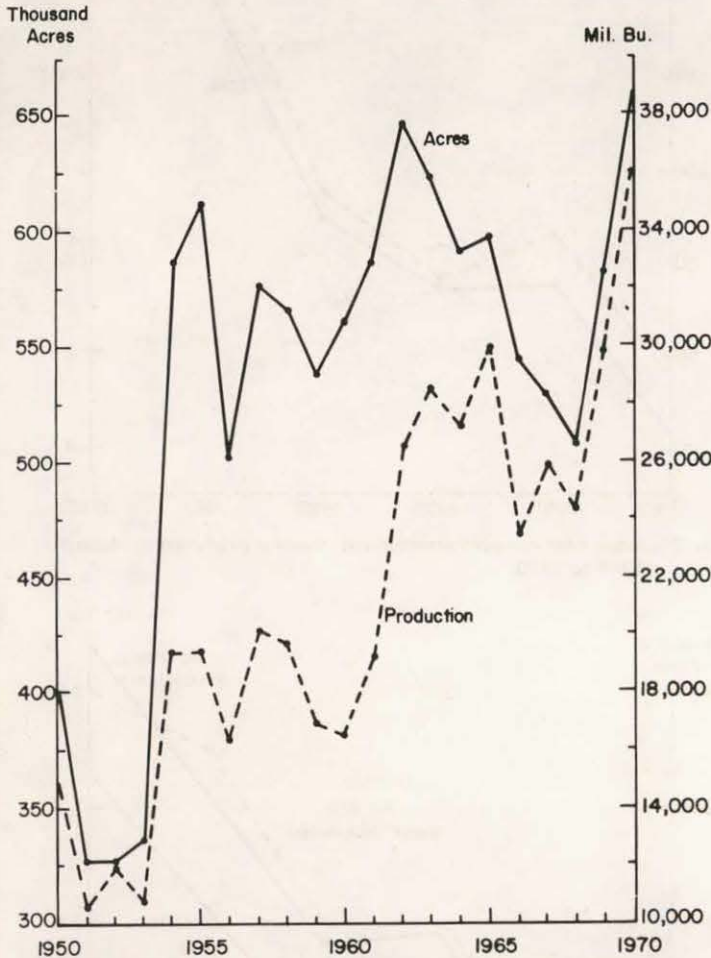


Fig. 23. Barley acreage harvested and bushels produced in Idaho, 1950 to 1970.

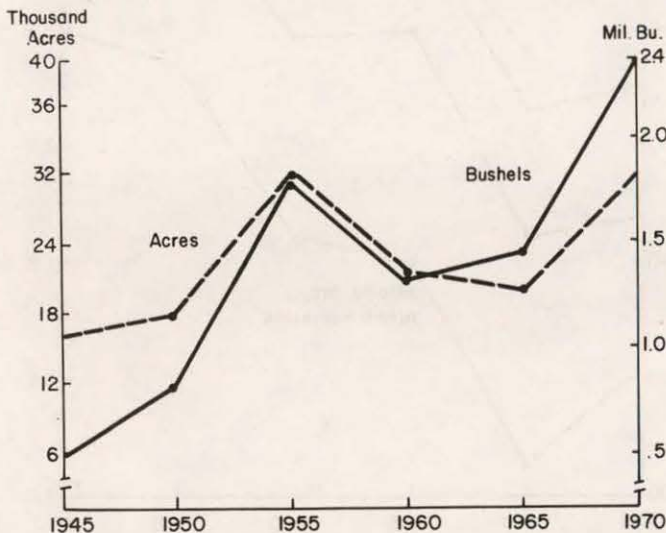


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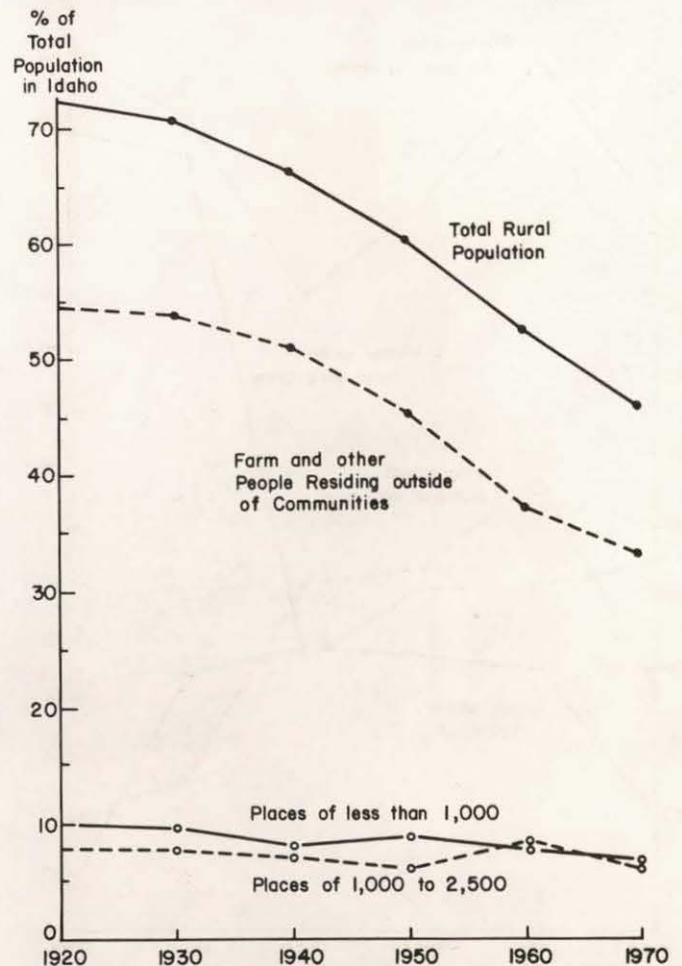


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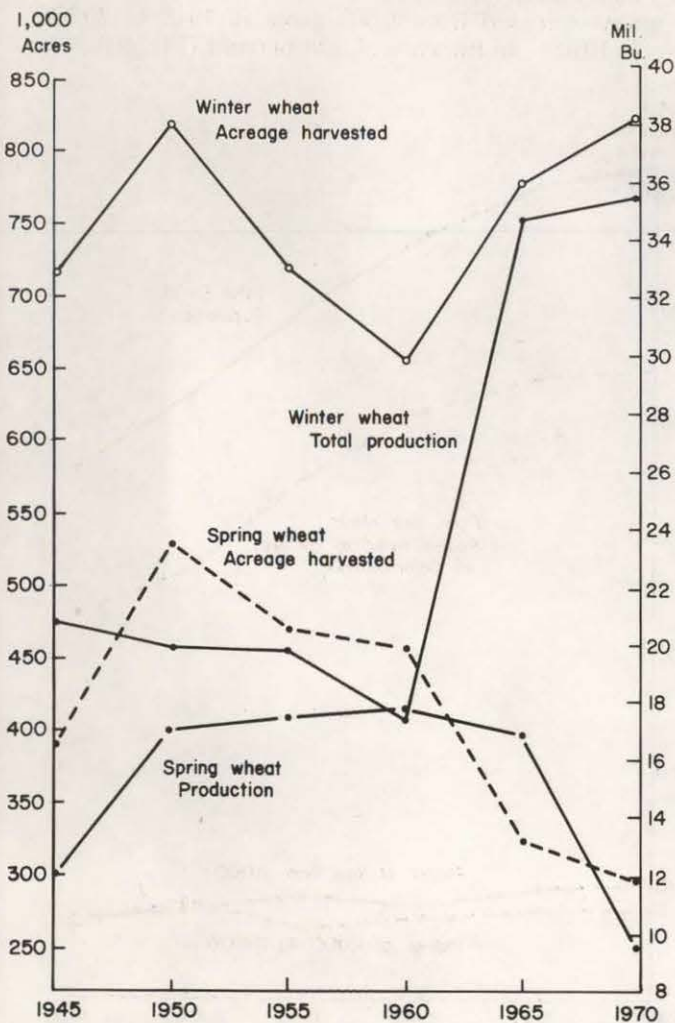


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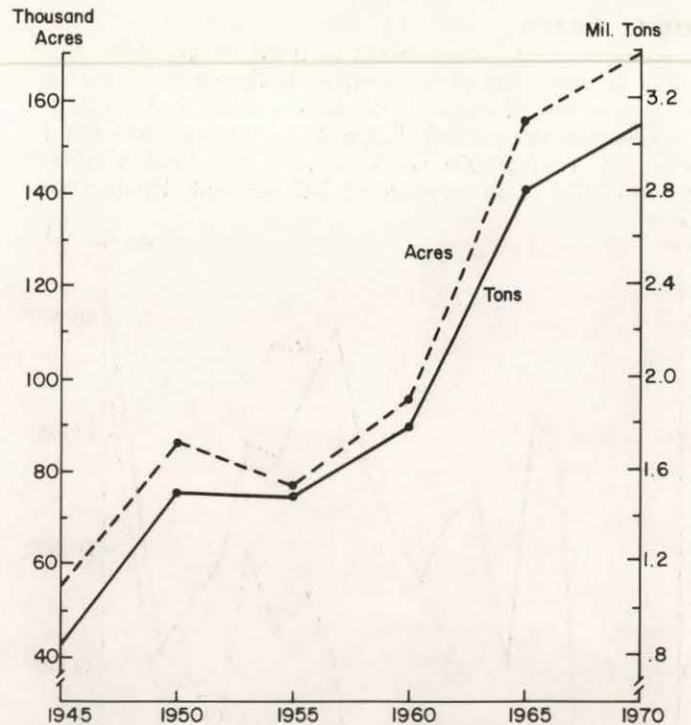


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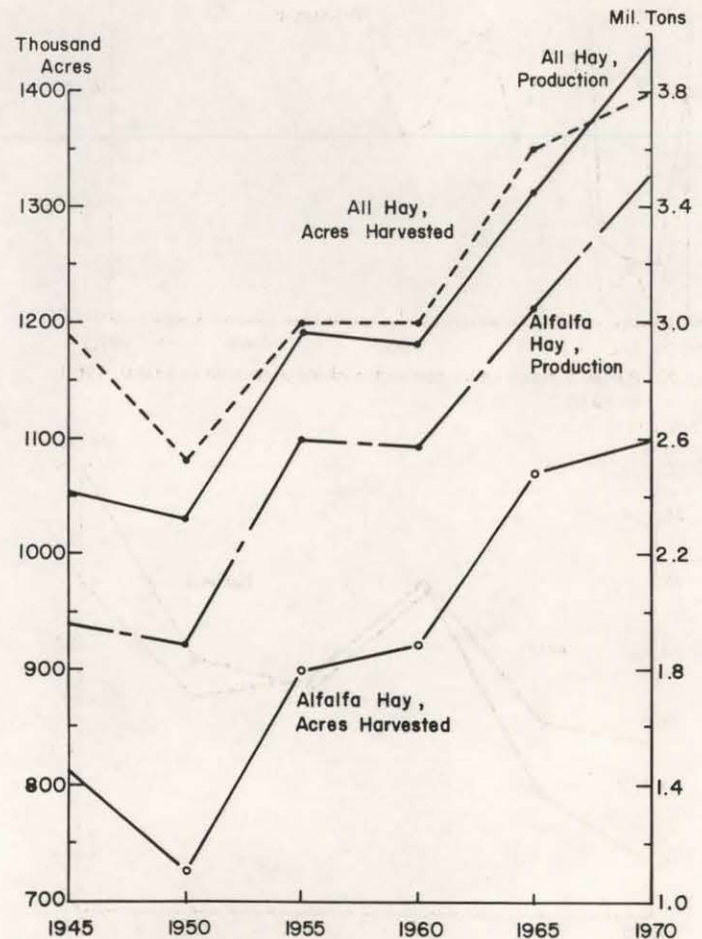


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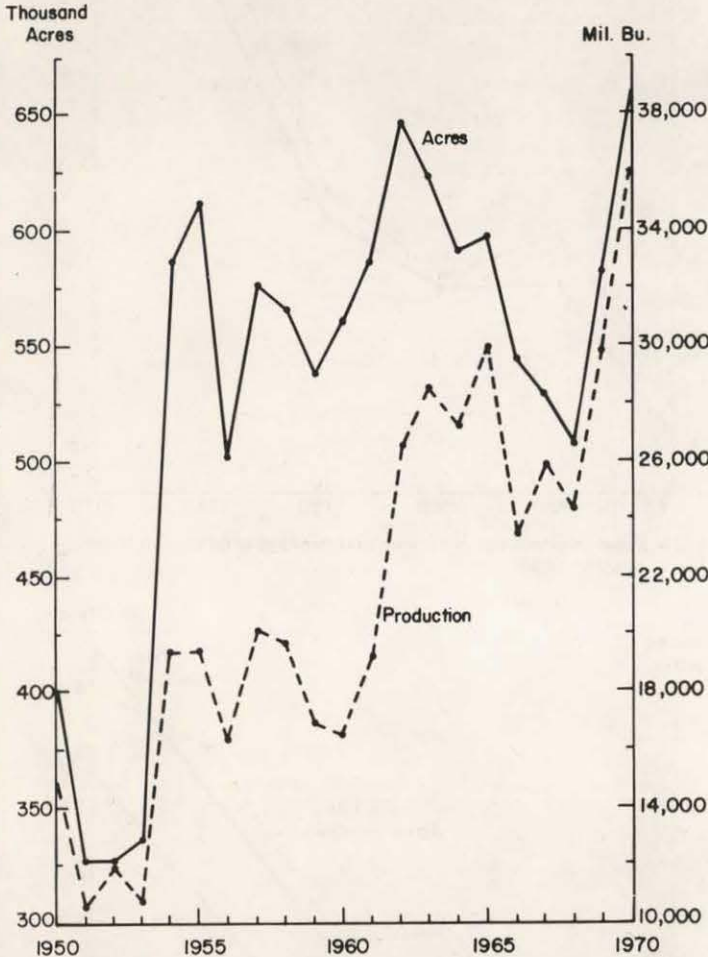


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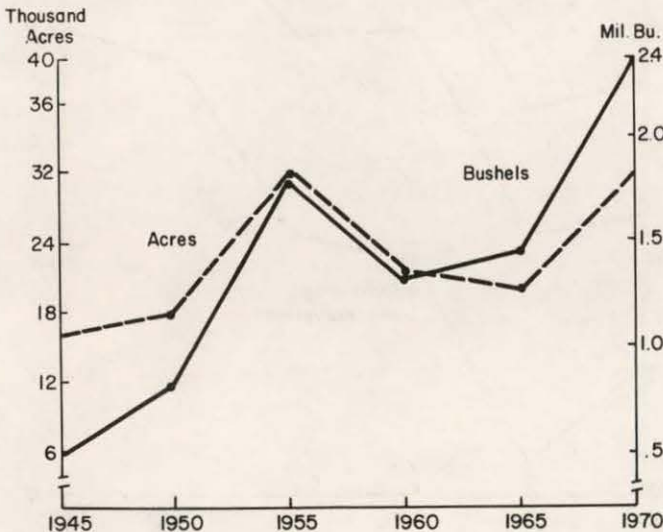


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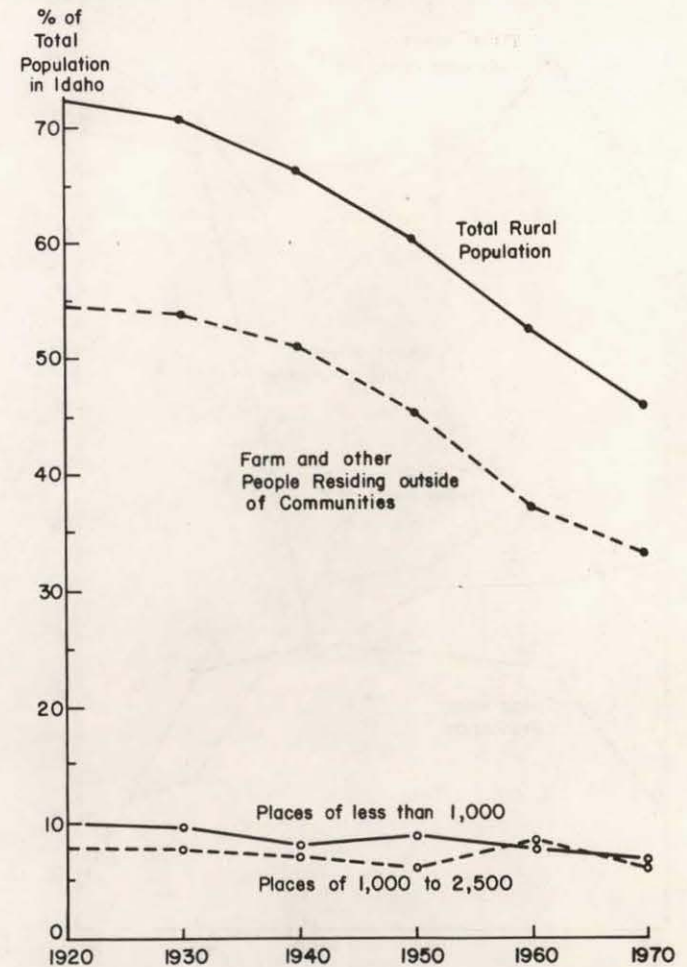


Fig. 25. Percentage of Idaho population living in rural areas and on farms, 1920 to 1970.

Rural Population, Farm Employment and Land Use

Rural Population

In 1950, the rural population represented 60 percent of the total population in Idaho, while in 1970 about 46 percent of Idaho's population lived in rural areas. Of the 1950 total population, 8.8 percent lived in communities of less than 1,000 population, 6.2 percent lived in communities of 1,000-2,500 population, and 45.3 percent resided outside of communities.⁸ Of the 1970 total population, 6.6 percent lived in communities of less than 1,000 population, 6.1 percent lived in communities of 1,000-2,500 population, and 33.3 percent resided outside of communities (Fig. 25).

⁸People residing outside of communities include people living on farms and others who don't live on farms but live in single residence in the country. Data is not available to determine the exact number of people living on farms.

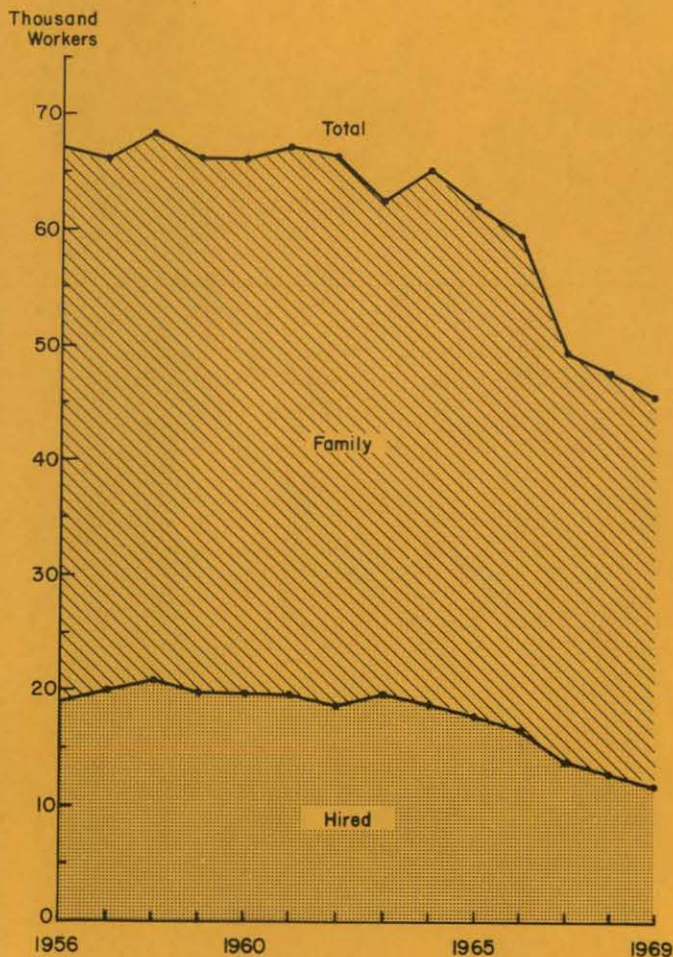


Fig. 26. Number of family and hired workers employed on farms in Idaho, 1956 to 1969.

Of the 1950 rural population, 14.61 percent lived in communities of less than 1,000 population, 10.29 percent lived in communities of 1,000-2,500 population, and the remaining 75.24 percent resided outside of communities. Of the 1970 rural population, 14.37 percent lived in communities of less than 1,000 population, 13.28 percent lived in communities of 1,000-2,500 population, and the remaining 72.54 percent resided outside the communities.

Farm Employment

Total farm employment in Idaho decreased from 68,000 workers in 1956 to 46,000 workers in 1969, or a 32 percent decrease. Hired labor decreased from 18,500 in 1956 to 12,000 in 1969, or a 35 percent decrease. Family labor decreased from 49,500 in 1956 to 34,000 in 1969, or a decrease of 31 percent (Fig. 26).

Land Use

Total land in farms increased from 13.2 million acres in 1950 to 14.2 million in 1969 — an increase of about 8 percent. Total land in farms reached a peak of 15.3 million acres in 1964. Pasture land increased from 7.3 million acres in 1950 to 6.1 million acres in 1970 — an increase of 26 percent. Cropland increased from 5.2 million acres in 1950 to 6.1 million acres in 1970 — an increase of 17 percent. Woodland went from 1.6 million in 1950 to 1 million acres in 1970 — a decrease of 38 percent (Fig. 27).

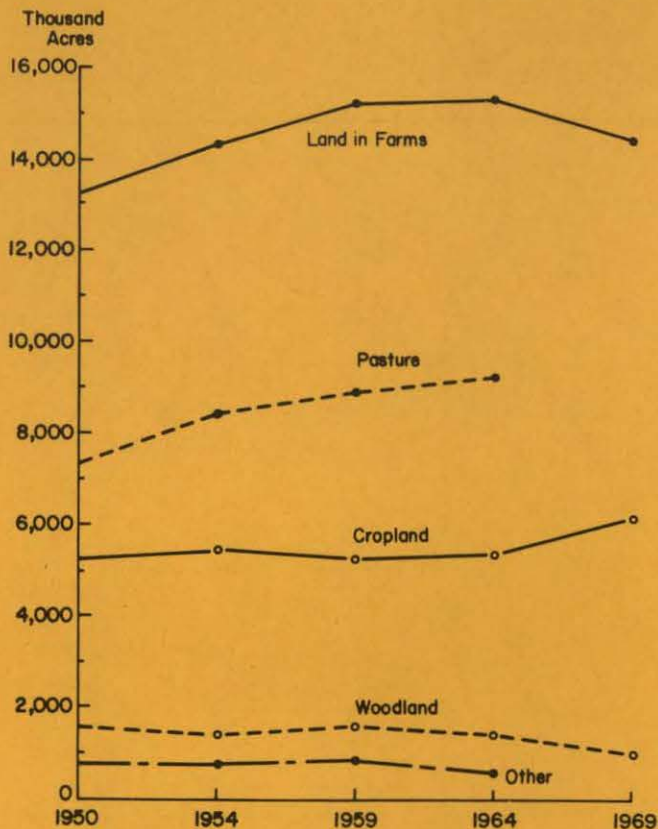


Fig. 27. Total farm land and land use in Idaho, 1950 to 1970.

The State is truly our campus. We desire to work for all citizens of the State striving to provide the best possible educational and research information and its application through Cooperative Extension in order to provide a high quality food supply, a strong economy for the State and a quality of life desired by all.



Auttis M. Mullins
Dean, College of Agriculture
University of Idaho



SERVING THE STATE

This is the three-fold charge of the College of Agriculture at your state Land-Grant institution, the University of Idaho. To fulfill this charge, the College extends its faculty and resources to all parts of the state.

Service ... The Cooperative Extension Service has active programs in 42 of Idaho's 44 counties. Current organization places major emphasis on county office contact and multi-county specialists to better serve all the people. These College of Agriculture faculty members are supported cooperatively by federal, state and county funding to work with agriculture, home economics, youth and community development.

Research ... Agricultural Research scientists are located at the campus in Moscow, at Research and Extension Centers near Aberdeen, Caldwell, Parma, Sandpoint, Teton, Twin Falls and at the U.S. Sheep Experiment Station, Dubois and the USDA/ARS Soil and Water Laboratory at Kimberly. Their work includes research on every major agricultural program in Idaho and on economic and community development activities that apply to the state as a whole.

Teaching ... Centers of College of Agriculture teaching are the University classrooms and laboratories where agriculture students can earn bachelor of science degrees in any of 20 major fields, or work for master's and Ph.D. degrees in their specialties. And beyond these are the variety of workshops and training sessions developed throughout the state for adults and youth by College of Agriculture faculty.