

ECONOMIC STATUS OF KANSAS FARMS 1974

by

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Introduction

Farming is Kansas' No. 1 industry. Strong and sound farm businesses are important for the Kansas economy. Since changes in the economy never stop, agriculture has to keep pace with new demands and technological developments to sustain its growth, strength and competitive edge in the complex world of diverse economic forces. The changes in agriculture mirror the changes undertaken by individual farmers.

In the last few years, 1970 through 1973, the Kansas farmers enjoyed one record year after the other. The crop production in Kansas reached three consecutive all-time highs. The number of cattle on farms was higher than never before. The meat production was booming. The result of these bumper productions were record high cash receipts from farming, since farm prices were increasing too. Then, in 1974 agriculture again experienced some dramatic reversals.

A drought and a slump in livestock prices caused a substantial decrease in cash receipts from farming. The aftermath of the energy crises and a high inflation rate caused the production expenses to reach new heights. The consequence was a massive drop in the net farm income.

This report shows some recent changes in Kansas agriculture which are important for the economic well-being and the viability of the state's farms. These changes are related to the number and size of farms, type of farm organization, distribution of farms by economic class, use and composition of purchased farm inputs, and the financial situation of Kansas farms.

Mainly based on the preliminary county reports for Kansas of the 1974 Census of Agriculture, these reports point out the changes that occurred between 1969 and 1974, compared with some figures in the more distant past. The data are presented for the nine reporting districts, as defined by the Statistical Division of the Kansas Department of Agriculture (see graph 1).

In the 1974 Census of Agriculture a farm is defined as

".....any place from which \$2500 or more of agricultural products were sold, or normally would have been sold, during the census year, or any place of 10 acres or more from which \$50 or more of agricultural products were sold, or normally would have been sold, during the census year."¹

All the farms, as defined above, are used in this report. Exceptions are noted in the tables.

¹U.S. Department of Commerce, Bureau of the Census, 1974 Census of Agriculture, Preliminary County Reports, July/August 1976.

A map of Oklahoma counties with letters placed in various regions. The letters are: NE (North East), NW (North West), WC (West Central), EC (East Central), SC (South Central), and SE (South East). The map shows the county boundaries and names of Oklahoma.

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2. The Kansas Farms 1974

2.1. Number of Farms, Land in Farms

According to the 1974 Census of Agriculture there were 81,909 Kansas farms; 4,148 or 4.8 percent fewer than in 1969 (Table 1). This five year decrease in the number of Kansas farms is less than the U.S. average. For the U.S. as a whole the drop in the number of farms was 5.7 percent (Table 14 shows U.S. farm numbers by economic class). Table 2 shows the changes in the number of Kansas farms and the changes in their average size since 1954.

The total land in Kansas farms decreased by 3.7 percent; from 49,390,369 acres in 1969 to 47,553,071 acres in 1974--a decrease of 1.8 million acres in five years.

2.2. Number of Farms by Size

Table 3 shows the number of Kansas farms by their size. The most remarkable change occurred in the extreme classes. State-wide the number of farms in the class with more than 2,000 acres increased by 14.2 percent between 1969 and 1974. The number of small farm holdings (under 50 acres) increased by 1617 farms, or 18.6 percent. More than 1/3 of all the Kansas farms have less than 180 acres of land, 15.7 percent of the farms manage more than 1,000 acres. In western Kansas more than 60 percent of the farms are larger than 500 acres and only about 12 percent of the farms have less than 180 acres. In eastern Kansas, on the other hand, around 50 percent of the farms are smaller than 180 acres and less than 10 percent of the farms are larger than 1,000 acres.

Table 1. Number of Farms, Land in Farms and Average Size Farms

District		Number of Farms	Land in Farms (Acres)	Average Size of Farms (Acres)
Northwest (NW)	1974	4,645	4,629,906	997
	1969	5,062	4,924,758	973
West-Central (WC)	1974	3,862	4,724,681	1,223
	1969	4,129	4,823,435	1,168
Southwest (SW)	1974	5,825	7,030,928	1,207
	1969	6,041	7,406,330	1,226
North-Central (NC)	1974	9,522	5,451,355	573
	1969	10,322	5,521,565	535
Central (C)	1974	10,475	5,439,137	519
	1969	11,273	5,669,155	503
South-Central (SC)	1974	11,363	6,714,372	591
	1969	11,914	7,015,376	589
Northeast (NE)	1974	10,915	3,421,570	313
	1969	10,965	3,497,139	319
East-Central (EC)	1974	12,099	4,539,446	375
	1969	12,757	4,775,286	374
Southeast (SE)	1974	13,194	5,601,675	425
	1969	13,594	5,737,325	422
State	1974	81,909	47,553,071	581
	1969	86,057	49,390,369	574

Source: U.S. Department of Commerce, Bureau of the Census, 1974 Census of Agriculture, Preliminary County Reports, July/August 1976.

Table 2. Changes in Number of Farms and in Average Farm Size Since 1954

Census Year	Number of Farms	Percent Change	Average Farm Size	Percent Change
1954	120,167	-8.5%	417	+12.7
1959	104,347	-13.2	480	+15.1
1964	92,440	-11.4	544	+13.3
1969	86,057	-6.9	574	+5.5
1974	81,909	-4.8	581	+1.2

Source: U.S. Department of Commerce, Bureau of the Census, Census of Agriculture, Years 1954, 1959, 1964, 1969, and Preliminary Report for 1974.

Table 3. Number of Farms by Size

District	Under 10 Acres	10-49 Acres	50-179 Acres	180-499 Acres	500-999 Acres	1000-1999 Acres	Over 2000 Acres
NW	1974 229 4.9% 1969 178 3.5	103 2.2% 88 1.7	451 9.7% 393 7.8	1,012 21.8% 1,093 21.6	1,143 24.6% 1,486 29.4	1,163 25.0% 1,336 26.4	544 11.7% 488 9.6
WC	1974 187 4.8 1969 139 3.4	58 1.5 58 1.4	346 9.0 310 7.5	767 19.9 807 19.5	922 23.9 1,132 27.4	917 23.7 1,088 26.4	665 17.2 595 14.4
SW	1974 285 4.9 1969 245 4.1	153 2.6 141 2.3	664 11.4 528 8.7	1,149 19.7 1,173 19.4	1,302 22.4 1,531 25.3	1,359 23.3 1,505 24.9	914 15.7 918 15.2
NC	1974 401 4.2 1969 425 4.1	431 4.5 367 3.6	1,841 19.3 1,838 17.8	2,957 31.1 3,469 33.6	2,356 24.7 2,871 27.8	1,226 12.9 1,142 11.1	313 3.3 207 2.0
C	1974 531 5.1 1969 459 4.1	547 5.2 489 4.3	2,254 21.5 2,190 19.4	3,515 33.6 4,139 36.7	2,340 22.3 2,714 24.1	1,089 10.4 1,060 9.4	299 2.9 222 2.0
SC	1974 614 5.4 1969 488 4.1	854 7.5 711 6.0	2,420 21.3 2,183 18.3	3,152 27.7 3,882 32.6	2,448 21.5 2,870 24.1	1,396 12.3 1,381 11.6	479 4.2 398 3.3
NE	1974 514 4.7 1969 492 4.5	1,358 12.4 904 8.2	3,449 31.6 3,415 31.1	3,433 31.5 3,983 36.3	1,680 15.4 1,659 15.1	424 3.9 368 3.4	68 0.6 51 0.5
EC	1974 449 3.7 1969 504 4.0	1,561 12.9 1,222 9.6	3,992 33.0 4,094 32.1	3,489 28.8 4,227 33.1	1,693 14.0 1,937 15.2	702 5.8 602 4.7	213 1.8 171 1.3
SE	1974 628 4.8 1969 530 3.9	1,405 10.6 1,251 9.2	4,118 31.2 4,074 30.0	3,876 29.4 4,470 32.9	2,012 15.2 2,192 16.1	833 6.3 789 5.8	322 2.4 288 2.1
State	1974 3,838 4.7 1969 3,460 4.0	6,470 7.9 5,231 6.1	19,532 23.7 19,025 22.1	23,250 28.4 27,334 31.8	15,895 19.4 18,394 21.4	9,107 11.1 9,272 10.8	3,817 4.6 3,341 3.8

Source: 1974 Census of Agriculture.

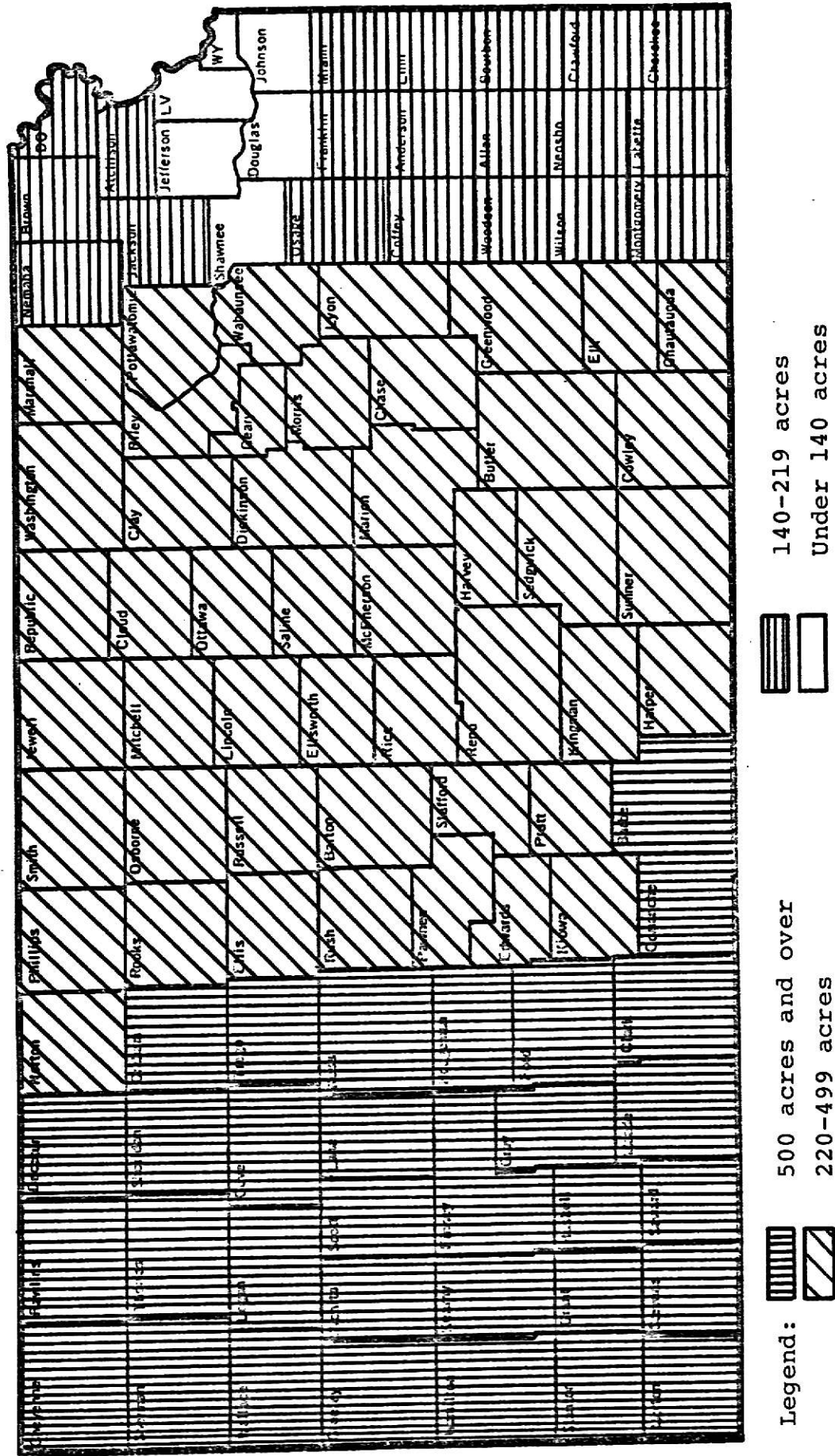
2.3. Average Size Farm

The average size Kansas farm increased slightly to 581 acres, up about 7 acres since 1969 (Table 1). Back in 1954 the average size farm was 417 acres. Graph 1 shows the farm size situation as it was in 1954 in Kansas. Compared to Graph 2 (situation in 1974) the average farm size increased all over Kansas. The largest farms are located in southwestern and west-central Kansas where the average farm size is over 1,200 acres. In some counties the average size farm has 1,700 acres and more (Clark, Hamilton, Morton). In central Kansas the average size is between 500 and 600 acres whereas in the east of the state the average size farm has between 300 and 400 acres. In the counties around Kansas City the average size farm has only around 200 acres of land.

2.4. Type of Farm Organization

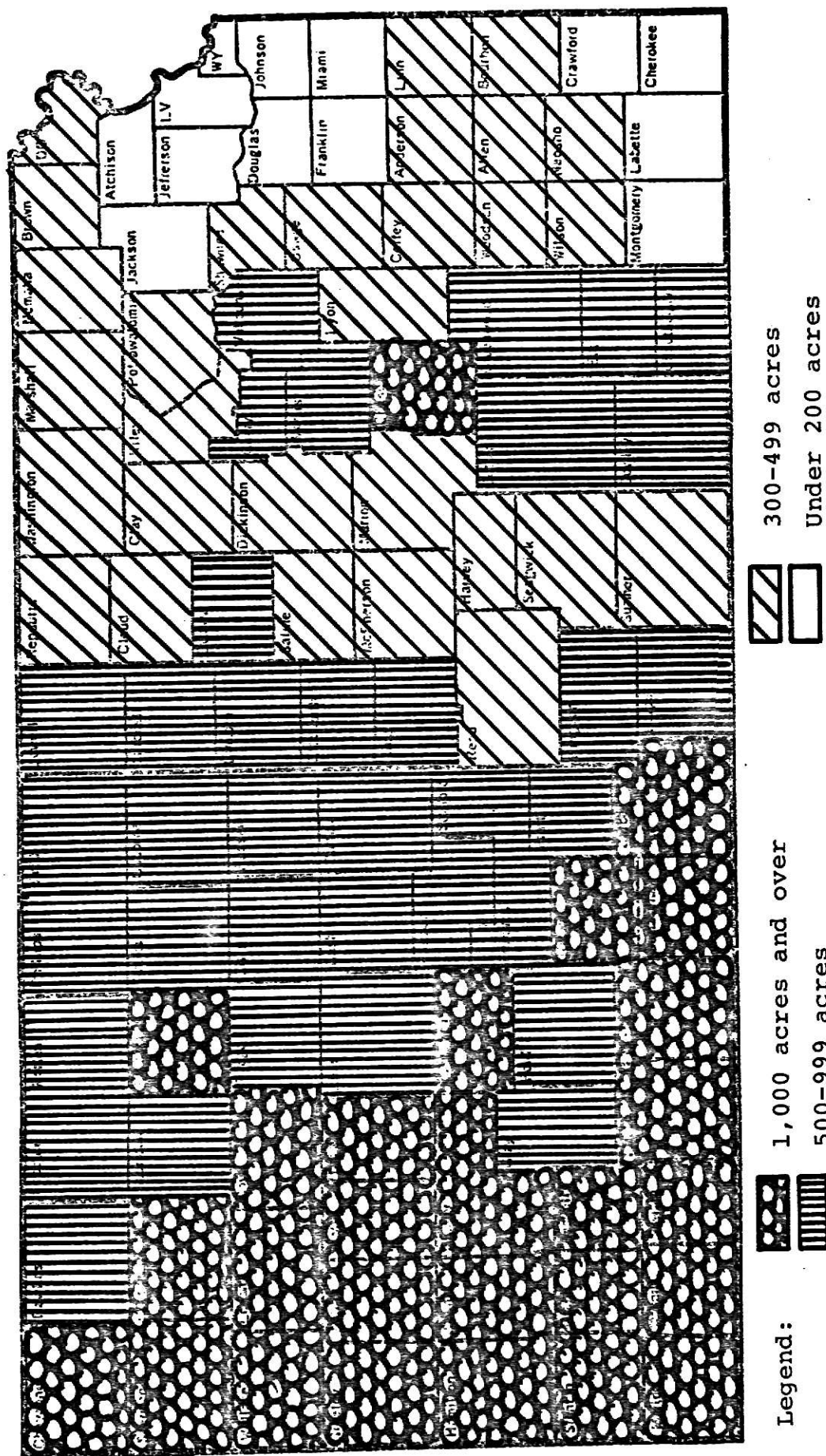
Most of the farms with more than \$2,500 total sales (91.8 percent in the state) are individually or family owned (Table 4). The family ownership of Kansas farms increased by 5.5 percent over that in 1969. In the same time period the number of partnership-farms (7.0 percent) decreased by 38.2 percent. Whereas the corporations (family owned and others) more than doubled their number from 328 in 1969 to 672 in 1974. Most of the increase is expected to be in the class of family owned corporations (10 or fewer shareholders) since in 1969 there were 87.5 percent corporations with 10 or fewer shareholders. Under "other" farms are listed: estates or trusts, Indian reservations, prison farms, grazing associations, cooperatives, etc. The number of these

Graph 2. Average Size of Farms in 1954



Source: Orazem, Frank, The Changing Kansas Farm, The Kansas Agricultural Situation, Kansas State University, Manhattan, Kansas, Vol. 36, No. 8, January 1960.

Graph 3. Average Size of Farms in 1974



Legend:

1,000 acres and over

500-999 acres

300-499 acres

Under 200 acres

Source: 1974 Census of Agriculture

Table 4. Number of Farms by Type of Farm Organization
(farms with sales of \$2500 and more only)

	Total	Individual or Family	Partnership	Corporation Incl.		Other		
				Family Owned				
NW	1974 4,324	3,931	317	7.2%	62	1.4%	16	0.3%
	1969 4,396	3,837	515	11.7	22	0.5	22	0.5
WC	1974 3,647	3,312	259	7.1	70	1.9	6	0.2
	1969 3,616	3,147	421	11.6	29	0.8	19	0.5
SW	1974 5,451	4,854	450	8.3	133	2.4	14	0.3
	1969 5,300	4,553	670	12.6	53	1.0	24	0.5
NC	1974 8,666	7,942	646	7.5	62	0.7	16	0.2
	1969 8,779	7,600	1,099	12.5	26	0.3	45	0.5
C	1974 9,266	8,542	644	7.0	65	0.7	15	0.1
	1969 9,026	7,967	980	10.8	41	0.5	38	0.4
SC	1974 9,930	9,192	620	6.2	96	1.0	22	0.2
	1969 9,903	8,730	1,072	10.8	48	0.5	52	0.5
NE	1974 8,459	7,705	683	8.1	60	0.7	11	0.1
	1969 8,407	7,245	1,109	13.2	28	0.3	25	0.3
EC	1974 9,253	8,542	633	6.8	69	0.7	9	0.1
	1969 9,220	8,198	944	10.2	46	0.5	32	0.4
SE	1974 9,896	9,231	596	6.0	54	0.5	15	0.2
	1969 9,753	8,675	1,004	10.3	35	0.4	39	0.4
State	1974 68,840	63,224	4,819	7.0	672	1.0	125	0.2
	1969 68,394	59,955	7,814	11.4	328	0.5	297	0.4

Source: 1974 Census of Agriculture.

types of farms decreased by 57.9 percent, from 297 in 1969 to 125 in 1974. The percentage distributions of the number of farms by type of farm organization for the reporting districts are similar to the distribution for the whole state. Percentage-wise in western Kansas there are slightly more corporations than in the eastern part of the state (2 percent and .7 percent, respectively).

2.5. Farm Operators

Farm operators on most of the Kansas farms, in all reporting districts, are either full owners or part owners (Table 5). The percentage of full owners is greater in eastern than in either central or western Kansas. In the central and western part of the state between 30 and 40 percent of the farms are operated by full owners. In eastern Kansas 57 percent of all farms are full-owner-operated. The opposite is true for part-owner-operated farms. Percentagewise more of them are located in western Kansas. The same holds true for the tenant operated farms. In western Kansas there are on the average about 20 percent of the farms tenant operated, whereas in the eastern part of the state only 10 percent of the farms are tenant operated.

For the state as a whole in 1974, 45.7 percent (up 9 percent since 1969) of the farms were operated by full owners, 39.4 percent by part owners, and 14.9 percent by tenants. Both the number and percentage of part owners and tenants has decreased since 1969; 9.7 percent and 23.4 percent, respectively.

Table 5. Kansas Farm Operators

District		Full Owner		Part Owner		Tenant	
NW	1974	1,638	35.3%	2,230	48.0%	777	16.7%
	1969	1,512	29.9	2,542	50.2	1,008	19.9
WC	1974	1,212	31.4	1,873	48.5	777	20.1
	1969	1,003	24.3	2,118	51.3	1,008	24.4
SW	1974	1,764	30.3	2,670	45.8	1,391	23.9
	1969	1,424	23.6	3,013	49.9	1,604	26.6
NC	1974	3,860	40.5	4,095	43.0	1,567	16.5
	1969	3,639	35.3	4,660	45.1	2,020	19.6
C	1974	3,932	37.5	4,773	45.6	1,770	16.9
	1969	3,503	31.1	5,328	47.3	2,439	21.6
SC	1974	4,244	37.3	5,042	44.4	2,077	18.3
	1969	3,599	30.2	5,553	46.6	2,760	23.2
NE	1974	6,480	59.3	3,164	29.0	1,280	11.7
	1969	5,876	53.6	3,461	31.6	1,628	14.8
EC	1974	6,904	57.1	4,005	33.1	1,189	9.8
	1969	6,825	53.5	4,290	33.6	1,642	12.9
SE	1974	7,413	56.2	4,432	33.6	1,349	10.2
	1969	6,987	51.4	4,817	35.4	1,790	13.2
State	1974	34,448	45.7	32,284	39.4	12,177	14.9
	1969	34,370	39.9	35,782	41.6	15,905	18.5

Source: 1974 Census of Agriculture

Table 6 shows the average age of Kansas farm operators. The Kansas farmer in 1974 averaged 52.5 years; 1.4 years older than in 1969. An increase in average age can be observed in every reporting district.

2.6. Principal Occupation of Kansas Farm Operators

An interesting new data, reported for the first time in the 1974 Census of Agriculture, is the principal occupation of Kansas farm operators. Table 6 shows that for 28.1 percent of the state's farmers the work on the farm is not their principal occupation. Part-time farming is more important in eastern Kansas. In this part of the state 36.5 percent of the farm operators work mainly off the farm. In western Kansas more than 80 percent of the farm operators are more or less full time farmers. This shows how important off-farm job opportunities and off-farm incomes are for the Kansas farmers.

Table 6. Principal Occupation and Average Age of Kansas Farm Operators

District		Principal Occupation				Average Age of Operators
		Farming		Other		
NW	1974	3,776	82.7%	788	17.3%	52.6
	1969	-1)		-1)		50.7
WC	1974	3,210	84.8	574	15.2	51.9
	1969	—		—		49.3
SW	1974	4,553	80.2	1,122	19.8	52.0
	1969	—		—		49.9
NC	1974	7,775	82.3	1,668	17.7	52.9
	1969	—		—		51.1
C	1974	7,909	76.1	2,482	23.9	52.9
	1969	—		—		51.3
SC	1974	8,255	73.4	2,987	26.6	53.6
	1969	—		—		51.9
NE	1974	7,253	66.9	3,585	33.1	51.4
	1969	—		—		50.5
EC	1974	7,387	61.5	4,627	38.5	52.5
	1969	—		—		51.9
SE	1974	8,213	62.6	4,910	37.4	53.2
	1969	—		—		52.1
State	1974	58,331	71.9	22,749	28.1	52.5
	1969	—		—		51.1

1) Not available

Source: 1974 Census of Agriculture

3. The Financial Situation 1974

3.1. Number of Farms by Economic Class

Large changes occurred in the number of farms by economic classes throughout the state. High prices for agricultural products, higher production, and inflation caused an increase in the number of farms with more than \$20,000 of sale volume (Table 7). The largest increase took place in the class with farms which sold more than \$100,000 worth of agricultural products (Class Ia). The census of 1969 showed 1,676 such farms (2 percent of all farms). In 1974 6,008 farms, or 7.3 percent of the total, were counted in this class. That is an increase of 258.5 percent. In class Ib, farms with sales between \$40,000 and \$99,999, the number of farms increased by 119 percent. The number of farms in economic class II increased by 18.7 percent between 1969 and 1974. In all the other economic classes the number of farms decreased between 22 and 34 percent. Still 16 percent of all the farms in Kansas had less than \$2500 worth of agricultural products sold (down 26 percent from the 20.5 percent counted in 1969). The distribution of the farms by their sales is similar to the distribution of the farms by their average size. The most of the "big" farms, economic class Ia and Ib, are located in western Kansas where around 40 percent of the farms had more than \$40,000 worth of agricultural products sold. In eastern Kansas only about 13 percent of the farms fall in these classes. The distribution for the "small" farms, farms with sales under \$2500, is the other way around.

Table 7. Number of Farms by Economic Class

Economic Class, by Farm Sales															
District		Ia		Ib		II		III		IV		V		Other Under \$2,500	
		Over \$100,000		\$40,000- \$99,999		\$20,000- \$39,999		\$10,000- \$19,999		\$5,000- \$9,999		\$2,500- \$4,999			
NW	1974	581	12.5%	1,141	24.6%	1,139	24.5%	748	16.1%	442	9.5%	278	6.0%	316	6.8%
	1969			522 ¹⁾	10.3	914	18.0	1,292	25.4	1,071	21.5	614	12.1	666	13.1
WC	1974	731	18.9	886 ¹⁾	22.9	849	22.0	594	15.4	377	9.8	210	5.4	215	5.6
	1969			670	16.2	790	19.1	968	23.4	755	18.3	433	10.5	513	12.4
SW	1974	1,423	24.4	1,349 ¹⁾	23.2	1,107	19.0	747	12.8	472	8.1	344	5.9	383	6.6
	1969			1,311 ¹⁾	21.7	1,243	20.6	1,179	19.5	921	15.2	649	10.7	738	12.2
NC	1974	615	6.5	1,882 ¹⁾	19.8	2,232	23.4	1,813	19.0	1,291	13.6	801	8.4	888	9.3
	1969			930	9.1	1,820	17.7	2,496	24.3	2,074	20.2	1,397	13.6	1,552	15.0
C	1974	507	4.8	1,759 ¹⁾	16.8	2,249	21.5	2,172	20.7	1,538	14.2	1,041	9.9	1,209	11.5
	1969			753 ¹⁾	6.7	1,503	13.3	2,431	21.6	2,476	22.0	1,858	16.5	2,247	19.9
SC	1974	973	8.6	2,505 ¹⁾	22.0	2,446	21.5	1,840	16.2	1,219	10.7	947	8.3	1,433	12.6
	1969			1,151 ¹⁾	9.7	2,060	17.3	2,660	22.3	2,366	19.9	1,666	14.0	2,011	16.8
NE	1974	385	3.5	1,428 ¹⁾	13.1	1,911	17.5	1,769	16.2	1,606	14.7	1,361	12.5	2,464	22.5
	1969			818 ¹⁾	7.5	1,691	15.4	2,135	19.5	2,057	18.7	1,701	15.5	2,564	23.4
EC	1974	394	3.3	1,316 ¹⁾	10.9	1,735	14.3	2,028	16.8	1,910	15.8	1,853	15.3	2,863	23.6
	1969			918 ¹⁾	7.2	1,579	12.4	2,178	17.1	2,319	18.2	2,225	17.4	3,537	27.7
SE	1974	399	3.0	1,334 ¹⁾	10.1	1,898	14.4	2,161	16.4	2,153	16.3	1,951	14.8	3,298	25.0
	1969			813 ¹⁾	6.0	1,507	11.1	2,401	17.7	2,676	19.7	2,356	17.3	3,841	28.2
State	1974	6,008	7.3	13,600	16.6	15,566	19.0	13,872	16.9	11,008	13.4	8,786	10.7	13,069	16.0
	1969	1,676	2.0	6,210	7.2	13,112	15.2	17,793	20.7	16,699	19.4	12,904	15.0	17,663	20.5

1) Classes Ia and Ib together

Source: 1974 Census of Agriculture.

Twenty-three percent of the farms in eastern Kansas had sales of less than \$2500. Whereas in western Kansas only 6.5 percent of the farms fall in this "hobby-farm" class.

3.2. Value of Agricultural Products Sold

The 81,909 Kansas farms sold more than 3.6 billion dollars worth of agricultural products in 1974 (Table 8). That is twice as much as the 1.8 billion dollars worth of farm products sold in 1969. The per farm value amounts to \$44,361; an increase of 110 percent from the \$21,126 in 1969. Statewide the crops accounted for 48.7 percent of the total sales, and livestock products brought 50.7 percent of the total sales value. In 1969 the figures were 31.9 percent from the crops and 68.1 percent from the livestock products. The average value per farm varies considerably within the state. The southwestern Kansas farms averaged \$143,802 in total sales, whereas in east-central Kansas the average farm sold about \$23,218 worth of agricultural products. The crop production is largest in northwestern Kansas where 61.6 percent of the total sale value came from crop production and 38.4 percent from livestock production. The proportion in 1969 was 46.1 percent from crops and 53.1 percent from livestock enterprises. In southeastern Kansas the livestock production is dominant over crops, 64.5 percent to 35.3 percent. Five years earlier, in 1969, 78.7 percent of the total sales were livestock products and only 21.5 percent crop products.

3.3. Farm Production Expenses

The volume of purchased inputs is increasing. Since 1969 the expenses for purchased production inputs increased by 73 percent,

Table 8. Value of Agricultural Products Sold 1974 and 1969

	NW	WC	SW	NC	C	SC	NE	EC	SE	State
Total value of products sold										
1974	288,189	372,166	837,644	358,128	402,731	487,854	260,801	280,910	345,156	3,633,605
1969	102,454	162,257	308,102	190,321	204,706	251,088	173,962	201,954	223,172	1,818,018
Average per farm										
1974	62,043	96,366	143,802	37,611	38,447	42,934	23,894	23,218	26,160	44,361
1969	20,240	39,297	51,002	18,438	18,159	21,075	15,865	15,831	16,417	21,126
Crops										
1974	177,405	174,116	362,894	189,555	193,180	305,632	127,625	116,121	122,010	1,768,551
1969	47,271	48,998	101,095	67,721	64,281	97,285	54,676	49,988	47,877	579,188
(Percent of total value)										
1974	(61.6)	(46.8)	(43.3)	(52.9)	(48.0)	(62.6)	(48.9)	(41.3)	(35.3)	(48.7)
1969	(46.1)	(30.2)	(32.8)	(35.6)	(31.4)	(38.7)	(31.4)	(24.8)	(21.5)	(31.9)
Livestock										
1974	110,597	198,068	474,582	168,346	208,258	179,473	131,681	161,444	222,643	1,842,342
1969	55,183	113,259	207,006	122,591	140,406	153,779	119,145	151,796	175,600	1,238,363
(Percent of total value)										
1974	(38.4)	(53.2)	(56.7)	(47.0)	(51.3)	(36.2)	(50.5)	(57.5)	(64.5)	(50.7)
1969	(53.1)	(69.8)	(67.2)	(64.4)	(68.6)	(61.2)	(68.5)	(75.2)	(78.7)	(68.1)

Source: 1974 Census of Agriculture.

from 1.5 billion dollars to 2.6 billion dollars in 1974. Tables 9 and 10 show amounts spent by Kansas farms on various inputs used in production of farm products in 1969 and 1974, respectively. In 1974 the largest amount of money spent on inputs went for buying livestock and poultry, 27.9 percent of all the expenses. However, in 1969 this portion was much higher, 37.5 percent. The portion or purchased feed for livestock and poultry, on the other hand, greatly increased. In 1969 only 6 percent of all the production expenses was used for feed. In 1974 the portion used for livestock and poultry feedstuff increased to 22.3 percent. The portions of the other major input items did not change appreciably. The inflation seems to affect all the input items equally. Most surprisingly the portion spent on gasoline and other petroleum products increased only from 5.0 percent in 1969 to 5.2 percent in 1974. However, the total amount of money spent on petroleum products doubled between 1969 and 1974. The commercial fertilizer prices seem to be affected most during the 1969-74 period. The portion spent on fertilizer increased from 4.7 percent to 7.7 percent. However, part of this increase is caused by an increase in the quantity of fertilizer used. In 1969 the quantity of fertilizer sold in Kansas amounted to 1,098,000 tons.¹⁾ In 1974 the quantity was 1,566,000 tons, an increase of 42.6 percent. The value of fertilizer purchased by Kansas farmers almost tripled between 1969 and 1974. Table 11 shows the average production expenses per farm in 1974.

¹⁾ Kansas Board of Agriculture, Farm Facts 1974-75, Topeka, Kansas, 1975, p. 157.

Table 9. Farm Production Expenses in 1969

	NW	WC	SW	NC	C	SC	NE	EC	SE	State
Total farm production expenses										
\$1000	82,104	145,559	274,303	149,852	122,236	210,561	137,400	169,401	189,660	1,531,075
Livestock and poultry										
\$1000	21,514	70,748	134,066	44,568	63,351	73,349	37,538	58,450	69,979	573,566
(%)	(26.2)	(48.6)	(48.9)	(29.7)	(36.8)	(34.8)	(27.3)	(34.5)	(36.9)	(37.5)
Feed for livestock and poultry										
\$1000	8,888	20,705	40,389	22,856	28,071	32,045	21,491	25,801	33,977	91,845
(%)	(10.8)	(14.2)	(14.7)	(15.3)	(16.3)	(15.2)	(15.6)	(15.2)	(17.9)	(6.0)
Seed, bulbs, plants and trees										
\$1000	1,988	2,015	3,825	2,535	2,698	3,566	3,142	2,941	2,919	25,627
(%)	(2.4)	(1.4)	(1.4)	(1.7)	(1.6)	(1.7)	(2.3)	(1.7)	(1.5)	(1.7)
Hired farm labor										
\$1000	3,576	4,656	10,340	4,605	5,083	8,341	4,757	6,065	6,394	53,816
(%)	(4.4)	(3.4)	(3.8)	(3.1)	(3.0)	(4.0)	(3.5)	(3.6)	(3.4)	(3.5)
Contract labor, machine hire and customer work										
\$1000	5,559	6,402	10,913	5,273	4,809	8,534	3,928	3,883	4,571	53,871
(%)	(6.8)	(4.4)	(4.0)	(3.5)	(2.8)	(4.1)	(2.9)	(2.3)	(2.4)	(3.5)
Commercial fertilizer purchased										
\$1000	3,377	2,855	8,126	8,563	6,791	11,648	11,790	10,041	9,368	72,564
(%)	(4.1)	(2.0)	(3.0)	(5.7)	(3.9)	(5.5)	(8.6)	(5.9)	(4.9)	(4.7)
Gas and other petroleum fuel										
\$1000	6,174	6,006	9,752	9,265	9,516	11,385	7,749	8,123	8,884	76,882
(%)	(7.5)	(4.1)	(3.6)	(6.2)	(5.5)	(5.4)	(5.6)	(4.8)	(4.7)	(5.0)
Agricultural chemicals, including lime										
\$1000	969	1,085	3,058	1,715	841	1,000	3,782	2,620	1,786	16,856
(%)	(1.2)	(.8)	(1.1)	(1.1)	(.5)	(4.7)	(2.7)	(1.5)	(.9)	(1.1)
Other production expenses										
\$1000	30,061	31,079	52,842	50,462	51,044	60,689	43,225	51,448	51,783	423,639
(%)	(36.6)	(21.3)	(19.3)	(33.7)	(29.6)	(28.8)	(31.5)	(30.4)	(27.3)	(27.7)

Source: 1974 Census of Agriculture.

Table 10. Farm Production Expenses in 1974

	NW	WC	SW	NC	C	SC	NE	EC	SE	State
Total farm production expenses										
\$1000	182,365	266,552	648,521	239,563	292,143	322,523	188,232	223,728	280,606	2,645,533
Livestock and poultry										
\$1000	45,708	84,276	240,443	51,676	88,333	68,226	31,817	51,659	68,816	736,956
(%)	(25.1)	(31.6)	(37.1)	(21.6)	(30.2)	(21.2)	(16.9)	(23.1)	(24.5)	(27.9)
Feed for livestock and poultry										
\$1000	28,894	59,718	178,704	44,549	61,641	56,388	33,841	46,236	78,724	588,668
(%)	(15.8)	(22.4)	(27.6)	(18.6)	(21.1)	(17.5)	(18.0)	(20.7)	(28.1)	(22.3)
Seed, bulbs, plants and trees										
\$1000	4,330	4,531	9,149	4,794	5,444	7,989	6,394	5,460	5,183	53,583
(%)	(2.4)	(1.7)	(1.4)	(2.0)	(1.9)	(2.5)	(3.4)	(2.4)	(1.8)	(2.0)
Hired farm labor										
\$1000	6,646	9,775	21,251	6,851	7,055	11,129	5,658	7,537	8,165	84,089
(%)	(3.6)	(3.7)	(3.3)	(2.9)	(2.4)	(3.5)	(3.0)	(3.4)	(2.9)	(3.2)
Contract labor, machine hire and custom work										
\$1000	10,238	11,410	18,576	7,012	7,701	14,349	5,148	4,507	5,246	84,189
(%)	(5.6)	(4.3)	(2.9)	(2.9)	(2.6)	(4.4)	(2.7)	(2.0)	(1.9)	(3.2)
Commercial fertilizer purchased										
\$1000	10,816	10,276	30,751	24,904	23,212	36,786	25,106	20,108	21,910	203,604
(%)	(5.9)	(3.9)	(4.7)	(10.4)	(8.0)	(11.4)	(13.3)	(9.0)	(7.8)	(7.7)
Gas and other petroleum fuel										
\$1000	11,641	11,471	20,602	15,540	16,474	21,141	12,674	12,723	14,315	136,592
(%)	(6.4)	(4.3)	(3.2)	(6.5)	(5.6)	(6.6)	(6.7)	(5.7)	(5.1)	(5.2)
Agricultural chemicals, including lime										
\$1000	2,528	3,359	9,246	13,852	2,796	3,274	7,288	5,560	3,901	42,584
(%)	(1.4)	(1.3)	(1.4)	(5.8)	(9.6)	(1.0)	(3.9)	(2.5)	(1.4)	(1.6)
Other production expenses										
\$1000	61,565	65,718	119,774	64,529	79,442	103,244	64,082	69,932	75,344	715,268
(%)	(33.8)	(24.7)	(18.5)	(26.9)	(27.2)	(32.0)	(34.0)	(31.3)	(26.8)	(27.0)

Source: 1974 Census of Agriculture.

Table 11. Average Production Expenses per Farm in 1974

	Amount
Livestock and poultry	\$8,997
Feed for livestock and poultry	7,187
Seed, bulbs, plants and trees	654
Hired farm labor	1,027
Contract labor, machine hire and custom work	1,028
Commercial fertilizer purchased	2,486
Gas and other petroleum products fuel	1,668
Agricultural chemicals, including lime	520
Other production expenses	<u>8,732</u>
Total	<u>\$32,298</u>

Source: 1974 Census of Agriculture

3.4. Farm Income

Realized gross farm income in 1974 was slightly down from the record high in 1973. But the Kansas farms improved their gross income by 98.8 percent between 1969 and 1974 (Table 12). However, farm production expenses increased appreciably during the same time period. In 1974 total net farm income dropped more than 30 percent from the all-time high in 1973. Between 1969 and 1974 the total net income realized by Kansas farmers increased by 143 percent. That means that the economic status of Kansas farms has improved in the last five years. Gross income per farm has increased from \$24,328 in 1969 to \$50,842 five years later. Net farm income went up from \$4,629 to \$11,812 in the same period. In 1969, for example, for every dollar of gross income \$0.81 went for purchased inputs. In 1974 \$0.77 of each dollar of gross income was spent on purchased inputs.

However, per farm averages may not be very meaningful because of great differences in earning capacities among farms. Table 13 shows the average amount of farm related income received per farm in 1974. Farm related income is income (before taxes and expenses) received for customwork and other agricultural services provided for others, for recreational services (like providing hunting, fishing, camping, etc.) and for participation in government farm programs. In western Kansas, as expected, because of the larger size farms, such income is much higher than in eastern Kansas. Statewide the average Kansas farm earned \$3,284 in farm related income.

Table 12. Kansas Gross and Net Farm Income 1964-1975
(in million dollars)

Year	Realized Gross Farm Income					Farm Production Expenses	Realized Net Farm Income	Net Change in Farm Inventories	Total Net Farm Income
	Cash Receipts From Farm Marketings	Govern- ment Payments	Non- Money Income	Other Farm Income	Total				
1964	1,184.9	188.8	79.7	14.4	1,467.8	1,128.8	339.0	-37.8	301.1
1965	1,206.6	207.3	81.5	17.0	1,512.4	1,254.3	258.1	122.0	380.1
1966	1,513.4	225.6	86.5	18.6	1,844.2	1,397.4	446.8	-30.5	416.3
1967	1,461.2	212.4	87.6	22.1	1,783.3	1,438.8	344.5	-8.1	336.4
1968	1,456.6	228.2	91.8	24.2	1,800.8	1,524.7	276.0	42.9	318.9
1969	1,736.1	235.2	95.8	26.4	2,093.6	1,738.3	355.3	43.1	398.4
1970	1,984.8	227.6	84.7	25.5	2,322.5	1,854.2	468.4	71.7	540.1
1971	2,233.3	217.7	88.0	30.3	2,569.3	2,049.7	519.6	99.4	619.0
1972	2,978.8	246.4	97.3	31.1	3,353.6	2,462.2	891.5	5.0	896.4
1973	4,168.8	150.4	112.3	38.4	4,469.9	3,207.3	1,262.6	162.2	1,424.8
1974	3,952.6	22.5	147.2	42.2	4,164.4	2,926.0	1,238.4	-270.9	967.5
1975	3,365.3	38.4	165.2	47.4	3,616.4	3,010.2	606.2	129.3	735.4

Source: U.S.D.A. Economic Research Service, State Farm Income Statistics, Supplement to Statistical Bulletin
No. 557, August 1976.

Table 13. Farm-Related Income, Farm-Related Expenses
and Off-Farm Income, 1974 (average of selected farms)

District	Farm-Related Income \$/Farm	Farm-Related Expenses \$/Farm	Off-Farm Income \$/Farm
NW	4,057	2,283	6,925
WC	7,380	3,553	6,961
SW	6,083	4,410	8,277
NC	2,763	2,082	5,741
C	2,633	1,036	7,021
SC	3,540	2,879	7,828
NE	2,344	1,887	7,472
EC	2,250	1,976	9,245
SE	2,475	1,848	8,612
State	3,284	2,441	7,692

Source: 1974 Census of Agriculture

3.5. Off-Farm Income

Increased industrialization in and near rural areas makes it possible for more and more farm people to find off-farm work and thus, improve or add to their farm incomes. The Kansas farmer makes a significant part of his income away from the farm (Table 13). In 1974 the average off-farm income was \$7,692 per farm or 39 percent of the total income (net farm income + off-farm income). However, Table 14 shows that compared to the U.S. average off-farm income in Kansas is less important than in other parts of the country. The average U.S. farmer earned almost 50 percent of his income off the farm in 1974. From an average total income of \$19,155 in 1974 \$9,329 was off-farm income. Within the State of Kansas the difference between east and west is not as high as expected. An average of \$7,390 for the larger western farms compares with \$8,445 earned off the farm by eastern Kansas farmers.

3.6. Government Payments

Payments to Kansas farmer for different government programs decreased rapidly since 1969 (Table 12). From over 200 million dollars received by Kansas farmers in the years before 1973 the government payments dropped to 22.5 million dollars in 1974. Table 15 shows the distribution of government monies for 1969 and 1974 for different programs.

4. Summary and Conclusions

The economic status of Kansas farms has improved since 1969. On the average it compares favorably with that of U.S. as a whole. However, per farm averages may not be too meaningful because of great differences in earning capacities among farms. In recent

Table 14. U.S. Farm Numbers, Output and Income by Economic Class, 1969, 1974 and 1975

	Economic Class							
	Ia	Ib	II	III	IV	V	Other	Total
No. of farms (1,000)								
1969	51	168	330	400	413	436	1,201	2,999
1974	114	352	583	326	249	493	713	2,830
1975	110	339	565	326	254	485	729	2,808
(Percent of all farms)								
1969	1.7	5.6	11.0	13.3	13.8	14.6	40.0	100.0
1974	4.0	12.4	20.6	11.5	8.8	17.4	25.3	100.0
1975	3.9	12.1	20.1	11.6	9.1	17.3	25.9	100.0
Cash receipts from farming, including other income (dollars per farm)								
1969	321,254	67,220	32,491	17,221	8,787	4,327	1,440	17,516
1974	389,931	63,506	30,141	15,629	7,875	3,785	1,082	33,235
1975	388,636	63,826	30,350	15,770	7,961	3,844	1,110	32,534
(Percent of all receipts)								
1969	31.2	21.5	20.4	13.1	6.9	3.6	3.3	100.0
1974	47.2	23.7	18.7	5.4	2.1	2.0	0.9	100.0
1975	46.8	23.7	18.8	5.6	2.2	2.0	0.9	100.0
Realized net income per farm			(dollars per farm)					
1969	42,136	17,547	10,561	5,961	3,300	1,722	927	4,733
1974	84,300	20,401	11,332	6,065	3,365	1,762	1,026	9,826
1975	63,236	17,558	10,116	5,451	3,064	1,606	1,004	8,079
Off-farm income per farm								
1969	7,490	3,869	3,215	3,860	5,094	5,752	6,963	5,539
1974	11,211	5,886	5,091	6,469	8,550	9,824	15,431	9,329
1975	12,418	6,501	5,577	7,031	9,260	10,612	16,364	10,129
Total net income per farm*								
1969	49,626	21,416	13,776	9,821	8,394	7,474	7,890	10,272
1974	95,511	26,287	16,423	12,534	11,915	11,586	16,457	19,155
1975	75,654	24,059	15,693	12,482	12,324	12,218	17,368	18,205

* Including government payments

Source: U.S.D.A., Economic Research Service, Farm Income Statistics, Statistical Bulletin No. 557, July 1976.

Table 15. Government Payments, by Programs, 1969 and 1974, in \$1000

Program	1969	1974
Wheat program	151,090	7,120
Feed grain program	71,431	6,069
Sugar act	1,036	1,107
Crop land adjustment	1,514	860
Great plains conservation	902	801
Conservation and other	9,274	6,500

Source: U.S.D.A., Economic Research Service, State Farm Income Statistics, Supplement to Statistical Bulletin No. 557, August 1976 and U.S.D.A., Economic Research Service, Farm Income, Supplement to Farm Income Situation, August 1972.

years, the difference between high income farms and farms with low incomes seemed to increase further. The successful commercial farms make extensive use of technology, whereas small farmers are not helped with technology. The heterogeneity among farms increases over time. The world food shortage in recent years attributed to relatively high prices for farm products and this helped many farmers to survive the competition with fellow farmers. Within Kansas the difference in size and earning capacity between western and eastern farms is increasing very rapidly. The average farm size in western Kansas increased by 22 acres per farm. In eastern Kansas the average farm size did not change since 1969. The difference of \$120,000 in value of total sales per farm between southwest and northeast shows the differences among Kansas farms even better. However, a high gross income does not necessarily guarantee a high net income, because of increasing costs of purchased inputs. However, in order to get a satisfactory net return for family living and investment, a farm business must reap a sizeable gross return, because more and more of today's farm inputs are not produced on the farm but they must be purchased.

Part-time farming in Kansas is not as important as it is for the U.S. agriculture as a whole. The trend in Kansas is toward larger farms and corporations. But, increasing job opportunities in and near rural areas help small farmers to improve their income by off-farm employment.

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Kansas Board of Agriculture, Farm Facts, Topeka, Kansas, Years 1971-1976.

Orazem, Frank, The Changing Kansas Farm, The Kansas Agricultural Situation, Kansas State University, Manhattan, Kansas, Vol. 36, No. 8, January 1960.

U.S. Department of Agriculture, Economic Research Service, Farm Income Statistics, Statistical Bulletin No. 557, July 1976.

U.S. Department of Agriculture, Economic Research Service, State Farm Income Statistics, Supplement to Statistical Bulletin No. 557, August 1976.

U.S. Department of Agriculture, Economic Research Service, Farm Income, Supplement to Farm Income Situation, August 1972.

U.S. Department of Commerce, Bureau of Census, 1974 Census of Agriculture, Preliminary County Reports, July/August 1976.

ECONOMIC STATUS OF KANSAS FARMS 1974

by

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AN ABSTRACT OF A MASTER'S REPORT

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ABSTRACT

This report shows some recent changes in Kansas agriculture which are important for the economic well-being and the viability of the state's farms. These changes are related to the number and size of farms, type of farm organization, distribution of farms by economic class, use and composition of farm resources, value of agricultural products sold, production expenses, and income of Kansas farms. Mainly based on the preliminary county reports for Kansas of the 1974 Census of Agriculture the report points out changes occurred between 1969 and 1974. The results are presented for each of the nine Kansas crop reporting districts and for the whole state.

The economic status of Kansas farms improved since 1969. It compares favorably with that of the U.S. as a whole. The number of farms is still decreasing and the average farm grows in size. The differences in size of average farms between eastern and western parts of the state gets greater and the difference in earning capacity among Kansas farms is increasing. The total net farm income in Kansas almost tripled since 1969, however a sharp increase is expected since inflation and other price moving powers must be taken into consideration. The trend continues toward larger farms and family owned corporations, however there will still be a place for the part-time farmer. Part-time farming in Kansas is not as important as it is for the U.S. as a whole.