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Competitive Position of Indiana Farmers

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COMPETITIVE POSITION OF INDIANA FARMERS

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Indiana farmers retain a strong competitive position in the production of corn and the livestock enterprises closely associated with corn. During the next 10 years aggressive farmers who use progressive practices in the operation of commercial farms are likely to have earnings comparable to those in most other businesses.

The factors affecting the competitive position of Indiana farmers are many and varied. They include the geographic changes in population growth, the changing eating habits of consumers, changing technology in agricultural production and government programs.

Prior to World War II, the major areas of population concentrations were along the eastern seaboard and the Great Lakes. During the past decade population has grown very rapidly in the "Sunshine States" of Florida, California, Arizona, New Mexico and Nevada. (Figure 1). In the U. S. as a whole, population is expected to increase about 20 percent during the 1960's, but in Florida and the Southwest, growth may be as much as 80 percent. These areas now offer important and growing markets for the products of the midwest.

CHANGES IN FOOD HABITS

In addition to important geographic shifts and expanding population, the demand for all food products has been affected by changes in peoples' food habits. However, changes in production costs as well as changes in demand have caused more use of some commodities while others declined. As a result of improved production methods and lower prices, the per capita consumption of poultry meat has increased about 65 percent since the end of World War II (Table 1). On the other hand, per capita use of lamb and mutton declined about 25 percent, beef consumption per person rose 26 percent and the use of pork on a per capita basis showed little change.

Table 1. Meat consumption per person

Kind of meat	1945-1949	1961	Change
	pounds		percent
Beef and veal	73	92	+26
Pork	69	67	- 3
Lamb and mutton	6	4.5	-25
Poultry	23	38	+65

REGIONAL PRODUCTION SHIFTS

The Corn Belt now produces a slightly smaller share of the nation's feed supply and also a smaller share of the nation's livestock. But this decline was more than offset by increases in production of wheat and soybeans. (Tables 2 and 3).

Southern states reduced cotton production and shifted land into grass and pulp wood production. With more grass in this region, cattle production has expanded rapidly. (Table 4).

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Figure 1.

Trends affecting the competitive position of Indiana farmers

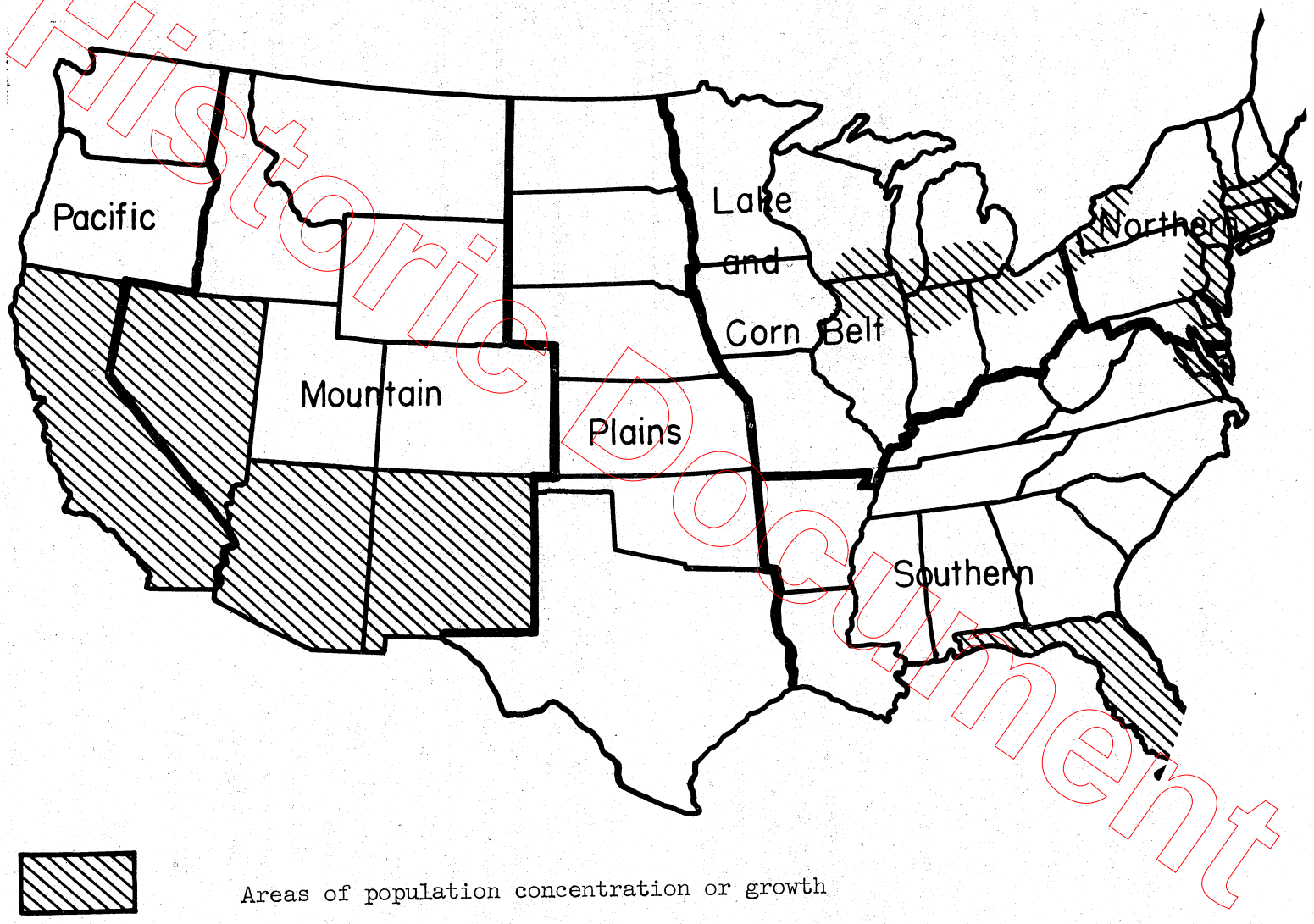

Table 2.-Geographic shifts in total farm production, 1946-1950 to 1956-1960

Region	Production index a/			Change in regional share b/		
	Livestock	Crops	Farm output	Livestock	Crops	Farm output
				Percent	Percent	Percent
Northeast	119	99	112	-0.4	-1.0	-0.7
Lake States	117	125	125	-.5	.9	.3
Corn Belt	115	126	125	-1.8	2.1	.7
Northern Plains	114	116	118	-.6	.1	-.3
Appalachian	126	95	109	.2	-1.7	-.9
Southeast	194	101	128	2.3	-.9	.4
Delta States	151	101	121	.8	-.8	0
Southern Plains	110	113	116	-.8	-.1	-.4
Mountain	120	124	126	-.1	.5	.2
Pacific	139	126	130	.9	.9	.7
United States	122	115	121	0	0	0

a/ 1956-60, with 1946-50=100.

b/ Percentage of U.S. total in 1956-60 minus percentage of U.S. total in 1946-50.

Table 3.-Geographic shifts in kinds of crop production, 1946-1950 to 1956-1960

Region	Production index a/					Change in regional share b/				
	Feed grain	Food grain	Fruit and veg.	Cotton	Oil crop	Feed grain	Food grain	Fruit and veg.	Cotton	Oil crop
						%	%	%	%	%
Northeast	124	77	93	---	391	-0.1	-0.8	-1.9	---	0.8
Lake States	128	104	113	---	150	-.1	0	.6	---	-.8
Corn Belt	125	114	79	102	181	-1.2	1.4	-1.2	0	5.7
Northern Plains	132	95	79	---	152	.5	-2.6	-.5	---	-.6
Appalachian	100	96	80	81	151	-1.6	-.1	-1.3	-2.0	-.5
Southeast	133	163	121	71	89	.2	.2	1.9	-5.6	-6.1
Delta States	91	145	71	86	527	-.7	1.4	-1.0	-5.2	6.3
Southern Plains	167	98	82	115	71	1.4	-.5	-.9	3.0	-3.0
Mountain	156	108	111	195	33	.5	.7	.5	3.8	-.6
Pacific	203	105	116	190	44	1.1	.3	3.8	6.0	-1.2
United States	128	102	104	105	161	0	0	0	0	0

a/ 1956-60, with 1946-50=100.

b/ Percentage of U.S. total in 1956-60 minus percentage of U. S. total in 1946-50.

Table 4.-Geographic shifts in kinds of livestock production, 1946-1950 to 1956-60

Region	Production index a/			Change in regional share b/		
	Meat animals	Dairy products	Poultry products	Meat animals	Dairy products	Poultry products
				percent	percent	percent
Northeast	103	116	128	-0.6	1.3	-2.1
Lake States	117	118	116	-.4	1.6	-2.0
Corn Belt	121	100	105	-.2	-1.6	-5.7
Norther Plains	123	93	91	.2	-.8	-2.5
Appalachian	120	108	157	-.1	-.1	1.1
Southeast	143	114	367	.5	.2	8.2
Delta States	130	98	259	.2	-.4	3.1
Southern Plains	115	85	126	-.4	-1.2	-.6
Mountain	127	109	99	.3	0	-.9
Pacific	137	122	163	.5	1.0	1.4
United States	122	109	141	0	0	0

a/ 1956-60, with 1946-50=100.

b/ Percentage of U.S. total in 1956-60 minus percentage of U.S. total in 1946-50.

Table 5. Changes in harvested crop acreage, 1953 compared with 1959, United States a/

Crop	1953	1959	Changes 1953-59	1961
		(1,000 acres)		
Wheat, all	67,608	53,024	- 14,584	51,620
Cotton	24,341	15,164	- 9,177	15,686
Rice	2,135	1,586	- 549	1,589
Tobacco	1,634	1,154	- 480	1,174
Total allotment crops	95,718	70,928	- 24,790	
Corn (grain only)				58,691
Corn, all	80,279	84,609	+ 4,330	66,453
Oats	39,358	28,496	- 10,862	24,077
Barley	8,534	15,074	+ 6,540	12,969
Grain sorghum for grain	6,137	15,575	+ 9,438	11,026
Total feed grains	134,308	143,754	+ 9,446	
Soybeans for beans	14,366	22,428	+ 8,062	27,340
Flaxseed	4,380	3,132	- 1,248	2,514
Total feed grains, Soybeans and flaxseed	153,054	169,314	+ 16,260	
Hay, all	73,918	69,404	- 4,514	67,085
Total of 11 selected crops shown	322,590	309,646	- 12,944	
Total of 59 crops b/	340,444	324,892	- 15,552	296,062

a/ Data from Agricultural Statistics, USDA, 1954, and Crop Production, December 1959, AMS.

b/ Acreage harvested of 59 crops officially reported by the Crop Reporting Board, including the 11 selected crops shown.

Improved crop varieties, increased irrigation and government allotment programs have resulted in shifting a larger share of the nation's feed grain production into the Great Plains States at the expense of the Corn Belt. Between 1953 and 1959, the seven major wheat states of North Dakota, Kansas, Oklahoma, Texas, Montana, Colorado and Washington shifted nearly 11 million acres out of wheat and into feed grain crops (primarily grain sorghum and barley). In these seven states alone, the increase in grain sorghum production would more than account for the total accumulation of surplus feed grains in the nation during the 1953-59 period. (Tables 5, 6, 7, 8 and 9).

SHIFTS IN DAIRYING

Changing consumer food habits, changing technology in agricultural production and marketing and changing patterns of feed production have caused some shifts in livestock production. Dairy production has tended to decline in Indiana and increase in the Lake States and the Northeast. (Table 10). Much of the decline has been in the production of sour cream and milk for manufacture. Even so, medium to large sized dairy enterprises producing for the wholemilk market are still able to compete successfully in Indiana. Poultry production has tended to move to the South where housing and labor costs are lower.

Table 6. Changes in acreage of selected crops, 1953 to 1959, in: a/

Eight major corn states (Ohio, Indiana, Illinois, Missouri, Iowa, Minnesota, Wisconsin and Michigan)

	1953	1959	Change
		(1,000 acres)	
Allotment crops (Wheat and tobacco)	10,468	8,139	-2,329
Feed grain crops ( )	65,980	67,306	+1,326
Soybeans and flaxseed	12,604	16,203	+3,599
Total feed grain and oil seed	78,584	83,509	+4,925
Hay	23,358	21,456	-1,902
Total of selected crops and hay	112,410	113,104	+ 694
Total of 59 crops b/	115,582	116,071	+ 489

a/ See Table 4. b/ See Table 4.

Table 7. Changes in acreage of selected crops, comparing 1953 with 1959 in:

Seven cotton and tobacco states (North Carolina, South Carolina, Georgia, Tennessee, Alabama, Kentucky and Virginia)

	1953	1959	Change
		(1,000 acres)	
Allotment crops (Wheat, cotton and tobacco)	9,165	5,383	-3,782
Feed grain crops	15,517	14,577	- 940
Soybeans	948	1,798	+ 850
Feed grains and soybeans	16,465	16,375	- 90
Hay	7,829	6,919	- 910
Total selected crops	33,459	28,617	-4,852
Total of 59 crops	35,345	30,387	-4,958

Substantial crop land was diverted to pasture and pulp wood production in the South East.

Table 8. Changes in acreage of selected crops, comparing 1953 with 1959 in:

Six cotton and rice states (Mississippi, Arkansas, Louisiana, New Mexico, Arizona, and California)

	1953	1959	Change
		(1,000 acres)	
Allotment crops (Wheat, cotton and rice)	10,273	6,803	-3,470
Feed grain crops	5,686	6,032	+ 346
Soybeans	955	3,359	+2,404
Feed grain and soybeans	6,641	9,391	+2,750
Hay	4,365	4,465	+ 100
Total of selected crops	21,280	20,659	- 569
Total of 59 crops	23,682	22,892	- 790

Cotton land was shifted to soybeans.

Table 9. Changes in harvested acreage of selected crops, 1953 to 1959 in: a/

Seven major wheat states (North Dakota, Kansas, Oklahoma, Texas, Montana, Colorado, and Washington)

	1953	1959	Change
		(1,000 acres)	
Allotment crops (Wheat, cotton and rice)	52,217	41,359	-10,858
Feed grain crops ( )	20,570	31,547	+10,977
Soybeans and flaxseed	3,105	2,823	- 282
Total feed grains and oil seeds	23,675	34,370	+10,695
Hay	13,609	13,288	- 484
Total of selected crops and hay	89,501	89,017	+ 56
Total of 59 crops b/	97,530	94,453	- 3,077

a/ See Table 4.
b/ See Table 4.

The wheat states dumped their problems into the feed and livestock industry.

Table 10. Indiana is producing a smaller share of the nation's milk

Milk production	1950	1959
U. S.--cow's	22,800,000	19,773
milk (mil. lb.)	120,000	124,883
Indiana--cow's	705,000	514,000
milk (mil. lb.)	3,560	3,603
Wisconsin--cow's	2,306,000	2,226,000
milk (mil. lb.)	15,612	17,986

HOGS STAY IN THE CORNBELT

Contrary to some reports, the Corn Belt has expanded hog production more rapidly than the Southern or Plains States. Indiana farmers are close to the feed and close to the market. Their feed costs are lower and hog prices higher. They retain an excellent competitive position in hog production (Tables 11, 12, 13 and 14).

Table 11. Price of corn is generally lower in the Corn Belt, selling price of hogs is generally higher; so the Corn Belt hog-corn ratio is more favorable

Year	Indiana			Georgia		
	Corn	Hogs	Ratio	Corn	Hogs	Ratio
1951	$1.66	$20.68	12.4	$1.69	$20.17	11.9
1952	1.64	18.54	11.3	1.85	17.97	9.7
1953	1.42	22.46	15.8	1.73	20.99	12.1
1954	1.44	22.53	15.6	1.59	22.06	13.9
1955	1.24	15.71	12.7	1.49	16.11	10.8
1956	1.28	14.58	11.4	1.24	14.50	11.7
1957	1.14	18.02	15.8	1.29	17.60	13.6
1958	1.11	20.27	18.2	1.37	19.74	14.4
Average	1.37	19.10	13.9	1.52	18.64	12.3

Table 12. This better hog price and lower corn price more than offsets the South's advantage in lower building and equipment cost, by an average of $3.03 per hog

Indiana hog price (1951-58)	$19.10	
Georgia hog price (1951-58)	18.64	
Corn Belt advantage, per hog		$1.03
Georgia corn price	1.52	
Indiana corn price (1951-58)	1.37	
Corn Belt advantage, per bushel	.15	
Corn Belt advantage, per hog (15 bushels)		2.25
Total Corn Belt advantage, per hog		3.28
Indiana building and equipment cost per hog	1.00	
Georgia building and equipment cost per hog	.75	
South's advantage, per hog		.25
NET CORN BELT ADVANTAGE PER HOG		$3.03

Table 13. And the Corn Belt advantage in returns per hour of labor continues at different stages of the hog cycle

Corn	Hogs	Indiana Ratio	Labor return
$1.37	$19.10	1-14	$1.85
1.10	18.70	1-17	2.58
1.10	15.40	1-14	.80
1.10	12.10	1-11	-1.07
		Georgia	
$1.52	$18.64	1-12.2	$1.03
1.30	18.20	1-14	1.61
1.25	14.95	1-12	0
1.15	12.00	1-10.4	-1.18

Table 14. NET RESULT: Percentage of hog crop produced in the South hasn't increased relative to the Corn Belt, as some exaggerated reports would indicate

Where hogs were produced	1947	1952	1958
		Percent	
Corn Belt and North Atlantic	72	75	76
South Atlantic and South Central	22	20	19
Other regions	6	5	5

BEEF CATTLE INCREASE

Beef cow numbers increased about 95 percent in Indiana between 1950 and 1960. This compares with increases of 113 percent in the Southern States and 36 percent in the Plains and Mountain States. Beef cow herds offer a good secondary source of income on many Indiana farms. Only a few farms in Indiana can be profitably operated with a beef cow herd as a major source of income.

Cattle feeding increased 21 percent in Indiana during the decade of the '50's. This compares with increases of 42 percent in the Corn Belt, Plains and Great Lakes states, 128 percent in the mountain region, 240 percent in the Pacific area and 69 percent for the nation as a whole (Tables 15 and 16).

Increased population in the west coupled with increased feed production in the Plains region has encouraged cattle feeding in the western part of the country. Cattle feeders in the west have the advantage of a dry climate where shelter and concrete lots are unnecessary. They are closer to the supply of feeder cattle, and they are near the western market.

Many cattle in these regions are fed in larger commercial feed lots that have an advantage in both buying and selling. However, feed costs are higher and the price of fed cattle is lower in the Western States

Table 15. Location of beef cows, 1950 and 1960

Location	January 1, 1950 Number (000)	January 1, 1950 % of U. S.	January 1, 1960 Number (000)	January 1, 1960 % of U. S.	% change 1950-1960
Indiana	178	1	347	1	95
Corn Belt and Lake States	2,070	12	3,970	15	92
Southern States	2,816	17	5,993	23	113
Plains and Mountain States	10,675	64	14,484	55	36
Pacific States	1,107	7	1,689	6	53
United States	16,743		26,344		57

Table 16. Location of cattle on feed, 1950 and 1960

Location	January 1, 1950 Number (000)	January 1, 1950 % of U. S.	January 1, 1960 Number (000)	January 1, 1960 % of U. S.	% change 1950-1960
Indiana	185	4	224	3	21
Corn, Belt, Lake and Plain States	3,665	82	5,219	69	42
Mountain States	462	10	1,052 844	14	128
Pacific States	248	6	7,564	11	240
United States	4,463				69

than in the Corn Belt. Besides, the Corn Belt farmer has the advantage of using the same labor force and some of the same machinery for growing crops in the summer and feeding cattle in the winter. These advantages continue to give him a strong competitive position. In spite of the rapid growth of cattle feeding in the Western States, the Corn Belt still feeds about two-thirds of the nation's cattle and is likely to do so for some time.

FARM BUSINESS PROSPECTS

During the mid '50's farm prices were going down, costs were rising and farm earnings were low. During the last part of the 1950's, prices stayed down and costs continued to rise but many good commercial farmers were able to improve their earnings through improved business organization and production practices. As these adjustments continue, earnings on these well-operated farms are expected to gradually improve.

In summary: The natural advantages Indiana farmers have in corn production plus their nearness to the Great Lakes and Eastern markets gives Hoosiers a strong competitive position in the feed and livestock industry.

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