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The Size - Scope - Significance of Agriculture in Kosciusko County, Indiana

The purpose of this paper is to discuss the importance of agriculture to the financial welfare of Kosciusko County. Kosciusko County is a major influence in Indiana agriculture from an income and size standpoint. The overall thrust will be to show how large Kosciusko County agriculture is from the aspect of the size of the overall county and then how much income is produced and spent in Kosciusko County.

One of the primary facts that needs to be brought out in the beginning of this term report is that of all the industries, agriculture historically spends most of the money it makes, in the county where it is made. This discussion will primarily be limited to the presentation of facts about agriculture so that each individual can draw his own conclusions as to the importance of agriculture to our local economy. It is important to point

out, however, that while the discussion relates to direct agriculture production, the agricultural industry provides jobs in many service industries, feed mills, fertilizer plants, equipment dealers, seed dealers, repair services, to name a few. These satelite industries provide our economy with many jobs and a large amount of income which is not reported as a direct part of agricultural income.

Part # 1 Kosciusko County Physical Layout

Kosciusko County is a county of 14 townships that covers 555 square miles and is rated as the third largest physical county in Indiana. The county extends about 27 miles north to south and about 21 miles east to west. This is an area of 345,728 acres.

Table 1: Kosciusko County - Land Use 1

Cropland (Harvested)	172,864 Acres
All Other Cropland	34,572
Woodland	34,572
All Other Land on Farms	17,286
Non Farm Land	86.432

<sup>1.</sup> Purdue University Extension Service, Department of Agricultural Statistics (Purdue, Indiana), 1985.

Of that total county acreage, 274,364 acres or 79.4% is in farms. Most of the land in Kosciusko County is in private ownership.

According to the 1982 Census the county has the following breakdown in size of farm ownership.

Table #22

		1982	1978	Change
Total Number of Farms		1,442	1,527	- 85
Average Size of Farms		190 Ac.	189 Ac.	+ 1
Ave. Value of Land & Bu	ilding/Fa	rm 321,461	311,321	+ 10,140
Average size of Farms U	sing Acre	s Harvested		
1 to 9 Acres	Farms	111	105	+ 6
	Acres	582	526	+ 56
10 to 19 Acres	Farms	104	104	- 0
	Acres	1,443	1,445	- 2
20 to 29 Acres	Farms	91	94	- 3
	Acres	2,144	2,195	- 51
30 to 49 Acres	Farms	145	168	- 23
	Acres	5,523	6,451	- 928

<sup>2. 1982</sup> Census of Agriculture, United States Department of Commerce (Washington, D.C.) 1982, p. 178.

50 to	59 Acres	Farms	295	313	- 18
		Acres	20,553	22,051	- 1,498
100 to	199 Acres	Farms	205	262	- 57
		Acres	29,256	36,029	- 6,773
200 to	499 Acres	Farms	213	253	- 40
		Acres	67,525	79,007	- 11,482
500 to	999 Acres	Farms	85	67	+ 18
		Acres	55,297	45,468	+ 9,829
1000 an	d More Acres		17	13	+ 4
			25,892	18,536	+ 7,359

The preceding chart shows some important facts about Kosciusko County in the 5 years from 1978 to 1982. The first trend is that total harvested croplands is down by 3,493 acres from 211,708 acres in 1978 to 208,215 acres in 1982. This shows useable crop land is being taken out of production and used for other purposes and other land classes are not being used for these non-farm purposes. The chart also shows a switch in the size of farms. There is both a reduction in the number of harvested acres in the farms in the 10 acre to 500 acre categories and a dramatic growth in the larger farm classifications. In farms over 500 acres there is a farm number increase and an acreage increase. This is brought about by larger and more efficient farm equipment becoming available to farmers. Another important factor seen

in this 5 year time period is a significant reduction in pasture and grazing land. In 1978 we had 17,107 acres in pasture and 12,049 in 1982, a loss of 5,058 in five years. Many of these acres were put into crop acres as farmers worked to increase their income by farming some of the more marginal land.

In the area of physical changes, a significant factor in Kosciusko County is the increase of acres of land under irrigation. In 1978 there were 25 farms and 2,640 acres being irrigated. By 1982 there were 45 farms and 7,150 acres being irrigated. The real significance of this will show up in the income amounts coming into our county through increased yields from those acres.

Table 3: Tenure and Characteristics of Operators<sup>3</sup>

Ownership		1982	1978	Change
Full Owners	Farms	881	893	- 12
	Acres	87,539	87,548	- 9
Part Owners	Farms	424	483	- 59
	Acres	162,361	170,170	- 7,809

3. 1982 Census of Agriculture, p. 198.

Tenants	Farms	137	151	- 14
	Acres	24,464	30,561	- 6,097
Days Worked Off Farm				
		1982	1987	Change
1 to 49		96*	136*	- 40
50 to 99		48	45	+ 3
100 to 149		44	49	- 5
150 to 199		74	70	+ 4
200 or More		615	634	- 19
None		468	525	~ 57
Average Age of Farmers				
		1982	1978	Change
Under 25		48	55	- 7
25 to 34		208	235	- 27
35 to 44		351	343	+ 8
45 to 54		324	315	+ 9
55 to 64		296	365	- 69
65 and Over		215	214	- 1
Average Age		48.5	48.8	

Type of Organization <sup>4</sup>	1982	1987	Change
Family Farms	1,208	1,291	- 83
Partnership	166	192	- 26
Corporations	57	38	+ 19

The previous discussions and tables have so far shown how much farm land there is in Kosciusko County and who farms the land, how old they are, how they organized their farms and how much part time income comes in to the farmers.

Up until now we have looked at gross acreage figures. The next section will be devoted to what is produced on these acres.

Table 4: Production Levels for Kosciusko County<sup>5</sup>

### Livestock Produced

	1984	1982	% of State
Hens and Pullets	2,239,600	2,145,600	10.2
Milk Cows	5,800	5,800	2.9
All Hogs and Pigs	94,700	100,000	2.2
All Cattle and Calves	42,900	45,000	2.5

<sup>4. 1982</sup> Census of Agriculture, p. 208.

<sup>5. &</sup>quot;Field Crops", Department of Agricultural Statistics, (Purdue University) 1982, 1983, 1984.

## Livestock Produced (cont'd)

	1984	1982	% of State
All Veal	18,900 *	N/A	N/A
All Ducks	5,000	N/A	N/A

# Crop Production for Kosciusko County<sup>6</sup>

		1984		1982	
Crop for Grain	Acres	111,700		113,000	
	Yield/Acre ,	108	bu.	116	bu.
	Production	12,080,000	bu.	13,098,000	Ъu.
Soybeans for Grain	Acres	58,300		65,800	
	Yield/Acre	30	bu.	36	bu.
	Production	1,755,000	bu.	2,357,800	bu.
Winter Wheat	Acres	19,200		16,600	
	Yield/Acre	50	bu.	36	bu.
	Production	960,900	bu.	599,700	bu.
Oats for Grain	Acres	1,700		2,700	
	Yield/Acres	67	bu.	62	bu.
	Production	113,300	bu.	166,400	bu.

<sup>\*</sup> This figure reflects 1986 numbers and represents calves sold per year.

<sup>6. &</sup>quot;Field Crops" USDA

#### Crop Production (cont'd)

		1984	1982
Нау	Acres	14,200	13,700
	Yield/Acre	3.2 ton	3.6 ton
	Production	45 ton	49,700 ton

The following table shows how Kosciusko County ranks state wide in each of the listed categories:

Production Item	State Ranking <sup>7*</sup>	Number of farms in Kosciusko County growing 3 commodities. <sup>8*</sup>
Hogs and Pigs	9	360
Cattle and Calves	1	668
Hens and Pullets	2	142
Milk Cows	8	128
Corn	16	641
Soybeans	36	638
Wheat	27	
Oats	n/A	61

<sup>7.</sup> Gross Cash Farm Income by Counties 1982 USDA (Purdue University) May 1986, pp. 13-20.

<sup>8. &</sup>quot;Field Crops" USDA (Purdue University)

<sup>\*</sup> Many farms are counted in more than one category because of crop and livestock production.

### State Ranking (cont'd)

Нау	N/A	111
Vea1	n/A	17 **
Ducks	1	21 **

The final part of this report will be devoted to how much income is generated by these farms, farmers, and the sale of the items they produce.

In 1982 Ke tucko County led all counties in Indiana in total cash income with an . of \$126,900,000. This is more than \$20,000,000 over the nearest county. In Indiana, agricultural sales were 4.5 billion dollars. The following table gives a precise listing of the individual categories from which these dollars are derived.

Table 6 on following page.

<sup>\*\* 1985</sup> farm numbers - veal and ducks numbers courtesy Maple Leaf Duck Farms, Inc. and Strauss Veal, Inc. April 1986.

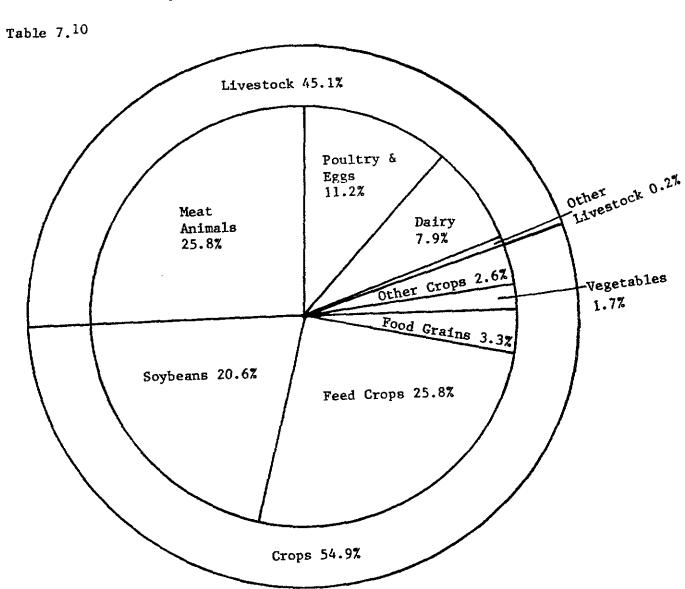
Table 6. Gross Cash Income from Farm Marketings from Indiana Farms by Commodities, with Comparisions,  $1982 \ 2/9$ 

	1972		1976		1982	
		% of		% of		% of
Commodity	Income	Total	Income	Total	Іпсоше	Total
	From Sales	Income	From Sales	Income	From Sales	Income
	(000)		(000)		(000)	
	Dollars		Dollars		Dollars	
Corn	346,753	20.1	1,058,094	31.8	1,361,444	30.2
Soybeans	290,736	16.8	655,669	19.7	1,030,317	22.9
Hogs	464,585	26.9	642,013	19.3	769,864	17.1
Cattle & Calves	210,077	12.2	284,396	8.5	344,147	7.6
Dairy Products	146,698	8.5	221,046	6.6	312,800	6.9
Poultry & Eggs <u>3</u> /	110,868	6.4	179,274	5.4	<b>3</b> 06 <b>,9</b> 21	6.8
Wheat	49,606	2.9	142,819	4.3	152,416	3.4
Vegetables 4/	19,338	1.1	<b>28,78</b> 1	.9	48,418	1.1
Greenhouse & Nursery	11,051	. 7	9,822	.3	46,680	1.0
Tobacco	9,993	. 6	17,196	. 5	25,157	.6
Hay	6,777	. 4	14,244	. 4	•	. 5
Popcorn	3,843	. 2	10,761	.3	16,744	- 4
Fruits, Nuts & Berries 5/	5,660	.3	5,959	. 2	16,201	. 4
Mint	2,310	.1	6,011	.2	6,972	. 2
Oats	4,842	.3	7,537	. 2	4,667	. 1
Sheep & Lambs	4,128	. 2	3,344	.1	3,653	. 1
Other Agricultural Products	38,353	2.3	43,789	1.3	33,638	.7
TOTAL ALL COMMODITIES	1,725,618	100.0	3,330,755	100.0	4,500,467	100.0
<ul> <li>Economic Research Service, U.S. Department of Agriculture.</li> <li>Includes broilers, farm chickens, turkeys, eggs and ducks.</li> </ul>						
3/ Includes broilers, farm chickens, turkeys, eggs and ducks.						
4/ Includes tomatoes, onions, watermelons, and cantaloupes. 5/ Includes apple, peaches, and strawberries.						
$\overline{5}$ / Includes apple, peaches, and strawberries.						

The incomes of agriculture are a constantly changing item. The figures in table 6 reflect the years from 1972 to 1982 where there is evidence of a change from livestock to crops as the income growth areas. Crop incomes grew much faster

"Gross Cash Farm Income" p. 1.

than livestock incomes. Table 7 below, which reflects Indiana income numbers in 1984 shows another change. The income coming from crops as a total percent is dropping and livestock income is increasing. In Kosciusko County, where agriculture is very diverse, there are both significant crop and livestock incomes; therefore, the effects of economic shifts and changes are less dramatic than in areas of the state where the primary income levels come from either crops or livestock.



10. "Annual Crop and Livestock Summary 1984" USDA (Purdue University) June 1985 p. 114.

For Kosciusko County the figures are approximately as follows per the 1982 Census of Agriculture. 11

Corn	\$ 20,043,00
Wheat	1,817,000
Soybeans	11,270,000
Hogs and Pigs	16,856,000
Cattle	17,190,000 *
Milk	8,340,000
All Poultry	37,630,000 ***
Vea1	8,000,000 **
Ducks	23,000,000 ****

The data presented in the paper shows a very large agricultural industry for Kosciusko County. This industry brings a yearly gross revenue of \$126,900,000 into the community and is a very important resource.

While in the years since 1982 there have been major changes in the agricultural ecomony, agriculture in Kosciusko remains a monetarily significant industry and every effort needs to be taken to strengthen this industry for the benefit of the financial stability of the county,

Includes both beef and dairy animals.

<sup>\*\*</sup> Is a 1986 figure for income.

<sup>\*\*\*</sup> Includes eggs and birds.

<sup>\*\*\*\* 1985</sup> income figures courtesy Maple Leaf Duck Farms.

<sup>11. 1982</sup> Census of Agriculture p. 36.