

Economic Importance of and Economic Impacts Associated with Livestock Production in Box Butte County

May 2005

Prepared by:

Donis N. Petersan, Ph.D., CEcD
Economist
Economic Development Department
Nebraska Public Power District
1414 15th Street - Box 499
Columbus, Nebraska 68602-0499

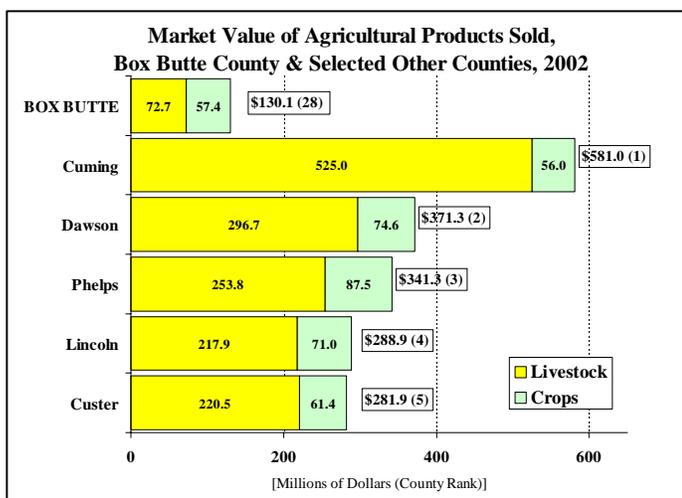
Telephone: (402) 563-5304 or (800) 282-6773
Email: dnpeter@nppd.com

Executive Summary

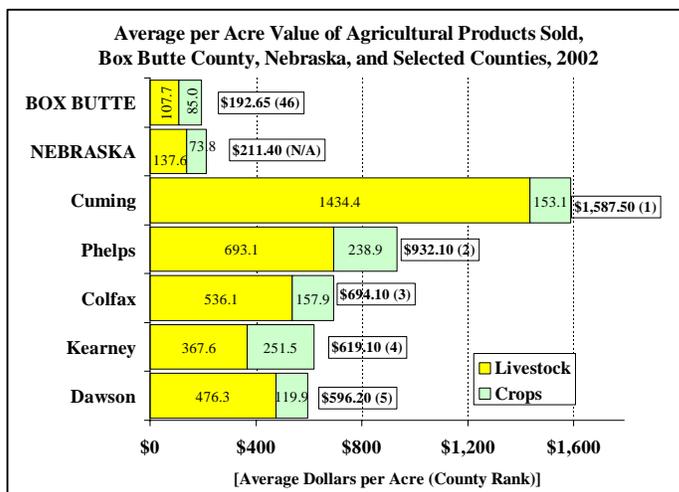
Information provided in this report focuses on the economic importance of the livestock sector in Box Butte County. The first part of the report reviews agriculture data from the *2002 Census of Agriculture*. These data provide information on the importance of agriculture and the livestock sector in Box Butte County. The second part of the report analyzes the direct, indirect and total economic impacts associated with livestock operations in Box Butte County. This analysis utilizes the *2002 Census of Agriculture* data along with the IMPLAN input-output (I-O) database and model developed specifically for Box Butte County.

Livestock and Agricultural Production in Box Butte County

The *2002 Census of Agriculture* for Nebraska provides data showing the importance of agriculture and the livestock sector in Box Butte County. The data presented in the chart indicate the market value of agricultural products sold in Box Butte County totaled \$130.1 million in 2002. Considering the per farm value of agricultural products sold, Box Butte County's average of \$273,234 ranked 16th among the counties and was 39.0 percent (\$76,625) more than the Nebraska per farm average of \$196,609.



The average market value of agricultural products per acre is shown in the next chart and includes the data for Box Butte County and for the leading five counties in terms of this measure, along with the Nebraska data.



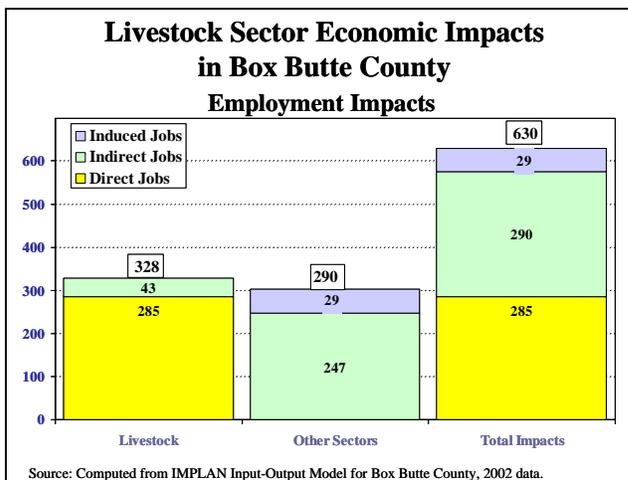
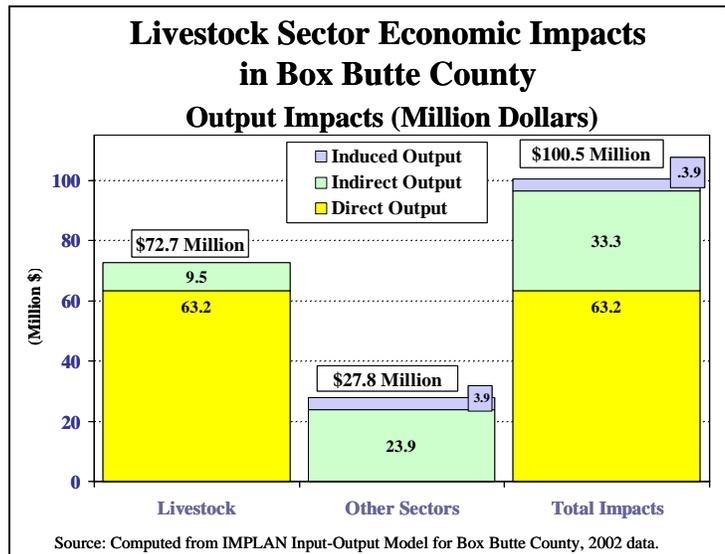
Box Butte County, with a value of \$192.65, ranks 46th among the Nebraska counties in terms of the market value of agriculture products per acre, with \$107.70 of that amount accounted for by livestock and livestock products. Box Butte County's per acre average for all agricultural products is slightly less (8.9 percent) than the Nebraska per acre average of \$211.40.

Data provided in this report indicate that livestock and livestock products are an important source of income for Box Butte County farmers, suggesting that this sector has a significant economic impact on the local economy. The per farm market value of livestock and livestock products averaged \$152,691 (55.9 percent of the total market value of all agricultural products sold) for Box Butte County, ranking the county 28th among the Nebraska counties in terms of this measure. The average Box Butte County per farm value (for livestock and livestock products) was 19.3 percent greater than the average per farm value of \$127,959 for Nebraska as a whole.

Economic Impacts Associated with Livestock Production in Box Butte County

The second part of the report provides an assessment of the positive employment and other economic effects associated with the production of livestock and livestock products in Box Butte County. The analysis utilizes an IMPLAN input-output (I-O) model developed for Box Butte County. The major positive employment and other economic effects associated with the production of livestock and livestock products in Box Butte County are summarized in the continuing portion of the Executive Summary.

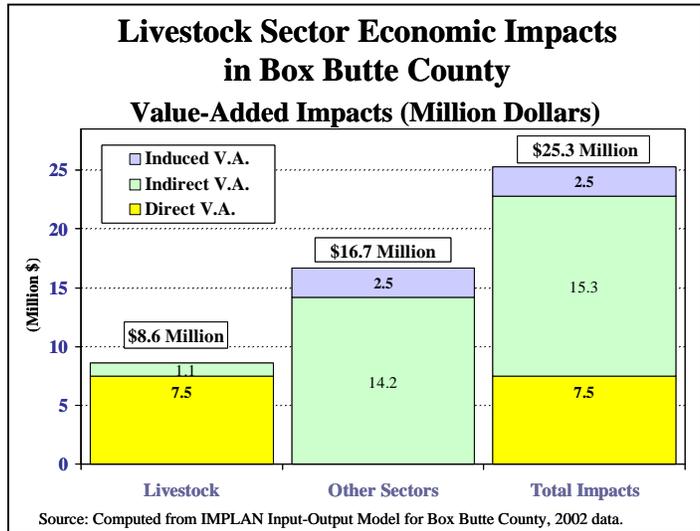
- Total Output Effects: The total value of output directly associated with sales to final demand by the livestock sector in Box Butte County is estimated to be \$63.2 million. When the secondary output effects (indirect and induced output) are added, the total output effects associated with the production of livestock and livestock products in Box Butte County are estimated to be \$100.5 million. Of this total, 72.3 percent (\$72.7 million) is accounted for by output (direct, indirect, and induced) produced by the livestock sector and the indirect and induced effects in other sectors represent an additional \$27.8 million of output.



- Employment Effects: There are an estimated 285 individuals employed in the Box Butte County livestock products sector producing the output dedicated to sales to final demand (\$63.2 million). When the indirect and induced employment effects are included, employment in the livestock sector is estimated to be 328 workers (and proprietors). The other secondary employment effects

(indirect and induced effects in sectors other than livestock and livestock products) account for an additional 290 employees that support livestock production. When the total employment effects for all sectors are considered, the estimated Box Butte County employment supporting the production of livestock is estimated to be 630 workers.

- Value-Added Effects: The value-added effects associated with livestock production in Box Butte County provide a good measure of the economic value associated with this sector. Value-added consists of payments to the factors of production within the economy and includes payments to labor, proprietors' income, other property income, and indirect business taxes. As the information and analysis provided in this report indicate, the total value-added effects related to the production of livestock and livestock products in Box Butte County are estimated to be \$25.3 million (for 2002). Of this amount, \$8.6 million represents value-added in the livestock products sector itself and \$16.7 million is value-added in other economic sectors supporting the production of livestock and livestock products in Box Butte County.



Livestock-Related Impacts Not Analyzed

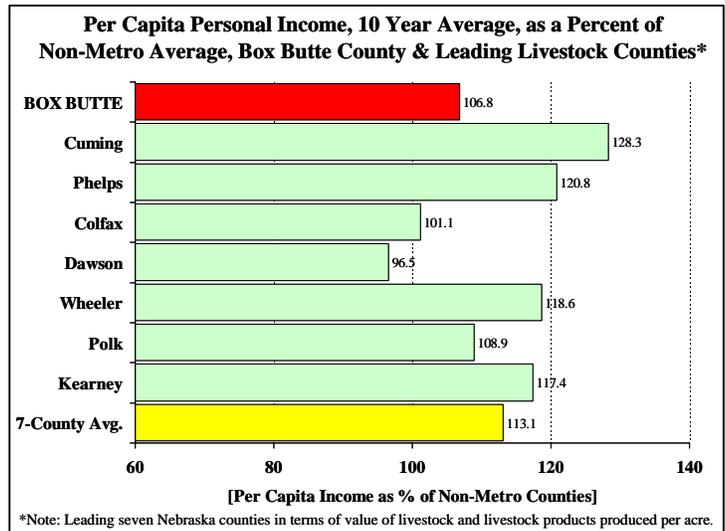
The analysis discussed in this report considers the backward-linkages associated with livestock production in Box Butte County. That is, the analysis has considered impacts associated with economic sectors providing inputs to support livestock production. The analysis has not considered the “stemming from” effects, or the economic impacts associated with those industry sectors with forward linkages from the livestock production sector. An obvious sector in this regard would be food processing activities utilizing meat products as an input. Obviously, the food and meat processing industry creates a very substantial amount of additional employment and economic activity in Nebraska and in many Nebraska counties, suggesting the contributions of the livestock industry may be significantly greater than reported in this analysis if these forward-linkages were considered.

Livestock Production and Economic Well Being

A key question about the importance of the livestock industry concerns its contributions to the economic well being of residents of Box Butte County and other counties where the production of livestock and livestock products may be even more significant as a contributor to the overall level of economic activity. Data presented in this report provide some insights into the relationship between livestock production and economic well being, measured in terms of per capita personal income.

Per capita personal income in Cuming County, which is the leading county in Nebraska in terms of the production of livestock and livestock products, was 21.7 percent more than the average per capita personal income for all non-metropolitan counties for the year 2002. For the ten-year period from 1993 to 2002, the average per capita personal income in Cuming County was 28.3 percent more than the average for the non-metropolitan areas of Nebraska. In the case of Box Butte County which ranked 52nd among Nebraska's 93 counties in terms of livestock sold per acre and 28th in terms of the average livestock sold per farm, average per capita income for the ten-year period, from 1993 to 2002, was \$22,966. This per capita income level was 6.8 percent more than the average per capita income level for all non-metropolitan counties for the 1993-2002 period.

For the top seven livestock counties, in terms of the average value of livestock and livestock products sold per acre, the per capita personal income average in 2002 was 8 percent more than for all non-metropolitan counties. In the case of the ten-year average (1993-2002), the per capita personal income average in the leading livestock counties was 13.1 percent more than for all non-metropolitan counties.



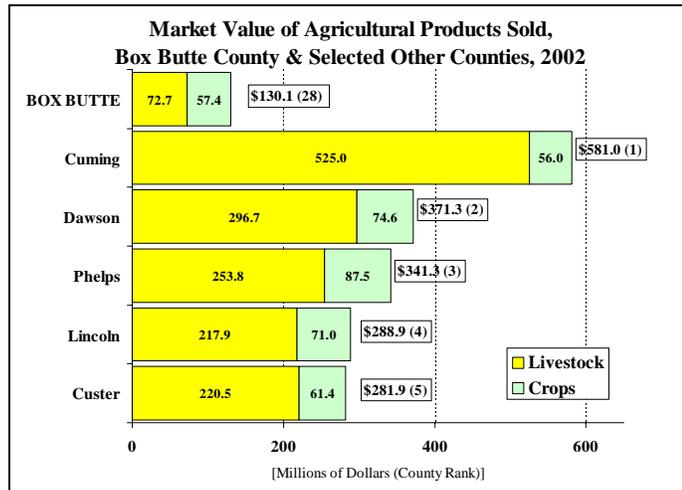
Economic Importance of and Economic Impacts Associated with Livestock Production in Box Butte County

Information provided in this report focuses on the importance of the livestock sector to the economy of Box Butte County. The first part of the report reviews agriculture data from the *2002 Census of Agriculture*. These data provide insights into the importance of agriculture and the livestock sector in Box Butte County. The second part of the report analyzes the secondary economic impacts associated with livestock production in Box Butte County. This analysis utilizes the *2002 Census of Agriculture* data along with the IMPLAN input-output (I-O) database and model developed specifically for Box Butte County.

Livestock and Agricultural Production in Box Butte County

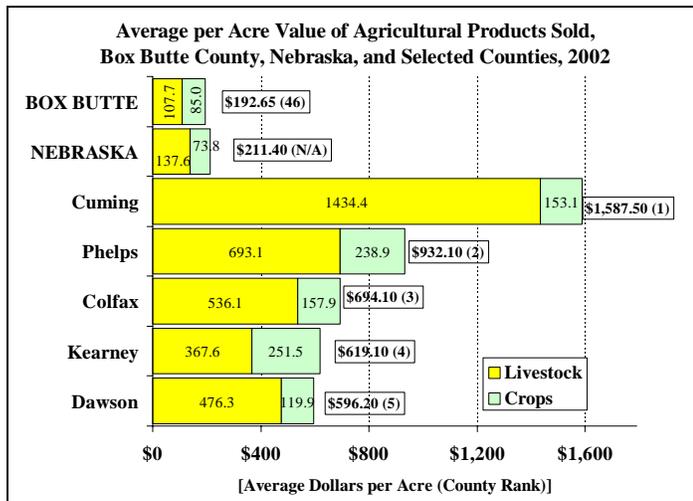
The *2002 Census of Agriculture* for Nebraska provides data showing the importance of agriculture and the livestock sector for Box Butte County. The data presented in Table One include the data for Box Butte County, along with data for Nebraska and selected Nebraska counties. The market

value of agricultural products sold in Box Butte County totaled \$130,059,000 in 2002. This level of sales of agricultural products ranked Box Butte County 28th among the Nebraska counties. In terms of the per farm value of agricultural products sold, Box Butte County's average of \$273,234 ranked 16th among the Nebraska counties and was 39.0 percent (\$76,625) more than the Nebraska per farm average of \$196,609.



The data reporting the market value of agricultural products sold may be somewhat misleading for selected counties, as these data are affected by the geographic size of the county (number of farms and acres). For example, while Lincoln and Custer counties rank fourth and fifth in terms of the total market value of agricultural products, their high ranking results, in part, from the relatively large size of these counties. When the data are normalized for the size of the county, these counties do not maintain their high rankings. For example, using the average market value of agricultural products per acre, Lincoln County ranks 50th and Custer County ranks 51st among Nebraska's 93 counties.

The average market value of agricultural products per acre is shown in the current chart and includes the data for Box Butte County and for the top five Nebraska counties in terms of this measure, along with the Nebraska data. These data are also shown in Table One. In terms of the market value of agriculture products sold per acre, Box Butte County with a value of \$192.65 ranks 46th among the Nebraska counties. Box Butte County's per acre average is slightly less (8.9 percent) than the Nebraska per acre average of \$211.40.



The data presented in Table One indicate that livestock and livestock products are important as a source of income for Box Butte County farmers. The per farm market value of livestock and livestock products sold averaged \$152,691 for Box Butte County, ranking the county 28th among Nebraska's 93 counties in terms of this measure. The market value of livestock products in Box Butte County accounted for 55.9 percent of the total market value of all agricultural products sold. For Nebraska as a whole, the market value of livestock and livestock products accounted for 65.1 percent of the total market value of all agricultural products sold. The average Box Butte County per farm value of livestock and livestock products sold (\$152,691) was 19.3 percent greater than the average per farm value of \$127,959 for Nebraska.

Table One also provides data reporting the number of farms, land in farms, farm employment, the estimated market value of land and buildings and of machinery and equipment, and net cash farm income of farm operations for Box Butte County, selected other Nebraska counties, and Nebraska.

Table One
Agricultural Characteristics, Box Butte County, Nebraska, and Selected Nebraska Counties, 2002

	BOX BUTTE COUNTY	Nebraska	Buffalo	Colfax	Cuming	Custer	Dawson	Fillmore	Gosper	Morrill	York
Number of Farms	476	49,355	989	589	904	1,149	718	499	242	443	617
% FT Farms ^(a)	74.2	73.0	70.6	75.0	76.0	76.1	74.2	85.6	83.9	70.0	77.8
Land in farms (Acres)	675,091	45,903,116	601,256	244,361	365,994	1,501,959	622,805	363,915	262,216	872,351	353,762
Average size (Acres)	1,418	930	608	415	405	1,307	867	729	1,084	1,969	573
Farm Employment^(b)	760	63,138	1,257	819	1,314	1,646	1,162	781	337	681	818
Average per farm	1.6	1.3	1.3	1.4	1.5	1.4	1.62	1.6	1.4	1.5	1.3
Estimated market value of land and buildings											
Average per farm (\$)	675,703	723,863	787,773	627,679	658,526	696,003	830,919	1,178,604	806,413	657,996	1,103,666
Average per acre (\$)	477	776	1,312	1,629	1,571	535	1,014	1,685	836	327	2,009
Estimated market value of all machinery and equipment											
Average per farm (\$)	167,028	111,776	128,090	121,938	111,129	104,469	137,066	191,054	151,941	104,187	180,841
Market value of agricultural products sold											
(\$1,000)	130,059	9,703,657	179,004	169,600	580,999	281,928	371,332	128,003	47,689	162,576	160,833
Average per farm (\$)	273,234	196,609	180,995	287,946	642,698	245,368	517,176	256,519	197,062	366,990	260,669
Average per acre (\$)	193	211	298	694	1,587	188	596	352	182	186	455
Market value of livestock, poultry, and their products											
Per farm (\$)	152,691	127,959	101,782	222,431	580,723	191,950	413,188	97,629	79,669	300,009	113,810
% Livestock	55.9	65.1	56.2	77.2	90.4	78.2	79.9	38.1	40.4	81.7	43.7
Net cash farm income of operation											
Average per farm (\$)	38,112	24,820	36,509	19,991	36,148	21,659	40,959	55,786	22,938	35,873	51,544

^(a) Full-time farms are defined as those where the principal operator has indicated their primary occupation is farming.

^(b) Farm employment estimates for 2002 from the U.S. Department of Commerce, Bureau of Economic Analysis (BEA), where farm employment includes farm proprietors and hired labor.

Source: USDA, National Agricultural Statistics Service, 2002 Census of Agriculture.

Economic Impacts Associated with Livestock Production in Box Butte County

Information presented in the continuing portion of this report focuses on the economic impacts associated with livestock operations in Box Butte County. This analysis utilizes an IMPLAN economic input-output (I-O) model developed specifically for Box Butte County.

From the Box Butte County I-O model, economic multipliers are derived that quantify the level or magnitude of economic activity necessary to support the production activity of local livestock enterprises. As such, the input-output analysis identifies and quantifies economic linkages associated with the inputs required in order for the livestock sector to produce the level of output it has achieved (backward linkages). The model does not evaluate forward linkages. That is, the model does not provide a measure of additional (downstream) processing made possible by the production of the livestock output, although this is certainly an important factor for Nebraska and for many Nebraska counties.

To provide a basic understanding of the structure and size of the agricultural sector within Box Butte County, data in Table One provide basic information describing production activity and other parameters for the farm sector from the *2002 Census of Agriculture*.

The IMPLAN database and I-O model provide further insight into the value of production of livestock and livestock products in Box Butte County. The data in Table Two present estimates of the value of production for the livestock sector derived from the *2002 Census of Agriculture* and the IMPLAN database and I-O model for Box Butte County. As the data in Table Two show, the total value of output for livestock and livestock products is estimated to be \$72,681,000 for 2002.

A further review of the data in Table Two indicates that livestock production in Box Butte County is derived primarily from the beef-producing sector. As Part B of the Table indicates, beef production activities accounted for 97.4 percent of the output produced by the livestock and livestock products sector.

Table Two
Agricultural Sector Parameters, Box Butte County, 2002

Part A - Estimates based on Census of Agriculture Data, 2002^(a)

	Industry		Employee	Proprietor	Other	Total
	Output	Employment ^(a)	Compensation ^(a)	Income	Property	Value
	(Million \$)	(Number)	(Million \$)	(Million \$)	Income	Added
Crops	57.378	497	3.386	5.893	14.273	25.331
Livestock	72.681	328	6.346	0.000	0.000	8.606
Total Agriculture	130.059	825	9.732	5.893	14.273	33.937

^(a)Estimates of output (value of products sold) derived from 2002 Census of Agriculture data. Employment data, employee compensation, and other parameters estimated using the 2002 Census of Agriculture benchmark data, in combination with data from the IMPLAN database for Box Butte County.

Part B - Implan Agricultural Sector Data, 2002

Industry	Industry		Employee	Proprietor	Other	Total
	Output	Employment	Compensation	Income	Property	Value
	(Million \$)	(Number)	(Million \$)	(Million \$)	Income	Added
Crops	62.481	606	4.129	6.417	15.542	28.024
Grain farming	40.402	401	1.421	4.808	10.199	17.522
Vegetable and melon farming	2.630	8	0.428	0.250	1.057	1.772
Greenhouse and nursery production	0.283	1	0.110	0.032	0.093	0.239
Sugarcane and sugar beet farming	11.477	172	1.178	0.754	1.939	4.448
All other crop farming	7.689	24	0.992	0.573	2.254	4.043
Livestock & Livestock Products	43.316	219	4.237	-0.530	-1.075	3.979
Cattle ranching and farming	42.205	213	4.089	-0.562	-1.199	3.662
Poultry and egg production	0.727	1	0.081	0.033	0.137	0.255
Animal production, except cattle and poultry	0.384	5	0.067	-0.001	-0.013	0.062

Source: Minnesota IMPLAN Group, Inc., IMPLAN Input-Output Model and database for Box Butte County (2002 data).

Economic Impact Analysis

The economic linkages and impacts associated with livestock operations in Box Butte County are analyzed in the balance of this report. The analysis utilizes an I-O model developed for Box Butte County, in which the livestock producing sectors have been collapsed (aggregated) into one sector (livestock and livestock products). This involves aggregating the three livestock sectors shown in Table Two into one livestock sector. The analysis then focuses on the economic impacts associated with the production of livestock and livestock products in Box Butte County. The I-O model analysis involves identifying the multiplier effects associated with this economic sector, where the multiplier effects evaluated include the output multiplier, the employment multiplier, and the value-added multiplier.

Each of the multipliers, in turn, consists of three components: the direct effect, the indirect effect, and the induced effect. The output multiplier defines (quantifies) the change in total output for the economy which is associated with the delivery of an additional unit (dollar) of output of livestock and livestock products to final demand.

The multipliers specified for the livestock sector recognize that changes in output (increases in sales to final demand) by this sector will require additional inputs from other businesses or economic sectors be provided. The industries or economic sectors supplying additional inputs to the livestock sector will find they also must purchase additional inputs in order to expand their output to supply the increased inputs demanded by the livestock enterprises. As the increased demand for goods and services associated with the initial increase in sales to final demand works itself through the sectors of the economy, these effects are collected and termed the indirect effects component of each of the economic multipliers.

The induced component of the economic multipliers follows as a result of the increased personal income (payments to households) in Box Butte County resulting from the increase in the demand for labor, both with respect to the direct and indirect economic effects. That is, as output is increased by the livestock products sector (direct effect) and in the economic sectors that supply the additional inputs to the livestock sector (indirect effects), these sectors will add labor inputs and increase their payments to labor. The translation of the additional household incomes into additional expenditures for (consumer) goods and services is referred to as the induced effects. The three effects--direct, indirect, and induced--together represent the total economic impacts embodied in the multipliers utilized to measure the economic impacts associated with the subject livestock enterprises.

The estimated direct, indirect, and induced components of the economic multipliers associated with the production of livestock and livestock products in Box Butte County are provided in Table Three. As indicated by these data, the three multipliers for which values are reported include the output, value-added, and employment multipliers. The output multiplier indicates that for each dollar of sales to final demand by the livestock sector in Box Butte County, there will be an estimated increase in total economic output of \$1.59 for the Box Butte County economy.

Multiplier Component	Total Output ^(a)	Total Value Added ^(b)	Total Employment ^(c)
Direct	1.0000	0.1184	4.5129
Indirect	0.5274	0.2424	4.5864
Induced	0.0623	0.0400	0.8673
Total	1.5897	0.4009	9.9666
Multiplier ^(d)	1.5897	3.3855	2.2085

^(a) Increase in output for each dollar of sales to final demand.
^(b) Change in value added for each dollar of sales to final demand.
^(c) Total jobs created per million dollars of sales to final demand.
^(d) Multiplier values equal the total effects divided by the direct effect.
Source: Minnesota IMPLAN Group, Inc., IMPLAN Input-Output Model for Box Butte County, 2002 data.

The value-added multiplier estimates there will be total payments to the factors of production of \$0.4009 for each dollar of sales of livestock and livestock products to final demand. This total value-added effect includes the direct effect of \$0.1184 associated with the initial sales of one dollar of output to final demand, \$0.2424 of payment to the factors of production associated with the indirect increase in output (sales) for the intermediate (supplying) sectors, and the induced effect of \$0.0400 related to the increased household demand for goods and services resulting from the increased payment to labor (household income). The value-added multiplier of 3.3855 indicates that for each dollar of value-added in the livestock and livestock products sector, we would expect to see approximately \$2.39 of additional value-added in other sectors of the Box Butte County economy.

The employment multiplier indicates for each \$1,000,000 of sales to final demand by the livestock and livestock products sector, there will be a total of 9.9666 jobs supported in the Box Butte County economy, including the direct, indirect, and induced components of the employment multiplier. Moreover, for each job created in the livestock and livestock products sector, an additional 1.2 jobs will be created in other economic sectors of the Box Butte County economy.

Table Four provides a summary of the economic effects associated with the production of livestock and livestock products in Box Butte County. As the information provided in this table is reviewed, it will be of interest to note the estimated sales to final demand by the livestock sector are presented in the table as the direct effects (output, employment, and value-added). For example, the direct output (value of production) associated with sales of livestock and livestock products to the final demand sector by Box Butte County livestock producers is estimated to be \$63,196,500. From the Box Butte County I-O model, we estimate that for the Box Butte County livestock sector to sell this amount of output to final demand, it would need to produce a total of \$72,681,000 of total output, as approximately 13.0 percent (\$9,484,500) of the total output would represent intermediate sales (sales by one producer in the livestock sector to other producers in the same sector).

-Output Effects

A review of the data presented in Table Four indicates the total output effects (including the direct, indirect, and induced output) associated with the production of livestock and livestock products in Box Butte County are estimated to be \$100,462,300. Of this total, 72.3 percent (\$72,681,000) is accounted for by output (direct, indirect, and induced) produced by the livestock sector and the indirect and induced effects in other Box Butte County economic sectors represent an additional \$27,781,300 of output.

-Employment Effects

There are an estimated 285 people employed in the livestock products sector working to produce the output dedicated to sales to final demand (\$63,196,500); when the indirect and induced effects are included, the estimated employment in the livestock sector increases to 328 people. The other secondary employment effects (indirect and induced effects in sectors other than livestock and livestock products), account for an additional

302 jobs and total employment in Box Butte County supporting the production of livestock and livestock products is estimated to be 630 workers.

-Value-Added Effects

The value-added effects associated with the livestock production in Box Butte County provide a measure of the economic value associated with this sector. Value-added consists of payments to the factors of production within the economy and includes payments to labor, proprietors' income, other property income, and indirect business taxes. As the data in Table Four show, the total value-added effects related to the production of livestock and livestock products in Box Butte County are estimated to be \$25,333,100 (for 2002). Of this amount, \$8.6 million is value-added in the livestock products sector itself and an estimated \$16.7 million is value-added in other economic sectors that results because of the additional economic activity in these other economic sectors required to support the production of livestock and livestock products in Box Butte County.

	Livestock Products	Other Economic Sectors	Total Economic Impacts
Output Effects			
Direct Output (Value of Production)	\$63,196,500	\$0	\$63,196,500
Indirect Effects [0.5274 of Direct]	9,454,100	23,875,800	33,329,900
Induced Effects [0.0623 of Direct]	30,400	3,905,500	3,935,900
Total Output Effects	\$72,681,000	\$27,781,300	\$100,462,300
Employment Effects			
Direct Employment (FTE)	285	0	285
Indirect Effects [1.0161 of Direct]	43	247	290
Induced Effects [0.1921 of Direct]	0	55	55
Total Employment (FTE)	328	302	630
Value-Added Effects			
Direct Value-Added (Payments)	\$7,482,900	\$0	\$7,482,900
Indirect Effects [2.0474 of Direct]	1,119,400	14,201,100	15,320,500
Induced Effects [0.3381 of Direct]	3,600	2,526,100	2,529,700
Total Value-Added Effects	\$8,605,900	\$16,727,200	\$25,333,100

Source: Computed from the IMPLAN Input-Output Model for Box Butte County (2002 data).

Table Five provides additional detail describing the economic effects associated with the production of livestock and livestock products in Box Butte County. The data in the table identify the business or economic sectors that are the primary beneficiaries of the economic activity resulting from livestock production in Box Butte County. Shown in the table is a list of the leading 25 economic and business sectors that are likely to be the most positively impacted by the production of livestock and livestock products. The impacts presented in the table include the predicted output, value-added, and employment

impacts for each of the 25 sectors associated with the production and sales to final demand of the output produced by the livestock sector in Box Butte County.

- Livestock Production and Economic Well Being

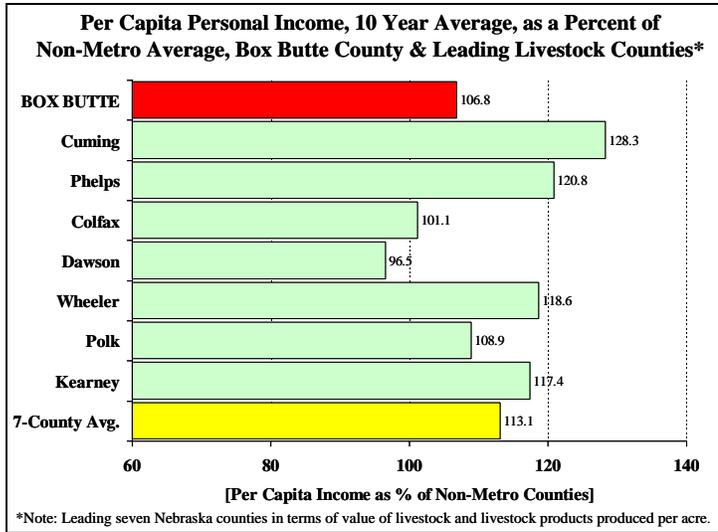
Data presented in Table Six provide further insight into the importance of livestock production activities as a contributing factor to economic well being for selected livestock producing counties. Included in the table are data showing the average per-acre value of livestock and livestock products sold for Box Butte County and for the leading livestock counties, according to this metric. Also included in the table are data showing per capita personal income for the counties, as a percent of per capita personal income for all non-metropolitan counties. The per capita personal income index data are included for two time periods. First the income index data are included for 2002. Also, recognizing the volatility of year-to-year changes in income, especially in rural counties, an average per capita personal income index measure is included for a ten-year period, 1993-2002.

County/ Nebraska	Livestock & Livestock Products Per Acre		Per Capita Income (% of NonMetro Counties)	
	Value (\$)	County Rank	2002	10 Yr Avg. (1993-2002)
BOX BUTTE	107.66	52	108.0	106.8
NEBRASKA	137.60	N/A	118.1	115.0
Cuming	1,434.40	1	121.7	128.3
Phelps	693.10	2	117.0	120.8
Colfax	536.10	3	101.8	101.1
Dawson	476.30	4	91.1	96.5
Wheeler	398.80	5	107.4	118.6
Polk	374.70	6	104.0	108.9
Kearney	367.60	7	112.9	117.4
Average for Top Seven Livestock Counties			140.3	144.8

Source: USDA, National Agricultural Statistics Service, *2002 Census of Agriculture*, and U.S. Bureau of Economic Analysis (BEA), County Personal Income, 1993-2002.

As the data shown in Table Six and the accompanying chart indicate, per capita personal income for 2002 in Cuming County, the leading county in Nebraska in terms of the production of livestock and livestock products, was 21.7 percent more than the average per capita personal income for all non-metropolitan counties. For the ten-year period, from 1993 to 2002, the average per capita personal income in Cuming County was 28.3 percent more than the average for the non-metropolitan areas of Nebraska. In the case of Box Butte County, which ranked 52nd among Nebraska's 93 counties in terms of livestock sold per acre and 28th in terms of the average livestock sold per farm, average per capita income for the ten-year period, from 1993 to 2002, was \$22,966. This per capita income level was 6.8 percent more than the average per capita income level for all non-metropolitan counties for the 1993-2002 period.

The data presented in Table Six and the accompanying chart also show, for the top seven livestock counties, per-capita personal income in 2002 was 8 percent more than for all non-metropolitan counties. In the case of the ten-year average, per capita personal income in the leading livestock counties was 13.1 percent more than for all non-metropolitan counties.



If further information about this analysis is desired or if the reader has questions about any aspect of this report, please contact:

**Donis N. Petersan, Ph.D., CEcD
Economist
Nebraska Public Power District
1414 15th Street - Box 499
Columbus, NE 68602-0499**

**Telephone: (402) 563-5304 or (800) 282-6773
Email: dnpeter@nppd.com**