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June
1946

ANNUAL FARM BUSINESS REPORT

NINETEEN FARMS IN WASHINGTON COUNTY

E. C.
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Rev.

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This report has been prepared by members of the Department of Rural Economics and the Agricultural Extension Service to enable each farm cooperator to compare his business with other farm businesses in thecounty. Special emphasis has been placed upon factors that affect returns to the farm operator and upon the strong and weak points of the individual farm business. By studying this analysis the farm operator may be able to make some changes that will increase his earnings.

Cooperative Extension Work in Agriculture and Home Economics University of Nebraska College of Agriculture, and the United States Department of Agriculture cooperating. W. H. Brokaw, Director, Lincoln 1, Nebraska.

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The report presents an analysis of farm income and expenses and reasons for differences in net returns. Special emphasis is placed upon an examination of some factors that influenced the 1945 labor incomes of the men who kept the records.

Farm businesses in Washington county include a wide diversity of enterprises. Corn, oats and alfalfa are the principal crops. Soybeans and wheat are grown on a few farms, particularly on the clay soils of the Missouri river bottom. Bromegrass is becoming increasingly important on the rolling upland. Either beef cattle and hogs or dairy cattle and hogs are the major livestock enterprises on most farms. Large numbers of cattle from the Sand Hills are bought and finished for market. Poultry flocks ranging from 100 to 400 hens are common. On the large farms, where most of the attention is given to beef and pork production, chickens are kept primarily to provide eggs and meat for home use. The surplus is sold and the returns constitute a small part of the total livestock income. Poultry is a major enterprise on some of the small farms. The returns are a substantial part of the total farm income.

Topography, Soil and Weather

The soils of Washington county range from Wabash clay on the level bottoms to Knox silt loam on the rolling upland. A high percentage of the land is used for crop production. Both sheet and gully erosion are extremely active on some farms. An increase in the size of some operating units is needed to permit the seeding of rolling land now used for grain production to bromegrass and alfalfa mixtures for hay and pasture.

Heavy rains in the spring of 1945 delayed corn planting. As a result, a considerable part of the crop was high in moisture at harvest time. No crop was produced on a few acres of low ground where the drainage was poor. Less than normal precipitation late in July and during August reduced yields below those obtained in 1944. Monthly and annual precipitation and the departure from normal at the Blair and Fremont weather stations are given in Table 1.

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Table 1. Monthly and annual precipitation at Blair and Fremont.

	Blair		Fremont	
	Precipitation inches	Departure from normal inches	Precipitation inches	Departure from normal inches
1945				
January	0.65	-0.05	0.93	+0.09
February	2.12	+1.18	1.84	+0.86
March	2.05	+0.66	1.93	+0.40
April	4.74	+2.10	4.47	+1.84
May	8.35	+4.27	8.85	+5.00
June	4.90	+0.37	6.11	+1.41
July	3.85	+0.06	4.49	+0.98
August	1.48	-1.84	0.86	-2.87
September	3.81	+0.69	3.75	+0.97
October	0.06	-1.94	0.10	-1.74
November	0.25	-0.99	0.11	-1.14
December	1.28	+0.27	1.23	+0.30
1945 total	33.54	+4.78	34.67	+6.10
1944 total	35.52	+6.76	41.13	+12.56
1943 total	20.14	-8.62	21.64	-6.93
1942 total	27.19	-1.56	25.35	-3.22
1941 total	28.91	+0.15	30.05	+1.48
Normal annual precipitation	28.76		28.57	

The data presented in Tables 2 and 3 summarize the beginning and ending inventories on all farms, and on the seven most profitable and the six least profitable farms. Similar information about the business of each operator is typed in the summary which is returned to him. This procedure is followed throughout the report. It gives each man an opportunity to compare the data on his farm with averages of other farms in the county.

The average investment in farm businesses did not change materially during the year. The decline in value of feed, grain and supplies was offset by an increase of the investment in productive livestock, principally cattle.

Table 2. Summary of inventories, 19 Washington county, Nebraska, farms where 1945 records were kept for analysis (Beginning of year).

Item	Your farm	Averages for 19 farms	7 most profitable farms	6 least profitable farms
Size of farm (acres)		220	207	188
Size of business (work units)[1]		354	338	282
Horses		$250	$274	$194
Productive livestock				
Feeder cattle		$1,818	$2,092	$1,475
Other beef cattle		220	208	---
Dairy cows		574	293	557
Other dairy cattle		306	189	409
Hogs		1,354	2,124	731
Poultry		156	127	163
All productive livestock		$4,428	$5,033	$3,335
Machinery and equipment				
Truck		$91	$154	$62
Automobile		237	135	243
Tractor		613	580	539
Other machinery		1,534	1,459	1,347
All machinery		$2,475	$2,328	$2,191
Feed, grain and supplies		$4,061	$5,001	$3,554
Buildings, fences and other improvements*		2,503	2,241	2,833
Land		20,897	20,378	19,428
Total farm capital		$34,614	$35,255	$31,535

[1]A productive man work unit is the amount of work a man can accomplish in a ten hour day when working on crops and productive livestock at average speed with the type of equipment in most common use in his community. The total work units required to grow and harvest the crops and to care for the productive livestock on any one farm is a measure of the size of that farm business.

*The residence of the operator is not included.

[3]A productive livestock animal unit represents one cow, one bull, one feeder steer or heifer, two head of stock cattle 1 to 2 years old, four calves under 1 year old, seven sheep, 1000 pounds of hogs produced, or 100 head of poultry.

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Table 3. Summary of inventories, 19 Washington county, Nebraska, farms where 1945 records were kept for analysis (End of year).

Item	Your farm	Averages for 19 farms	7 most profitable farms	6 least profitable farms
Horses		$202	$191	$154
Productive livestock				
Feeder cattle		$2,019	$2,014	$1,998
Other beef cattle		362	624	17
Dairy cows		586	271	752
Other dairy cattle		279	180	397
Hogs		1,371	2,233	381
Poultry		167	141	205
All productive livestock		$4,784	$5,463	$3,750
Machinery and equipment				
Truck		$67	$104	$54
Automobile		234	151	222
Tractor		638	654	497
Other machinery		1,670	1,471	1,583
All machinery		$2,609	$2,380	$2,356
Feed, grain and supplies		$3,327	$4,609	$2,459
Buildings, fences and other improvements*		2,535	2,165	2,942
Land		21,108	20,378	19,428
Total farm capital		$34,565	$35,186	$31,089

Productive man work required for major crops and types of livestock

Item	Unit	Hours of labor required
Milk cow producing:		
less than 160 lbs. of butterfat	1 head	100
More than 160 lbs. of butterfat	1 head	130
Other dairy cattle	1 animal unit[3]	40
Feeder cattle	1 head	15
Beef cows	1 head	40
Other beef cattle	1 animal unit	40
Hogs	100 pounds gain	3
Sheep, farm flock	1 animal unit	35
Poultry	100 head	200
Corn, husked	1 acre	8
Corn, hogged	1 acre	4
Corn, silage	1 acre	14
Wheat	1 acre	6
Oats or barley	1 acre	6
Alfalfa hay	1 acre	12
Seed (Alfalfa or clover)	1 acre	10
Other hay	1 acre	6
Grain sorghum	1 acre	10
Forage sorghum	1 acre	12
Temporary pasture	1 acre	3
Soybeans	1 acre	9

3 Foot note on page 3.

The acreages and types of crops grown on the most profitable farms did not vary greatly from the land use on all farms and on the least profitable units. The least profitable farms averaged 19 acres smaller than the most profitable farms. Both of these groups were smaller than the average of all farms. Details of the acreage of crops grown and the proportion of land in each crop are given in Table 4.

Table 4. Summary of land use on Washington county, Nebraska, farms where 1945 records were kept for analysis.

Item	Acres on your farm	Average acres for 19 farms	7 most profitable farms	6 least profitable farms
Corn		89	75	80
Oats		31	37	24
Wheat		8	3	13
Soybeans		2	3	2
Alfalfa		14	13	11
Corn or sorghum fodder		1	-	-
Corn silage		3	6	4
Legume and other tilled pasture		18	16	17
Wild hay		2	4	2
Other cropland		8	5	3
Total cropland		176	162	156
Permanent pasture		29	26	21
Farmstead, roads and waste		15	19	11
Total land in farm		220	207	188
Per cent of total acreage in each use				
Corn		40.4	36.2	42.6
Oats		14.1	17.9	12.8
Wheat		3.6	1.5	6.9
Soybeans		0.9	1.5	1.1
Alfalfa		6.4	6.3	5.8
Corn or sorghum fodder		0.5	-	-
Corn silage		1.4	2.9	2.1
Legume and other tilled pasture		8.2	7.7	9.0
Wild hay		0.9	1.9	1.1
Other cropland		3.6	2.4	1.6
Total cropland		80.0	78.3	83.0
Permanent pasture		13.2	12.5	11.2
Farmstead, roads and waste		6.8	9.2	5.8
Total land in farm		100.0	100.0	100.0

Data in Table 5 show the average numbers of livestock on each group of farms at the beginning and end of the year. There were fewer brood sows on these farms at the close of the year than at the beginning. Poultry flocks were increased during the year.

Table 5. Summary of livestock organization on Washington county, Nebraska, farms where 1945 records were kept for analysis. (Number of head)

Type of livestock	Beginning of year inventory			End of year inventory		
	Your farm	Averages for 19 farms	Averages for 7 most profitable farms	Averages for 6 least profitable farms	Your farm	Averages for 19 farms	Averages for 7 most profitable farms	Averages for 6 least profitable farms
Horses		3.6	4.1	2.8		3.0	3.1	2.5
Colts		0.1	0.3	--		--	0.1	--
Beef cows		1.2	1.3	--		1.5	1.7	0.2
Feeder cattle		27.3	37.7	18.5		28.1	32.1	19.7
Other beef cattle		2.5	1.6	--		1.8	2.4	--
Dairy cows		5.8	2.9	5.7		6.2	2.7	7.3
Other dairy cattle		7.4	3.9	10.0		6.6	4.0	8.0
Brood sows		13.6	26.1	5.2		12.6	23.1	4.7
Pigs		11.6	7.6	14.2		6.9	5.7	5.8
Other hogs		21.8	20.6	13.8		24.5	30.3	8.2
Poultry		162.6	97.3	174.7		180.4	154.4	197.0

Cash incomes and expenses for the various groups of farms are presented in Table 6. The data in Table 7 show the farm earnings including cash receipts, expenses and net inventory changes. Cattle, hogs and grain were the principal sources of income on the most profitable farms. Cattle and hogs also led on the least profitable farms, but dairy cows and poultry contributed a larger portion of the total net returns than on the most profitable farms.

Labor incomes varied from $6,260 to $-43. The average labor income of the seven operators who earned the highest percentage on the total investment were $4,297. The six who earned the lowest percentage received only $288 for their labor and management after deducting 5 per cent interest on the investment in the farm business and allowing wages at $125 a month to members of the family who replaced hired labor and were not paid regular wages. Wet weather in the spring and lack of rain at the critical period of corn growth were among the major causes of the differences. These conditions cannot be controlled by the farm operator but many changes that will improve net income can be made in most farm businesses.

Table 6. Summary of cash income and expenses on Washington county, Nebraska farms where 1945 records were kept for analysis.

Item	Your farm	Averages for 19 farms	7 most profitable farms	6 least profitable farms
Cash income from				
Horses		$12	$32	--
Cattle		4,534	5,511	$3,138
Hogs		3,325	6,182	1,428
Poultry		179	151	189
Egg sales		519	391	632
Dairy sales		647	177	740
Machinery and equipment		251	262	346
Feed, grain and supplies		2,403	2,705	1,670
Labor off farm		29	12	28
Miscellaneous receipts		83	118	81
Total cash income		$11,982	$15,541	$8,252
Cash expenses on				
Improvements		$286	$225	$291
Horses		14	9	7
Cattle		2,061	2,123	1,725
Hogs		500	1,050	128
Supplies		73	98	50
Poultry		55	35	62
Livestock (veterinary, etc.)		286	652	88
Machinery and equipment		1,614	1,674	1,510
Feed and grain		1,417	2.136	703
Crop expense		186	229	187
Hired labor		453	416	531
Taxes		314	346	247
Miscellaneous		129	209	111
Total cash expense		$7,388	$9,202	$5,640
Net cash gain		$4,594	$6,339	$2,612
Net inventory gain		--	--	--
Net cash loss		--	--	--
Net inventory loss		$259	$67	$445
Return to capital and operator's family		$4,335	$6,272	$2,167

Table 7. Summary of income and expenses, including inventory changes and farm earnings, on Washington county, Nebraska, farms where 1945 records were kept for analysis.

Item	Your farm	Averages for 19 farms	7 Most profitable farms	6 least profitable farms
RECEIPTS AND NET INVENTORY INCREASES				
Horses		$1	--	--
Cattle		2,799	$3,696	$2,136
Hogs		2,843	5,242	949
Poultry		143	133	176
Egg sales		519	391	632
Dairy sales		647	177	740
Feed and grain		768	872	568
Labor off farm		29	12	28
Miscellaneous receipts		83	118	81
Total receipts and net increases		$7,832	$10,641	$5,310
Expenses and Net Decreases				
Improvements		$254	$301	$181
Horses		49	59	47
Poultry		7	2	7
Livestock (veterinary, etc.)		286	652	88
Supplies		73	98	50
Machinery and equipment		1,229	1,360	997
Feed and grain		517	697	697
Crop expense		186	229	187
Hired labor		453	416	531
Taxes		314	346	247
Miscellaneous expense		129	209	111
Total expenses and net decreases		$3,497	$4,369	$3,143
Returns to capital and operator's family		$4,335	$6,272	$2,167
Value of unpaid labor at $125 a month		1,849	1,714	1,813
Net income from investment and management		2,486	4,558	354
Average investment		$34,590	$35,220	$31,312
Rate earned on investment, %		7.2	13.0	1.1
Returns to capital and operator's labor and management		$3,986	$6,058	$1,854
5% interest on average investment		1,730	1,761	1,566
Labor income		$2,256	$4,297	$288

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Table 8. Comparison of some factors that affect farm income, Washington county, Nebraska, farms where 1945 records were kept for analysis.

Item	Your farm	Averages for 19 farms	7 most profitable farms	6 least profitable farms
Rate earned on investment		7.2	13.0	1.1
Labor and management wage		$2,256	$4,297	$288
Size of Business				
Acres in farm		220	207	188
Acres in cropland		176	162	156
Man Equivalent		1.6	1.5	1.6
Productive man work units		354	338	282
Animal units of productive livestock		47.8	55.1	36.3
Number of cows milked		5.4	2.8	5.8
Litters of pigs farrowed		9.8	13.6	6.2
Number of pigs weaned		59.0	87.9	37.3
Number of cattle on feed		27.7	34.9	19.1
Number of hens		164	127	198
Volume of production				
Bushels of Grain				
Corn		3,444	3,790	2,301
Oats		1,076	1,386	760
Wheat		217	107	289
Soybeans		33	63	30
Hay and roughage, tons				
Alfalfa		39	41	30
Silage		22	34	31
Other hay and roughage		12	7	7
Livestock and products				
Pounds of hogs produced		14,524	26,743	5,514
Number of cattle sold		34.4	43.8	21.8
Dairy sales		$647	$177	$740
Egg sales		$519	$391	$632
Rates of production				
Yields of principal crops				
Corn, bushels per acre		38.7	50.5	28.8
Oats, bushels per acre		34.7	37.5	31.7
Wheat, bushels per acre		27.1	35.7	22.2
Alfalfa, tons per acre		2.8	3.2	2.7
Crop index		100.0	116.9	85.7
Pigs weaned per litter		6.0	6.5	6.0
Dairy sales per cow milked		$127.31	$92.40	$147.00
Egg sales per hen		$3.24	$3.33	$3.68
Efficiency				
Productive man work units accomplished per worker		234	248	171
Power, machinery and labor cost per productive man work unit		$10.62	$10.25	$12.71
Returns from productive livestock per $100 worth of feed fed		$132	$149	$124
Balance				
Percentage of productive work spent on crops		35.6	34.7	39.1
Percentage of productive work spent on livestock		64.4	65.3	60.9
Productive livestock units per 100 acres in farm		22.4	27.9	16.0

Reasons for Differences in Labor Income

Size of business and the volume of products available for sale, rates of production; efficiency in the use of labor, feed and equipment, and balance in the farm organization are important factors that influence net returns. Comparisons of some important measures of these factors are given in Table 8. The relationship between some of these factors and labor income is pointed out in the following analysis.

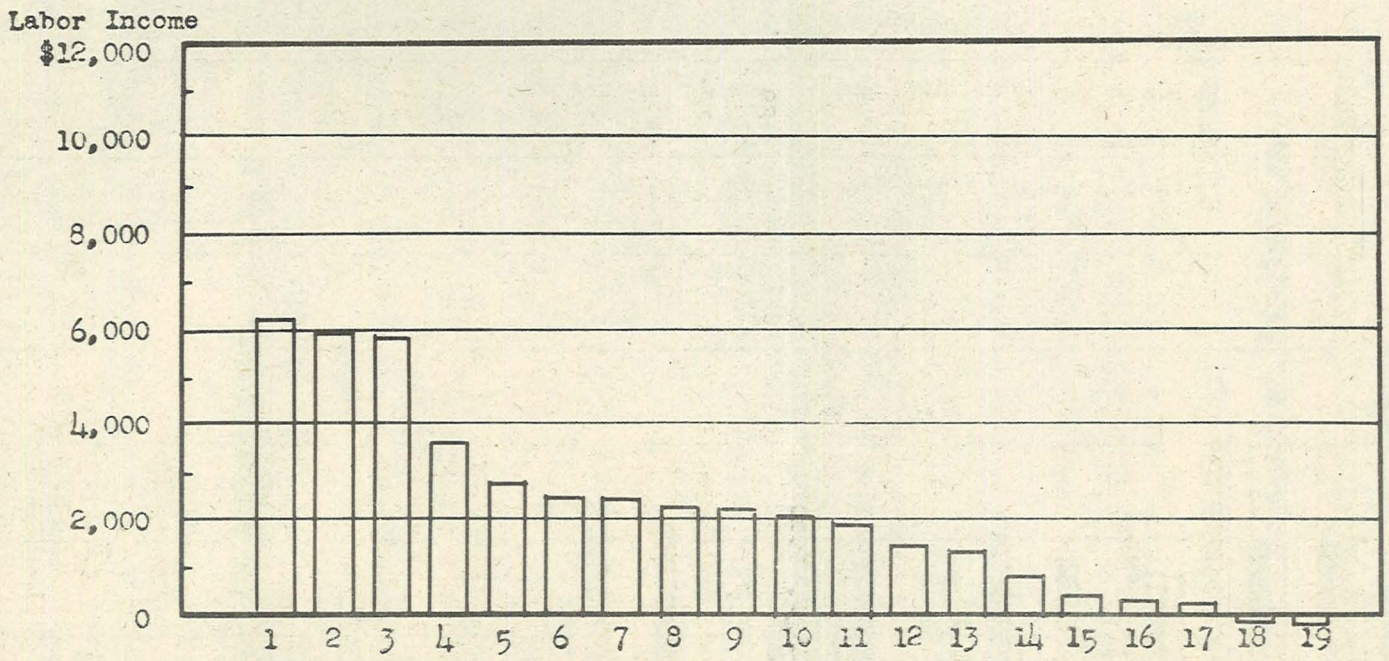

Figure 1. Labor Incomes on Washington County Farms - 1945

Each of the bars presented in Figure 1 indicates the labor income of one operator. The record of each man whose farm is included in the summary is indicated by a red X on the copy of the graph that is returned to him.

The bars in Figure 2 show the receipts including the net inventory increases, the expenses and net inventory decreases and the net income to the family and capital for each of the nineteen farms. The bars in Figure 3 show the cash receipts, expenses and net cash income of each operator. The records are numbered and arranged in the same order as in Figure 1. Each operator's summary is marked so that he can compare his standing with the results obtained by the operators of other farms.

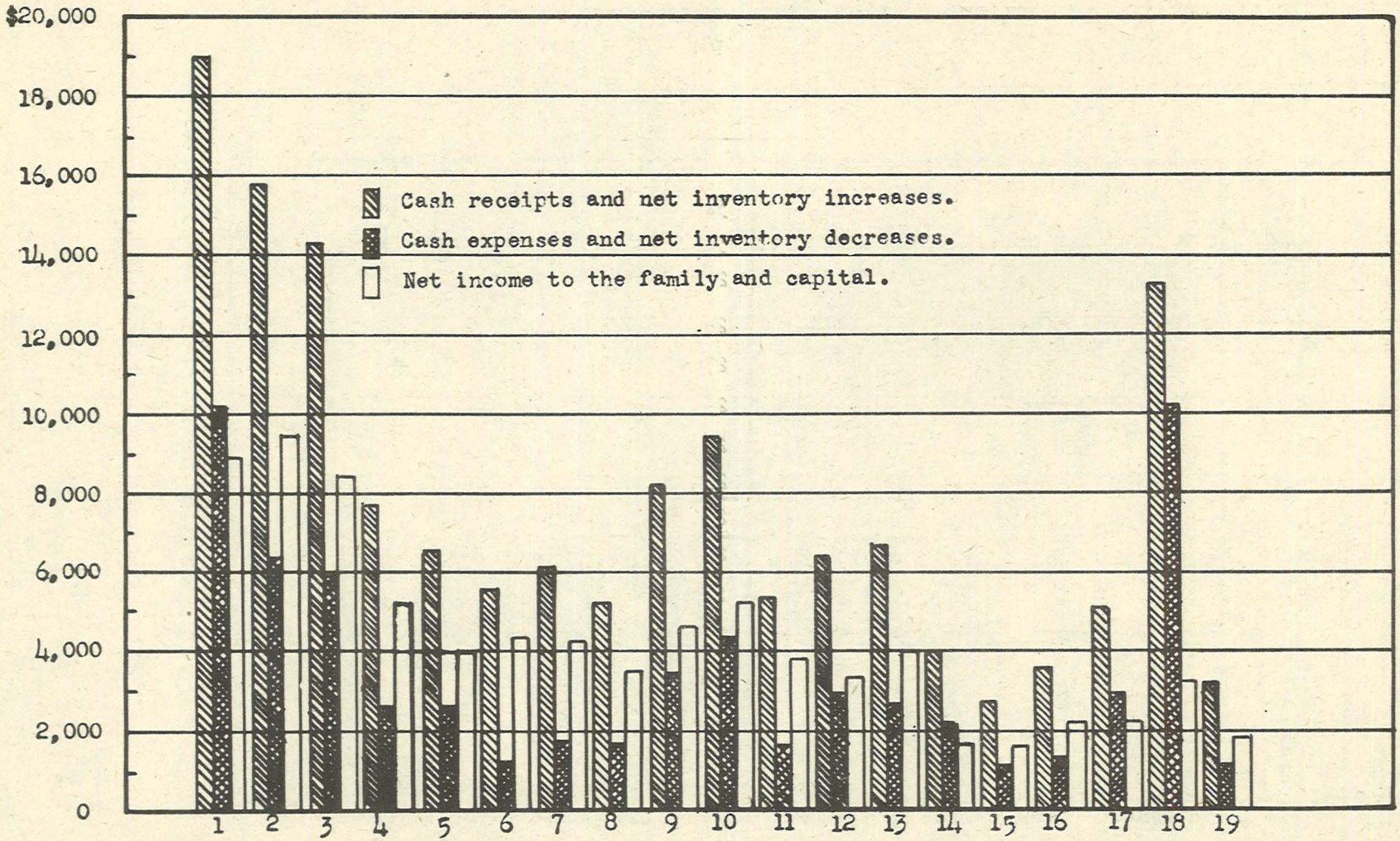

Figure 2. Graphic summary of receipts, expenses and net income to the family and capital; Washington County Farm Records - 1945.

Thermometer Chart. By using the figures for his farm on page 9 the operator can determine his standing with respect to the various measures of farm organization, management efficiency and balance. The averages for the 19 records used in the summary are located between the lines across the center of the pages.

Size			Rates of production		Efficiency			Balance			
Acres	Productive man work units	Units of productive livestock	Crop yield index	Pigs weaned per litter	Returns per $100 worth of feed fed	Work units accomplished per worker	Power machinery and labor cost per man work unit	Percentage of productive work spent on livestock	Productive livestock units per 100 acres in farm	Rate earned on investment (per cent)	Labor income
420	630	125			215	315	6.50				
395	595	115			205	305	7.00		40.0	14.0	
370	560	105		8.5	195	295	7.50		37.5	13.0	5500
345	525	95	150	8.0	185	285	8.00	75	35.0	12.0	5000
320	490	85	140	7.5	175	275	8.50	73	32.5	11.0	4500
295	455	75	130	7.0	165	265	9.00	71	30.0	10.0	4000
270	420	65	120	6.5	155	255	9.50	69	27.5	9.0	3500
245	385	55	110	6.0	145	245	10.00	67	25.0	8.0	3000
220	350	45	100	5.5	135	235	10.50	65	22.5	7.0	2500
195	315	35	90	5.0	125	225	11.00	63	20.0	6.0	2000
170	280	25	80	4.5	115	215	11.50	61	17.5	5.0	1500
145	245	15	70	4.0	105	205	12.00	59	15.0	4.0	1000
120	210		60	3.5	95	195	12.50	57	12.5	3.0	500
95	175		50	3.0	85	185	13.00	55	10.0	2.0	00
				2.5	75	175	13.50	53	7.5	1.0	-500
				2.0		165	14.00	51	5.0	0.0	
				1.5		155	14.50	49		-1.0	
				1.0		145	15.00	47		-2.0	

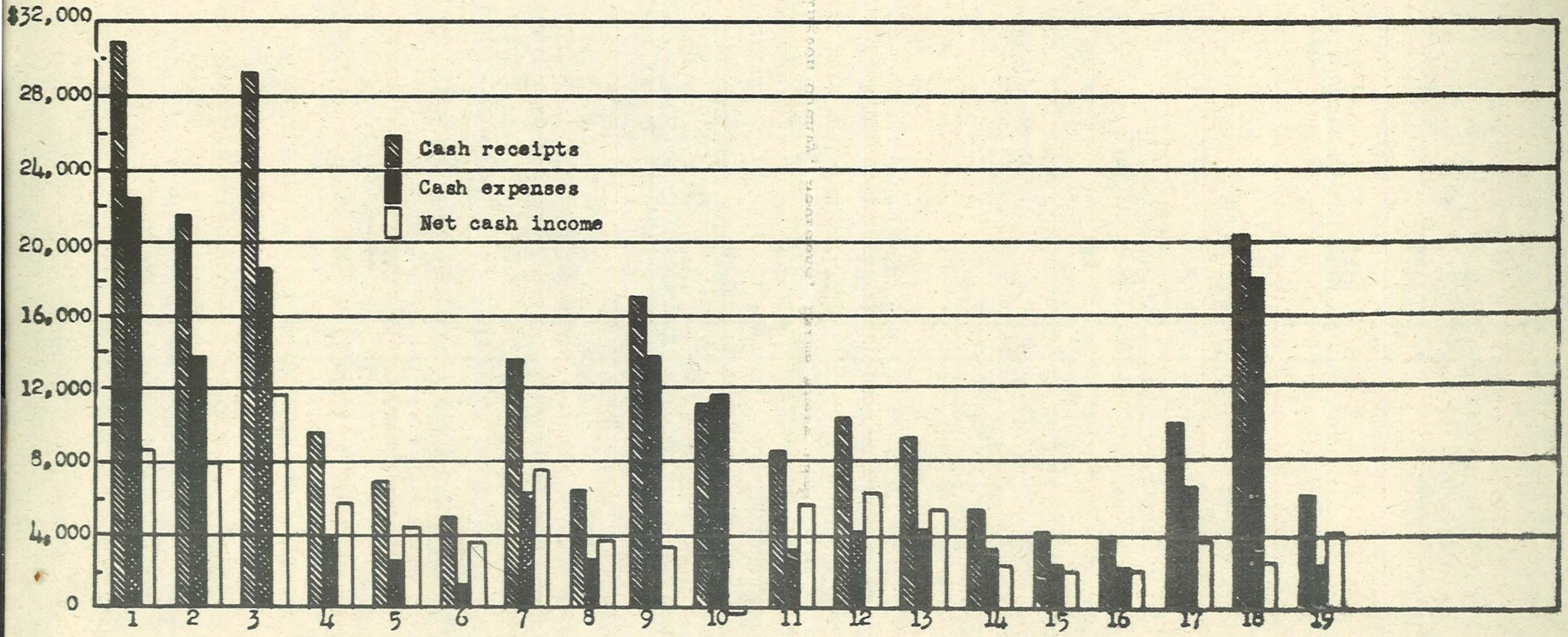

Figure 3. Graphic summary of cash receipts, expenses and net cash income; Washington County Farm Records - 1945.

Size of Business

This factor can be controlled to a considerable extent by the operator. He can usually rent or buy additional land, increase the numbers of livestock, change from low labor requiring animals such as beef cattle and sheep to dairy cattle and poultry, or shift from extensive crops such as hay and pasture to intensive crops like corn and soybeans, if his land is suitable for these crops.

The enterprises included in the business should be adjusted to the use suitability of the land and to the other resources available on the farm such as the amount of capital for providing livestock and equipment and the number of family workers. Intensive crops can be planted several years in succession on fertile level land. Rolling land that is subject to serious erosion should be kept in hay and pasture crops a considerable part of the time. If the operating unit is made up of this type of land, expansion of the acreage so enough hay and pasture is available to feed a good dairy herd may be the most feasible method of adjustment. The type of adjustments that should be made depends to a large extent upon the physical characteristics of the available land.

A wide diversity of enterprises are included in Washington county farm businesses. For this reason the average amount of labor required to take care of all enterprises is used as a measure of size in Table 9. Farms on which the crops and livestock required an average of 514 units of productive work returned $3,376 labor income. Those requiring 217 units returned $823 for the labor and management of the operator.

Table 9. Relation of size of business to labor income on Washington county, Nebraska, farms where 1945 records were kept for analysis.

Productive man work units accomplished		Number of farms	Average labor income
Range	Average		
Below 250	217	6	$823
250 to 400	311	6	3,186
400 and above	514	6	3,376

Crop Yields

Within the limits of proven practices in a community, high rates of production tend to lower the cost per unit and increase the net returns. This statement does not mean that a man can increase his net gain on a crop like corn by cultivating it five times instead of three to get a few additional pounds per acre, or that he will profit by feeding his milk cows in a manner that will give him the greatest number of pounds of milk each cow will produce. The value of the increased product must equal or exceed the cost of getting it or the added expense will reduce the net income. Crop yields can be increased by using legumes in a systematic rotation, by planting the best adapted varieties, by conserving moisture through contour planting or subsurface tillage and by getting each type of work done in its proper season. The rate of gain on fattening animals, the quantity of milk produced per cow and the number of eggs laid per hen can be increased by feeding balanced rations. The relationship between crop yields and labor income is shown in Table 10.

Table 10. Relation of crop yields to labor income on Washington county farms where 1945 records were kept for analysis.

Crop yield index		Number of farms	Average labor income
Range	Average		
Below 90	77	6	$791
90 to 105	98	6	2,516
105 and over	122	7	3,496

Operators whose yields were only 77 per cent of the average for all farms received $791 for their labor and management. Those who obtained yields averaging 22 per cent above the average of the entire group received $3,496 labor income.

Livestock. Most of the farmers in Washington county keep enough livestock to consume the grain and hay they grow. A few buy feed from the minority who are cash crop operators. If efficiently managed, livestock usually return a profit in excess of the market prices of the feed they consume. They convert grass and crop residues into salable products, aid in maintaining soil fertility by leaving manure on the farm and help to provide productive employment for the farm family throughout the year. Careful selection for high rates of production in proportion to feed consumed, control of diseases and parasites, balanced rations and skill in feeding and managing the animals are the principal problems associated with livestock production. Men who are skillful in these tasks usually receive good returns for their labor. Data in Table 11 show the relationship between number of animal units on farms and labor income. Operators with an average of 18.2 units of productive livestock received $823 labor income. Those who had 87.8 units received $3,516 for their labor and management.

In 1945 the men who had beef cattle and hogs received higher labor incomes than those who had dairy cattle. This situation probably reflects the fact that the ceiling price on milk and butterfat did not give the operator very high wages for the time spent milking cows.

Table 11. Relation of animal units of productive livestock to labor income on Washington county farms where 1945 records were kept for analysis.

Animal units		Number of farms	Average labor income
Range	Average		
Below 25	18.2	6	$823
25 to 60	45.4	6	2,460
60 and above	87.8	7	3,516

Efficiency in the Use of Feed

The value of the feed consumed by the animals usually is 50 to 85 per cent of the cost in livestock production. The exact proportion that feed is of the total cost varies with the class of livestock, the number of animals on the individual farm, the type of equipment and the managerial ability of the herdsman. The cash receipts and net inventory increases from livestock and animal products were enough to leave a margin above the value of feed fed on most of the farms. Labor incomes of operators who received less than $120 for each $100 worth of feed fed averaged $1,490 for their labor and management in 1945. Those who received $138 or more for each $100 worth of feed had labor incomes that averaged $3,155.

Table 12. Relation of returns from feed fed to productive livestock to labor income on Washington county farms where 1945 records were kept for analysis.

Returns per $100 worth of feed fed to productive livestock		Number of farms	Average labor income
Range	Average		
Below 120	99	6	$1,490
120 to 138	130	6	2,214
138 and above	163	7	3,155

Rates of production as shown by dairy sales per cow, pigs weaned and pounds of hogs produced per litter, and egg sales per hen also have a marked influence upon the net income of the livestock producer. Each operator can compare his standing in these items with the average of all farms, and with the most profitable and least profitable farms in Table 8.

Labor Efficiency

Labor income usually is higher on farms where a large amount of work is accomplished per worker than on units where the rate of accomplishment is low. A high rate of accomplishment per worker reduces the labor charge per unit of business and increases the net return. The farm manager can increase the efficiency of the labor force in several ways. In the first place the business must be large enough to provide work for all members of the family who expect to be employed on the farm. Enterprises should be selected and organized in a manner that will distribute the labor requirements throughout the year. Cattle feeding in the winter months or fall freshening of milk cows provide winter employment when field work is not pressing. School boys can take care of a sizeable poultry flock outside of school hours. The use of labor saving machinery such as combines, pick up balers, hay choppers and field ensilage cutters helps to increase the amount of work accomplished per worker.

The relationship of efficiency in the use of labor and returns to the operator is shown in Table 13. The average labor income of operators on farms where fewer than 185 days of productive work were accomplished per man was $988. The operators of farms on which 250 or more work units were accomplished received $3,907 for their labor and management.

Table 13. Relation of efficiency in the use of labor to labor income on Washington county, Nebraska, farms where 1945 records were kept for analysis.

Productive man work units accomplished per worker		Number of farms	Average labor income
Range	Average		
Below 185	166	6	$988
185 to 250	218	6	2,405
250 and above	319	7	3,907

Power, Machinery and Labor Costs

Equipment costs and wages for the labor force are the most important expenses of operating a farm business. The out-of-pocket items included in these costs reduce the net returns to the operator. Expenses can be kept low on a farm that is inadequately manned and poorly equipped, but necessary work will not be done on time, and the net returns often will be unsatisfactory. The data in Table 14 show the relationship between power machinery and labor cost per work unit accomplished and labor income. The operators of farms where these costs averaged $13.30 per man work unit accomplished received $1,062 labor income. Men who kept their costs to an average of $7.38 per work unit received $3,329 for their labor and management.

Table 14. Relation of power machinery and labor cost per productive man work unit accomplished to labor income on Washington county, Nebraska farms where 1945 records were kept for analysis.

Power, machinery and labor cost per productive man work unit accomplished		Number of farms	Average labor income
Range	Average		
Above $12.00	$13.30	6	$1,062
$9.00 to $12.00	10.78	7	2,567
Below $9.00	7.38	6	3,329

The influence of the factors that affect farm income is cumulative. Very few operators maintain a high standing in all phases of the business. Quite often efficient management in one part is offset by poor results in other parts. These farmers get medium returns for their labor and management. Those who are low in all factors get small returns. The few who maintain a high standing in most phases of the business receive returns well above the average. The data in Table 15 confirm these statements. A careful study of this table and the thermometer chart on page 13 may suggest some changes that will increase the net returns of each operator.

Table 15. Relation of number of factors above average to labor income on 19 Washington county, Nebraska, farms where 1945 records were kept for analysis.

Number of factors above average	Number of farms	Average labor income
Fewer than 3	7	$1,032
3 to 5	7	2,093
6 or more	5	4,487

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