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Facts From Farm Account Records In Oklahoma

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FACTS FROM FARM ACCOUNT RECORDS IN OKLAHOMA

PART I

Examples of Various Types of Farms in Oklahoma

The type of farming in the wheat belt of Oklahoma is changing. Some farms have increased in acreage and are following large scale production methods, including tractors, combines, etc. On other farms of smaller size the tendency seems to be that of growing wheat plus one, two, or three classes of livestock which serve as sidelines to wheat, the major enterprise. Records kept on farms in Northwestern Oklahoma furnish good illustrations of the various ways in which wheat farmers are using livestock sidelines.

Wheat Farm with Poultry Sideline

Income and expense figures from a farm on which poultry was used as a sideline are given below.

Gross income from crops	$3217—55%
Gross income from poultry	1033—17%
Gross income from all other sources combined	1589—28%
Total gross income	5839
Total farm expense	2848
(1) Farm income	2991
(2) Return for labor	2812

(1) Farm income is the money left to pay interest on the investment and to pay the farmer and family for their labor after all other farm expenses have been deducted.

(2) Return for labor is the money left to pay the farmer and family for their time after all other farm expenses have been paid and also five per cent on the farm investment.

The size of this farm was 240 acres, of which 160 acres were planted to wheat. Figures in the table above show that 55 per cent of the gross income was obtained from crops. This was mostly from wheat. Quite evidently wheat was the major source of income. However, a flock of 370 hens brought a gross income of $1033 which was 17 per cent of the total gross income. The poultry flock was large enough to be considered a substantial sideline and evidently the birds were fairly good producers.

The money received from sources other than wheat and poultry ($1589) was largely pay for work done for the neighbors during harvest and threshing.

Wheat Farm with Cattle Sideline

On many wheat farms where conditions are favorable for cattle the principal sideline is beef cattle. Following are figures obtained from records kept on a farm so organized.

Gross income from crops	$4254
Gross income from cattle	1794
Gross income from all other sources combined	1026
Total gross income	7074
Total farm expense	2486
Farm income	4588
Return for labor	2585

The size of this farm was 400 acres and approximately 60 head of cattle were kept. About 25 per cent of the gross income came from cattle.

Wheat Farm with Two Sidelines

Farms having one sideline of considerable size represent the first step in development from the one-crop type to the diversified type of farm. Having **two** sidelines means greater safety. The figures below are from a farm on which two good livestock sidelines were kept.

Gross income from crops	$2725—63%
Gross income from cattle	876—20%
Gross income from sheep	567—13%
Gross income from all other sources combined	152— 4%
Total gross income	4320—100%
Total farm expense	1375
Farm income	2945
Return for labor	1718

This was a farm of 320 acres, having 68 head of sheep and 23 head of cattle. The income from cattle was mostly from dairy products. There were 15 milk cows on the place. The combined income from cattle and sheep was more than enough to pay the total farm expense. A little more than the entire income from wheat was left to pay interest on investment and to pay for the labor of the farmer and family.

The figures given in the tables above are merely illustrations of types of farms on which one or more livestock sidelines are being used to provide insurance against the risks of one-crop farming in the wheat country. Many other similar combinations may be found. The most common types are those obtaining most of their income from: crops and cattle; crops and poultry; crops, cattle, and poultry; crops, cattle and hogs; or, crops, cattle, and sheep.

That the types of farms illustrated by the figures presented are reasonably successful is brought out by a comparison with the average returns for farms in the community in which these farms are located. A survey conducted by the Department of Agricultural Economics of the A. & M. College shows that the average return for labor in this community in 1928 was about $930 per farm.

A One-Crop Cotton Farm

Most farms in the cotton belt of Oklahoma plant too much land to cotton and do not have enough livestock. During the last three years the income on farms of this type has been very small. The following figures were obtained from the record of a farm of 68 acres on which most of the crop land was planted to cotton.

Gross income from crops (mostly cotton)	$1152—87%
Gross income from all other sources combined	169—13%
Total gross income	1321
Total farm expense	308
Farm income	1013
Return for labor	726

That practically all the income on this farm was from cotton is quite evident from the figures above. The return of $726 for the year's work of the farmer and his family is rather low. If the cotton crop had been a failure the income would have been lower still. Many farms of similar type realized incomes of $300 to $400 per farm. Larger incomes are necessary for the support of the average family. A family cannot be properly fed, clothed and educated on four or five hundred dollars per year.

Cotton Farm with Two Sidelines

The figures below are from a well diversified farm on which cotton occupies a place of minor importance.

Gross income from crops	$ 438	19%
Gross income from cattle	844	37%
Gross income from poultry and eggs	788	35%
Gross income form all other sources combined	205	9%
Total gross income	2275	100%
Total farm expense	563	
Farm income	1712	
Return for labor	1369	

The area of this farm was 82 acres. Ten milk cows produced most of the cattle income. There were 370 chickens on the place. Three years ago there were only a few chickens on this farm and only about 5 or 6 cows. A modern poultry house built, according to the A. & M. plan, was constructed and a flock of good laying hens established. The number of cows was also increased. The return for labor on this farm in 1928 was considerably larger than it was in 1927. There are three substantial sources of income on this farm—crops, cattle, and poultry.

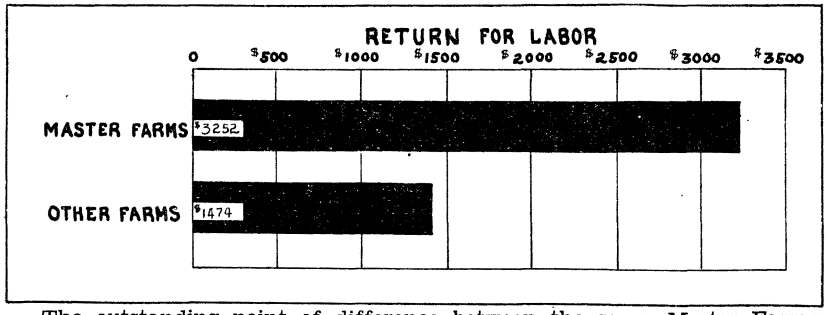
This type of farm is likely to be reasonably profitable every year. The risk of crop failure is guarded against by the livestock enterprises.

The above is merely one example of a diversified farm in the cotton belt. On some farms one livestock sideline is used while on others two or even three livestock enterprises may be kept. The different ways of using sidelines in the cotton belt are very similar to the examples cited for the wheat belt.

PART II

Master Farmer Farms Compared with Average of Other Farms

Comparison of the average income of seven master farms with the average income of 112 other farms admirably illustrates a very important principle in farm management; namely, the effect of size or volume of business upon the farm income. (See figure I). Other things being equal, the larger the volume of business the greater the farm profit over a period of years. This holds true up to a point where the business becomes so large that the farmer cannot manage it efficiently. The volume of farm business is determined not only by the area of the land operated but also by the number of head of livestock kept and the intensity of cultivation. For example, a 160-acre farm may have a larger volume of business than 320-acre farm due to having more livestock.



The outstanding point of difference between the seven Master Farmer

farms and the other farms whose income is represented in the accompanying chart is a difference in **volume of business.** The average amount of livestock per farm on Master Farmer farms was twice the number on the average of the other farms; the investment was nearly four times and the farm area more than twice that of the other farms.

Quality of farm enterprises is extremely important but unless high quality goes hand in hand with reasonable size or volume the farm will not return much profit. In every rural community in Oklahoma farms may be found which produce high yields of crops and have high producing cows or high quality poultry, but often the number of cows and chickens is so small that the income from these enterprises does not amount to much. Farms so organized are not very profitable; but when the **number** of high quality cows and the **size** of the poultry flock are increased, greater profits usually result.

Small farms in the cotton belt could increase the volume of the farm business and realize greater profit by building up good livestock sidelines. The figures below are obtained from two cotton belt farms. Comparison of these figures shows the influence of a good flock of poultry in increasing the volume of business as well as the profits.

	Farm No. 1	Farm No. 2
Size of farm	112 A.	160 A.
Gross income from crops	$ 655	$ 657
Gross income from poultry and eggs	50	891
Gross income from all other sources combined	473	356
Total gross income	1178	1906
Total farm expense	450	549
Farm income	728	1357
Return for labor	457	1295

The income from crops on the two farms above was about equal. There was but little differences in the income from "other sources," but the big difference was in the income from the poultry flock. On farm No. 1 there was a flock of 80 chickens which brought a gross income of $50. Three hundred fifty-two chickens on farm No. 2 brought a gross income of $891. This farm had high quality poultry and was well equipped to care for the flock. The difference in the income on the two farms was due primarily to the difference in the poultry flocks. The volume of business on farm No. 2 was greater than on farm No. 1 and the profit was also greater. Provided good housing and good poultry management a flock of 300 chickens on farm No. 1 would increase the gross income at least $700 and increase the net income by $400.

There are many farms in the cotton belt on which a similar change would prove profitable either by the cow route or the hen route. However, when either of these two livestock sidelines is added to the farm business the livestock must be high quality and must be properly cared for. Poor quality cows or poor quality poultry may add volume to the business but they will not increase the profits.

PART III

Averages of 119 Oklahoma Farm Records

Teh following tables are made up of averages of the records from 119 Oklahoma farms on which farm account records were keut in 1928. These averages may be considered somewhat representative of the **better farms** in the regions of the state from which the records come. As is indicated in figure 2 the northwest furnished a sufficient number of records to make a fairly representative sample; the number of records from the northeast and southwest may or may not be sufficient to furnish a fair sample; while the number of records obtained from the southeast is too small to be considered a representative sample.

Results of a farm management survey conducted by the Department of Agricultural Economics in one community last year indicated that the averages of farm account records in that community were above the general average of the community. On the strength of this it seems reasonable to assume that farms on which farm records are kept are above average and should, therefore, be considered representative of the **better** farms rather than representative of the average farm in the state.

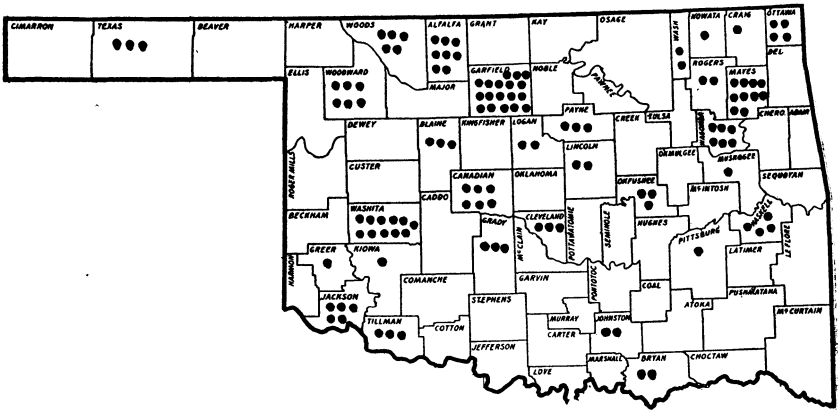


Figure 2

(Map of Oklahoma showing location of farms on which records were kept in 1928. Each dot indicates one farm).

Table 1—Income and Expenses per Farm, Average of 119 Farms, Oklahoma, 1928

Number of farms reporting	119
Gross income per farm	$3643
Farm expenses per farm	1461
(1) Farm income	2182
(2) Return for labor	1579

(1) Farm income is the money left to pay interest on investment and to pay the farmer and family for their labor after all other farm expenses have been deducted.

(2) Return for labor is the money left to pay the farmer and family for their time after all other farm expenses have been paid, and also five per cent on the farm investment.

Table 2—Distribution of Gross Income per Farm, Average of 119 Farms, Oklahoma, 1928

Sources of Income	Gross Dollars	Income per cent
Wheat	$ 1224	33
Cotton	507	14
Other Crops	315	9
Cattle	443	12
Dairy Products	284	8
Hogs	193	5
Sheep and wool	28	1
Poultry	146	4
Eggs	278	7
Horses and Mules	19	1
Miscellaneous	206	6
Total	$ 3643	100

Table 3—Distribution of Expense per Farm, Average of 119 Farms, Oklahoma, 1928

	Dollars	Per cent
Hired Labor	228	16
Feed bought	278	19
Seed bought	52	4
Farm fuel	135	9
Repairs for Equipment	204	7
Livestock Expense	37	2
Taxes	110	7
Machiery Depreciation	144	10
Building Depreciation	34	2
Auto Expense	52	4
Miscellaneous Farm Expense	287	20
Total	$ 1461	100

Table 4—Distribution of Investment per farm, Average of 90 Farms, Oklahoma, 1928

	Dollars	Per cent
Land	9546	64
Buildings	1449	9
Machinery	1202	8
Livestock	1752	12
Feeds, seeds, etc.	1014	7
Total	14963	100

Table 5—Number of Head of Livestock per Farm, Average of 119 Farms, Oklahoma, 1928

	Number of head
Milk cows	5
Other mature cattle	3
Young stock	7
Brood sows	1
Other hogs	12
Mature sheep	3
Poultry	205
Work horses and mules	6
Other horses and mules	1

Table 6—Size of Business, Amount of Livestock and Quality of Livestock, Sources of Income and Crop Yields per Acre. Average of 119 Farms, Oklahoma, 1928

Total farm expense	$1461
Farm Area (acres)	215
(1) Animal units of livestock per 100 acres in farm	12
Gross income per $100 invested in beef cattle	$ 135
Gross income of dairy products per milk cow	47
Gross income per 100 chickens	183
Gross income per $100 invested in hogs	159
Number of sources of income	3
Per cent acreage in cash crops	74
Yield per acre of wheat	17 bushels
Yield per acre of cotton	187 lb. lint
Yield per acre of corn	25 bushels
Yield per acre of tame hay	2 tons

(1) An animal unit of livestock is the equalavent of one mature horse or cow in feed consumption and manure production. It takes two head of young stock of horses or cattle to make an animal unit, or five hogs, ten pigs, seven sheep, fourteen lambs, or 100 chickens.

PART IV

Averages of 40 Farm Records in Northwest Oklahoma

The following tables repreesnt averages of 40 farm records from the heart of the wheat belt of Oklahoma. These figures should be fairly representative of **good** farms in this region of the state. Figure 3 shows which counties are included in the region which these averages represent.

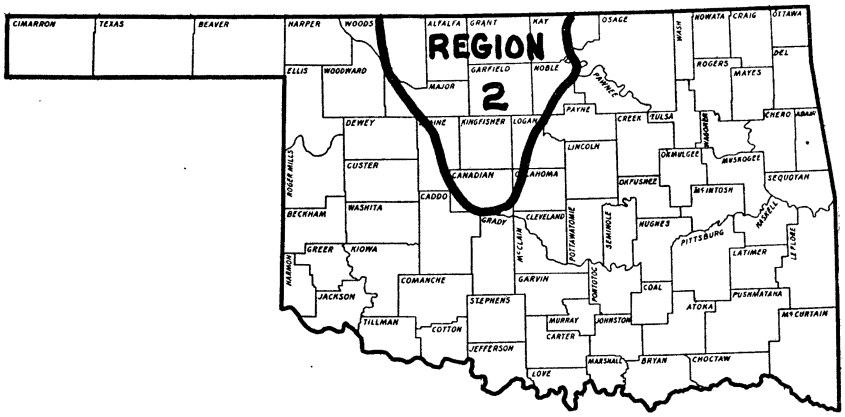


Figure 3 showing counties included in region 2. The principal crop in this region is wheat.

Table 1—Income and Expense per Farm, Average of 40 Farms, Region 2, Oklahoma, 1928

Number of farms reporting	40
Gross income per farm	$4953
Farm expenses per farm	2032
(1) Farm income	2921
(2) Return for labor	2014

(1) Farm income is the money left to pay the farmer and family for their labor after all other farm expenses have been deducted.

(2) Return for labor is the money left to pay the farmer and family for their time after all other farm expenses have been paid and also five per cent on the farm investment.

Table 2—Distribution of Gross Income per Farm, Average of 40 Farms, Region 2, Oklahoma, 1928

Sources of Income	Gross Income	
	Dollars	Per cent
Wheat	$2485	51
Other Crops	293	6
Cattle	746	15
Dairy Products	315	6
Hogs	314	6
Sheep and wool	59	1
Poultry	110	2
Eggs	242	5
Horses and Mules	48	1
Miscellaneous	341	7
Total	$4953	100

Table 3—Distribution of Expense per Farm, Average of 40 Farms, Region 2, Oklahoma, 1928

	Expenses per Farm	
	Dollars	Per cent
Hired labor	298	15
Feed bought	337	17
Seed bought	61	3
Farm fuel	226	11
Repairs for equipment	160	8
Livestock expense	65	3
Taxes	147	7
Machinery depreciation	213	11
Building depreciation	43	2
Auto expense	66	3
Miscellaneous farm expense	416	20
Total	$2032	100

Table 4—Distribution of Investment per Farm, Average of 29 Farms, Region 2, Oklahoma, 1928

	Investment per Farm	
	Dollars	Per cent
Land	$15,269	66
Buildings	1,899	8
Machinery	1,790	8
Livestock	2,602	11
Feeds, seeds, etc.	1,655	7
Total	$23,215	100

Table 5—Number of Head of Livestock per Farm, Average of 40 Farms, Region 2, Oklahoma, 1928

	Number of Head
Milk cows	6
Other Mature Cattle	8
Young stock	9
Brood sows	1
Other hogs	18
Mature sheep	7
Poultry	203
Work horses and mules	7
Other horses and mules	1

Table 6—Size of Business, Amount of Livestock, and Quality of Livestock, Sources of Income and crop yield per acre, Average of 40 Farms, Region 2, Oklahoma, 1928

Total Farm Expense	$2023
Farm Area (acres	293
(1) Animal units of Livestock per 100 acres in farm	9
Gross Income per $100 Invested in Beef Cattle	207
Gross Income of Dairy Products per milk cow	46
Gross Income per 100 Chickens	151
Gross Income per $100 Invested in Hogs	176
Number of Sources of Income	2
Per cent acreage in cash crops	80
Yield per acre wheat	19 bu.
Yield per acre cotton (lint)	166 lbs.
Yield per acre corn	19 bu.
Yield per acre tame hay	2⅓ T.

(1) An animal unit of livestock is the equivalent of one mature horse or cow in feed consumption and manure production. It takes two head of young stock of horses or cattle to make an animal unit, or five hogs, ten pigs, seven sheep, fourteen lambs, or 100 chickens.

PART V

Averages of 17 Farm Records in Northeast Oklahoma

The following tables represent averages of 17 farms in Northeast Oklahoma, a region of general farming where hay and dairy products are import-

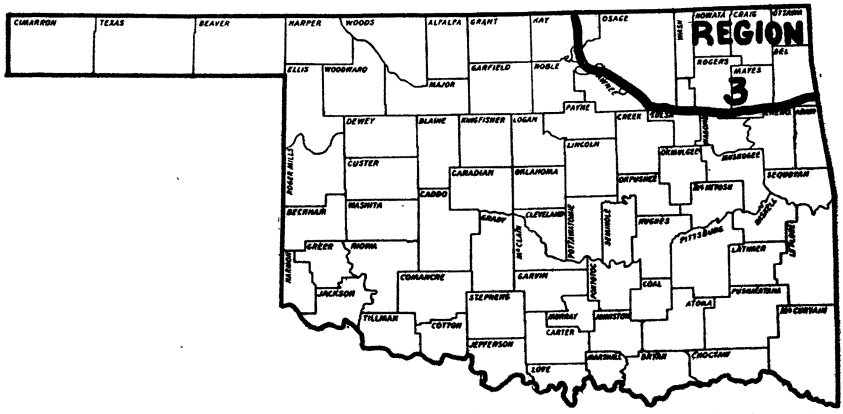


Figure 4 showing counties included in Region 3. This is a region of general farming. Hay and dairy products are important sources of income here.

ant sources of income. The number of records is not sufficient to insure a good sample but these are the best figures available at the present time. They may or may not be representative of the average of the better farms of this region. Figure 4 indicates what counties are included in the region which these averages represent.

Table 1—Income and Expense per Farm, Average of 17 Farms, Region 3 Oklahoma, 1928

Number of farms reporting	17
Gross income per farm	$2321
Farm expenses per farm	945
(1) Farm income	1376
(2) Return for labor	970

(1) Farm income is the money left to pay interest on the investment and to pay the farmer and family for their labor after all other farm expenses have been deducted.

(2) Return for labor is the money left to pay the farmer and family for their time after other farm expenses have been paid and also five per cent on the farm investment.

Table 2—Distribution of Gross Income per Farm of 17 Farms, Regionn 3, Oklahoma, 1928

Sources of Income	Gross Income Dollars	Per cent
Wheat	$ 93	4
Cotton	53	2
Other Crops	477	21
Cattle	345	15
Dairy Products	311	13
Hogs	261	11
Sheep and wool	10	
Poultry	174	8
Eggs	479	21
Horses and Mules	18	1
Miscellaneous	100	4
Total	$2321	100

Table 3—Distribution of Expense per Farm, Average of 17 Farms, Region 3 Oklahoma, 1928

Sources of Income	Expenses per Farm Dollars	Per cent
Hired labor	$ 61	6
Feed bought	384	41
Seed bought	42	4
Farm fuel	65	7
Repairs for equipment	59	6
Livestock expense	26	3
Taxes	65	7
Machinery depreciation	65	7
Building depreciation	32	3
Auto expense	46	5
Miscellaneous farm expense	100	11
Total	$945	100

Table 4—Distribution of Investment per Farm, Averave of 14 Farms, Region 3 Oklahoma, 1928

	Investment per Farm	
	Dollars	Per cent
Land	$5406	58
Buildings	1288	14
Machinery	694	8
Livestock	1315	14
Feeds, Seeds, etc.	534	6
Total	$9237	100

Table 5—Number of Head of Livestock per Farm, Average of 17 Farms, Region 3, Oklahoma, 1928

	Number of Head
Milk cows	7
Other mature cattle	2
Young stock	7
Brood sows	3
Other hogs	13
Mature sheep	1
Lambs	None
Poultry	304
Work horses and mules	5
Other horses and mules	1

Table 6—Size of Business, Amount of Livestock and Quality of Livestock, Sources of Income, and Crop Yield per Acre, Average of 17 Farms, Region 3, Oklahoma, 1928

Total Farm expense	$945
Farm Area (acres)	161
(1) Animals units of livestock per 100 acres in farm	16
Gross income per $100 invested in beef cattle	111
Gross income of dairy products per milk cow	42
Gross income per 100 chickens	197
Gross income per $100 invested in hogs	234
Number of sources of income	3
Per cent acreage in cash crops	73
Yield per acre wheat	13 bushels
Yield per acre cotton (lint)	83 lbs
Yield per acre corn	25 bushels
Yield per acre tame hay	2 tons

(1) An animal unit of livestock is the equivalent of one mature horse or cow in feed consumption and manure production. It takes two head of young stock of horses or cattle to make an animal unit, or five hogs, ten pigs, seven sheep, fourteen lambs or one hundred chickens.

PART VI

Averages of 19 Farm Records in Southwest Oklahoma

The following tables represent the averages of 19 farms in Southwest Oklahoma. Eleven of the nineteen farms were located in one county. This fact must be given due consideration in determining whether or not these records represent averages of the better farms in the "wheat-cotton" region of Oklahoma.

Figure 5 indicates what counties are included in the region which these records represent.

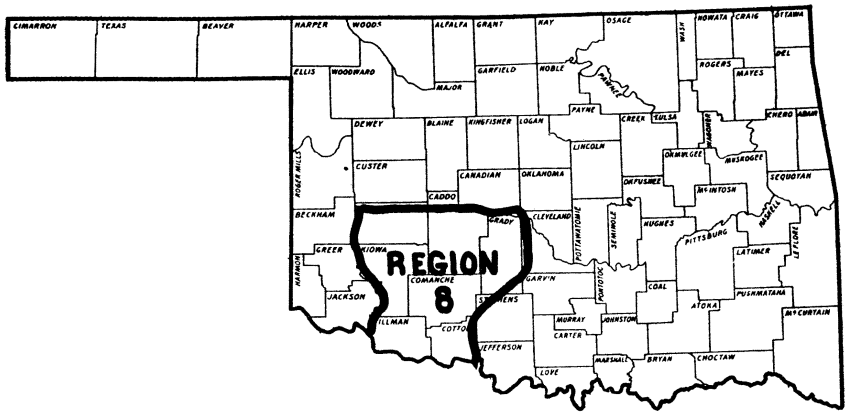


Figure 5 showing counties included in region 8. The principal crops in this region are cotton and wheat.

Table 1—Income and Expense per Farm, Average of 19 Farms, Region 8 Oklahoma, 1928

Number of farms reporting	19
Gross income per farm	$3937
Farm expenses per farm	1580
(1) Farm income	2357
(2) Return for labor	1689

(1) Farm income is the money left to pay interest on the investment and to pay the farmer and family for their labor after all other farm expenses have been deducted.

(2) Return for labor is the money left to pay the farmer and family for their time after all other farm expenses have been paid and also five per cent on the farm investment.

Table 2—Distribution of Gross Income per Farm, Average of 19 Farms, Region 8. Oklahoma, 1928

Sources of Income	Gross Income	
	Dollars	Per cent
Wheat	$ 926	24
Cotton	1440	36
Other Crops	280	7
Cattle	367	9
Dairy products	298	8
Hogs	83	2
Sheep and wool	2	-
Poultry	104	3
Eggs	222	6
Horses and mules	18	--
Miscellaneous	197	5
Total	3937	100

Table 3—Distribution of Expense per Farm, Average of 19 Farms, Region 8. Oklahoma, 1928

	Expenses per Farm	
	Dollars	Per cent
Hired labor	$ 344	22
Feed bought	196	13
Seed bought	48	3
Farm fuel	131	8
Repairs for equipment	114	7
Livestock expense	18	1
Taxes	147	9
Machinery depreciation	172	11
Building depreciation	36	2
Auto expense	59	4
Miscellaneous farm expense	315	20
Total	$1580	100

Table 4—Distribution of Investment per Farm, Average of 15 Farms, Region 8. Oklahoma, 1928

	Investment per Farm	
	Dollars	Per cent
Land	11,243	69
Buildings	1,520	9
Machinery	1,194	7
Livestock	1,409	9
Feeds, seeds, etc.	882	6
Total	$16,248	100

Table 5—Number of head of Livestock per Farm, Average of 19 Farms, Region 8, Oklahoma, 1928

	Number of Head
Milk cows	5
Other mature cattle	None
Young stock	7
Brood sows	None
Other hogs and pigs	5
Mature sheep	1
Poultry	147
Work horses and mules	5
Other horses and mules	1

Table 6—Size of Business, Amount of Livestock, and Quality of Livestock, Sources of Income and Crop Yield per Acre, Average of 19 Farms, Region 8, Oklahoma, 1928

Total Farm Expense	$1581
Farm Area (acres)	183
(1) Animal units of livestock per 100 acres in farm	11
Gross Income per $100 invested in beef cattle	108
Gross income of dairy products per milk cow	64
Gross income per 100 chickens	180
Gross income per $100 invested in hogs	149
Number of sources of income	2
Per cent acreage in cash crops	73
Yield per acre wheat	16 bushels
Yield per acre cotton (lint)	209 lbs.
Yield per acre corn	37 bushels
Yield per acre tame hay	2½ tons

(1) An animal unit of livestock is the equivalent of one mature horse or cow in feed consumption and manure production. It takes two head of young stock of horses or cattle to make an animal unit, or five hogs, ten pigs, seven sheep, fourteen lambs, or 100 chickens.

ACKNOWLEDGEMENTS

1. The three type of farming regions designated in this circular are taken from a type of farming study by J. O. Ellsworth, formerly of the Department of Agricultural Economics, Oklahoma A. & M. College.

2. Survey figures referred to on pages 3 and 4 are obtained from a farm management survey in Garfield County conducted by Professor P. H. Stephens, Department of Agricultural Economics, Oklahoma A. & M. College.