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EC800 Planning and Analyzing the Farm Business

E. L. Taylor

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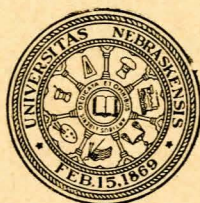
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AGRICULTURAL ECONOMICS
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UNITED STATES
DEPARTMENT OF AGRICULTURE
CO-OPERATING

Planning and Analyzing the Farm Business

E. L. TAYLOR

At the close of a long day's work Mr. Jones remarked to the family circle: "I fear that we are losing out in our farming operations. Here we are scarcely able to pay the interest, let alone being able to enjoy the reading matter, clothes, and household conveniences that every ambitious, hard-working family on the farm ought to have within its possibilities. You children ought to go to college later on, but right now such prospects are far from promising. Shall we sell out, move to town, and hope that the high wages there will bring us the prosperity and contentment that we want?"

For a long time there was silence, for every member of that family loved the old home place.

Finally John spoke up: "What is to become of us children? Would a move to the city mean that probably five out of the six of us would finally become dependent upon salaries or daily wages? I do not like to give up the idea of some time owning and operating a farm of my own. Although the farmer has recently been getting the worst of it, I feel sure that within a few years he will be in his former good position."

"John seems to have gone to the heart of the whole question," said Mrs. Jones. "We must take the long-time view, try to escape as much grief as possible and be ready for our good turn when it comes. As for my needs, I am on the road to solving a part of them. A lady from the Agricultural College told our woman's club about several inexpensive household conveniences. I am sure that I got several very valuable suggestions about bettering our home. Father, what did you learn at the meeting the other day?"

"That meeting is just what set me to thinking and caused me to suggest that we sell the farm and go to the city. I wanted to find out by my question if all of you still had faith in farming, and I now want to know if you are willing to join with me in attacking our problems from a new angle?"

"Our speaker began by talking about the way the price of corn and the price of hogs keep playing teeter-totter. Then all at once they change the game while one of them chases the

farmer, and says, 'Tag, you're it.' You know I have been wondering why we can't get on to that little game of theirs and escape more of their hard rubs than we do? You see when there is considerable profit in any one thing for a year or so too many of us get on and ride at top speed without making due preparations for a sharp turn that may be somewhere ahead, caused by the piling up of a mountain of supplies that demand is slow to remove.

"That thought seemed to open up several possibilities for me right here on this farm. I have lost out on the old get-along-as-best-you-can plan. So, I say, let's all join in and add something different this coming year. Let's make a close study of every twist and turn in our farm business. For instance, how about our farm operations? Are we marketing our labor to best advantage in the crops, livestock and livestock products that we sell? Could we make more profit by hitching up to a slightly different balance in our farm operations? Do we know what our costs are? Are we holding them down to the lowest point? Are we taking as good a living first hand from the farm as we ought?"

The next evening more discussion followed, after which they all gathered around the table and helped father with the farm account book. The first work done was the opening of inventories for feed, cattle, horses, swine, poultry, buildings, and machinery.

Henry insisted that he could see no reason for making out such inventories since it was easy to see any of these items if one went outside and looked about the place.

Mr. Jones explained that an inventory is a business list of property that is the basis for all studies in profit-and-loss accounts such as their farm was to undertake that year; that the inventory shows what one's business is worth when debts are subtracted; and that such an inventory is the basis for credit statements that bankers are using more and more when making loans to farmers, particularly when these loans are passing on to Federal Reserve Banks.

Turning to the feed inventory (see p. 9), Mr. Jones said, "Henry, does it seem that our feeds listed show that we have been raising the best balance of feeds for our livestock?"

After a considerable time Henry remarked, "It seems to me that we need more alfalfa, for when we pasture our hogs all summer on the alfalfa we are sometimes short on hay for our cows. We ought to have at least five acres more of alfalfa."

"Henry, I believe that you have given us the right answer to one of our problems. While you were studying that out I reviewed our cattle inventory. I believe that we have some cows on the list that do not produce enough to pay for their feed and care. Let's test them out and then fork over good alfalfa only when a cow shows she is paying her way. Your extra chore this year will be to learn to test cows and then to keep a record on the herd. I believe that you can help us to make good on the old adage that 'a penny saved is a penny gained.'"

"John, what do you think of the swine inventory? Have we gone in too strong?" John said that he did not think so. Mr. Jones, replied, "We have had one year of extra good profits and possibly will see another year of fair profits, but since we have only 1300 bushels of corn and twelve brood sows, I have about decided to sell three of them since there is a strong demand for such animals. The nine left will keep us going strong enough." And so it was decided to reduce that enterprise.

The remaining inventories were about right. The horses were still strong and serviceable but advanced in years. High priced feed and cheap horses had resulted in the raising of very few colts and consequently the horses were above the average age normally kept. It was decided to raise an occasional colt to fill in the gap. And thus, throughout the year, the family sought to strengthen its business.

As time went on they became more and more interested in the approaching date when they could summarize their year's records and make them unfold their story. They had been constantly confronted by the questions, "From where does the money come? Where does the money go? Are we lowering our costs of production so that we are getting the largest possible per cent out of each dollar's worth of farm sales? Are we buying to the best advantage? Are we making the farm furnish us directly as much of our living as possible? Are we collecting as we go along the greatest possible amount of enjoyment out of life?"

December 31st came with the completed records as shown on the next seven pages, which are in turn followed by Mr. Jones' analysis and remarks.

PLANNING AND ANALYZING THE FARM BUSINESS 5

Below are given Sales and Purchases as found on various pages of the Farm Account Book as kept by Mr. Jones for the year 1922.

SALES OF CROPS

DATE	KIND AND QUANTITY OF CROP	Amount Received
July 24	Sold 751 bu. 17 lbs. wheat @ 90¢	\$ 676 15
Dec. 15	" 267 " 6 " oat " 37¢	98 85
TOTAL (Carry items above to summary page, column 3)		\$ 775 00

PURCHASES AND SALES OF LIVESTOCK

CATTLE

DATE	DETAILS OF TRANSACTION	Purchases	Sales
March 21	Sold two steers to H. Jones	\$	\$ 90 00
Sept. 6	" Two 11 months old calves		65 00
" 6	" Brown Eyes and Shanty		78 00
" 6	" Two spring calves		30 00
TOTALS (Carry Totals to columns 2 and 3 sum. p.)		\$ 0 00	\$ 263 00

HOGS

DATE	DETAILS OF TRANSACTION	Purchases	Sales
Jan. 14	Sold three bred sows, 600 #	\$	\$ 155 00
June 6	" fifteen fat hogs, 3375 # @ \$9 ¹⁰ cwt.		307 12
Aug. 15	" nine old sows, 2681 # @ 6 ⁵⁰ cwt.		174 26
Sept. 20	Bought male pig (70 #)	40 00	
Nov. 23	Sold thirty four fat hogs, 8650 # @ 6-		519 00
TOTALS (Carry as for cattle) (15,306 # sold)		\$ 40 00	\$ 1155 38

POULTRY

DATE	DETAILS OF TRANSACTION	Purchases	Sales
July 15	Sold 100 spring chickens	\$	\$ 54 84
Aug. 8	" 55 culs		40 80
TOTALS (Carry Totals to columns 2 and 3 summary p.)		\$ 0 00	\$ 95 64

OTHER SALES

Egg sales for year, as per egg record		\$ 187 43
Butterfat " " " " " sales record		293 55

→ Carry to Column 3, summary page

Below are given FARM EXPENSES as found on various pages of Mr. Jones' Farm account Book.

FEED BOUGHT

DATE	DETAILS OF TRANSACTION	Amount Paid
Jan 6	Oyster shells \$2, meat scraps \$6, tankage 100# @ \$3 ⁷⁵	\$ 11 75
Apr 3	Chicken scratch \$5, tankage 100# @ \$4-	9 00
May 4	1 bbl. salt \$2, tankage 100# @ 3 ⁵⁰	5 50
Oct 2	Meat scrap for poultry \$7, tankage 600# @ 3 ⁵⁰	28 00
	TOTAL (Carry Total to summary page, line 8.)	\$ 54 25

LABOR

DATE	DETAILS OF TRANSACTION	Amount Paid
Nov 24	Corn husking, 400 bu. @ 5¢	\$ 20 00
	TOTAL (Carry Total to summary page, line 9.)	\$ 20 00

MACHINERY EXPENSE

DATE	DETAILS OF TRANSACTION	Amount Paid
Feb 10	Mower repairs	\$ 5 00
Mar 5	Disc "	2 65
Apr 19	Wagon "	4 35
June 8	Cultivator "	2 00
" 20	Binder "	15 00
Sept 7	Drill "	1 00
	TOTAL (Carry Total to summary page, line 13.)	\$ 30 00

OTHER FARM EXPENSES

DATE	DETAILS OF TRANSACTION	Amount Paid
Feb 27	Veterinary for horse \$4, nails, staples, bolts, \$2 50	\$ 6 50
Mar 1	Some annual interest payment on \$8000- mortgage	22 00
Apr 5	Harness repairs \$1 50, machine oil \$1-	2 50
" 25	Real estate taxes on quarter section	180 37
June 1	Hail insurance on 40 acres wheat	21 50
" 7	Vaccine (double treatment) for 45 pigs	18 00
July 2	150# turp @ 11¢	16 50
" 10	Blacksmith bill for June \$5, axle grease \$1-	6 00
" 24	Threshing bill, wheat @ 8¢, oats 465 bu. @ 4¢	82 60
Aug 10	Bought alfalfa seed	9 00
" 31	Blacksmithing for August	4 00
Sept 11	Interest on mortgage	220 00
" 3	Fire insurance charged against this year's business	6 00
Nov 5	Husking milters	32 5
" 29	Paid personal taxes	26 10
Dec 31	Pro-rating gas, oil, tires against farm business	75 00
	TOTAL (Carry Total to summary page, line 11.)	\$ 897 32

PLANNING AND ANALYZING THE FARM BUSINESS

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DEPRECIATION ACCOUNT OF FARM PROPERTY

Include in this account all buildings, tiling, and other property of permanent nature.

If this record is filled completely it provides the information needed in determining the depreciation allowed on property and provides a permanent record. The purpose of allowing depreciation on property is to allow claiming as expense the original cost of the property during the life of the property. A portion of the cost should be charged as depreciation each year, based on the number of years the property will last, so that when the property is worn out, the full cost will have been claimed as depreciation. Enter the record below as indicated by the column headings. At the beginning of the year fill column 1, 2, and 6, leaving columns 3, 4, 5, and 7 to be filled at the end of the year.

* Depreciation of house is carried as a separate item at foot of account. Under the federal income tax law depreciation on your dwelling is not a deductible expense.

Kind of Property	Date Acquired	Cost or market value March 1, 1913 Plus Cost of Improvements Up to beginning of Taxable year	Total Cost of New Improvements Made During Taxable Year (Column 1)	Rate of Depreciation in %	Amount of Depreciation claimed for Taxable Year	Depreciation Sustained Prior to Taxable Year	on Total Depreciation Sustained to end of Taxable Year
Tenant house		\$	\$	%	\$	\$	\$
Barn	1918	500.00		4	20.00	80.00	100.00
Corn crib	"	250.00		6	15.00	60.00	75.00
Granary	"	200.00		4	8.00	32.00	40.00
Hog house	1919	300.00		4	12.00	36.00	48.00
Hen house	1918	125.00		4	5.00	20.00	25.00
Machine shed		—					
Fencing	1918	200.00		8	16.00	64.00	80.00
Well, mill and Pump	"	175.00		8	14.00	56.00	70.00
TOTAL Buildings, Fencing, tiling, etc.		\$	\$		\$ 90.00		\$
DWELLING *	1918	\$2,000.00	\$	4	\$ (80.00)	\$	\$
	Column 1	2	3	4	5	6	7

→ Carry to summary, line 14.

DEPRECIATION ACCOUNT OF FARM PROPERTY

Include in this account all larger machinery and tools. Hand tools and such as hammers, spades, forks, etc., should be entered only as expense when purchased on pages 18 and 19, and not carried in the inventory.

See directions on the previous page. Enter the record above as indicated by the column headings. At the beginning of the year fill columns 1, 2, and 5, leaving columns 3, 4, 5, and 7 to be filled at the end of the year.

* If the auto is used for personal and farm business, enter the full cost in column 2, but charge against the farm business in column 5.

MACHINE AND DEPRECIATION	Date Acquired	Cost or Market Value March 1, 1913 Plus Cost Improvements Up to Beginning of Taxable Year	Total Cost of New Improvements Made During Taxable Year (Column 1)	Rate of Depreciation	Amount of Depreciation Claimed for Taxable Year	Depreciation Sustained Prior to Taxable Year	Total Depreciation Sustained to end of Taxable Year
Wagon	1916	\$ 80.00	\$	% 10	\$ 8.00	\$ 48.00	\$ 56.00
Wagon <i>Tractor</i>	1917	70.00		% 8	560	28.00	33.60
Auto *	1920	600.00		20	60.00	240.00	360.00
Gang plow	1915	85.00		6	510	35.70	40.80
Disc harrow	1918	50.00		10	5.00	20.00	25.00
Spike-tooth harrow	1914	40.00		4	1.60	12.80	14.40
Corn planter	1913	45.00		8	3.60	32.40	36.00
Grand drill	1914	90.00		8	7.20	57.60	64.80
Mower	1917	55.00		12	6.60	33.00	39.60
Hay rake	1915	45.00		8	3.60	25.20	28.80
Harness	1918	90.00		10	9.00	36.00	45.00
Binder	1915	125.00		10	12.50	87.50	100.00
Carried Forward		\$	\$		\$ 127.80	\$	\$
	Column 1	2	3	4	5	6	7

* The share of depreciation on the auto to be charged against the business will vary considerably from farm to farm some men using the auto almost exclusively for farm business while others use it extensively for family and social purposes.

Machinery depreciation is influenced by care, shelter, and number of acres farmed by the particular machine especially if it is a binder, mower, or tractor.

PLANNING AND ANALYZING THE FARM BUSINESS 9

INVENTORY OF FEEDS, SEEDS AND SUPPLIES Year 1922

(Carry inventory totals to summary page, columns 1 and 4.)

ITEMS	ON HAND AT BEGINNING OF YEAR			ON HAND AT END OF YEAR		
	QUANTITY	PRICE	VALUE	QUANTITY	PRICE	VALUE
Corn	1300	\$ 30	\$ 390 00	1200	58	\$ 696 00
Wheat						
Oat	150	21	31 50	160	35	56 00
Alfalfa - hay	15	10 00	150 00	16	10 00	160 00
Fodder	3	5 00	15 00			
TOTALS			\$ 586 50			\$ 912 00

INVENTORY OF CATTLE

NAME OR NUMERAL OF ANIMAL	BEGINNING OF YEAR		END OF YEAR	
	Number	Value	Number	Value
Cows - in milk <i>Spot</i>	1	\$ 75 00	1	\$ 90 00
<i>Brindle</i>	1	70 00	1	60 00
<i>Brown Eyes</i>	1	55 00		<i>Sold</i>
<i>Lassie</i>	1	60 00	1	85 00
" dry <i>Kitty</i>	1	60 00	1	65 00
" <i>Shorty</i>	1	55 00		<i>Sold</i>
" <i>Boss</i>	1	50 00	1	70 00
Heifers				
Calves <i>October calves</i>	2	30 00		<i>Sold</i>
"			5	135 00
Steers <i>March</i>	3	60 00		<i>1 Slaughtered</i> <i>2 Sold</i>
Bulls				
TOTALS	12	\$ 515 00	10	\$ 505 00

LIVESTOCK INVENTORIES

HOGS

(Carry inventory totals to summary page, columns 1 and 4.)

NUMBER AND NAME OF ANIMAL	BEGINNING OF YEAR		END OF YEAR	
	Number	Value	Number	Value
Hogs -Market 750# ^{{later} slaughtered	3	\$ 45 00	2, # 500	\$ 38 00
Shotes 1035#	15	100 00	—	
Pigs				
Brood Sows 2165# ^{{later} sold 3	12	216 00	8, #1350	160 00
Males				
Spring pigs raised this year 43				
Fall " " " " 0				
TOTALS		\$ 361 00		\$ 198 00

HORSES

Maud, 9 years old	1	\$ 75 00	1	\$ 65 00
Queen, 8 " "	1	60 00	1	55 00
Rex, 8 " "	1	60 00	1	55 00
Dick, 10 " "	1	50 00	1	45 00
Barney, 8 " "	1	50 00	1	45 00
June, 5 " "	1	90 00	1	80 00
Pet - spring colt	1	25 00	1	50 00
TOTALS	7	\$ 410 00	7	\$ 395 00

POULTRY

Hens	100	\$ 100 00	90	\$ 100 00
Pullets				
Cocks	2	5 00	1	4 00
Cockerels	3	6 00	3	6 00
TOTALS		\$ 111 00		\$ 110 00

PLANNING AND ANALYZING THE FARM BUSINESS 11

FARM BUSINESS SUMMARY

The number at the left of the column below indicates the page and column from which the total is to be transferred to this summary. (30 - 1 indicates page 30, col. 1)

	DEBITS				CREDITS				
	Inventory at Beg. of Year		Total Purchases		Total Sales		Inventory at End of Year		
CROPS	P.	C.	P.	C.	P.	C.	P.	C.	
Corn	30	1	\$ 390.00	\$	3	\$	30	2	\$ 696.00
Oats	30	1	\$ 31.50	\$	3	\$ 98.83	30	2	\$ 56.00
Wheat	30	1	\$ —	\$	3	\$ 676.15	30	2	\$ —
Other crops	30	1	\$ 165.00	\$	4 & 5	\$	30	2	\$ 160.00
LIVESTOCK									
Cattle	31	1	\$ 55.00	6	1	\$	6	2	\$ 505.00
Dairy products					7	\$ 293.55			
Hogs	32	1	\$ 361.00	8	1	\$ 40.00	8	2	\$ 1155.38
Horses	32	1	\$ 410.00	9	1	\$	9	2	\$ —
Sheep	32	1	\$ —	9	1	\$	9	2	\$ —
Poultry	32	1	\$ 111.00	10	1	\$	10	2	\$ 95.64
Eggs					11	\$ 187.43	32	2	\$ 110.00
Miscellaneous Receipts					12 & 13	\$			
TOTALS			\$ 1983.50	\$ 40.00		\$ 2770.00			\$ 2120.00
	Column 1		Column 2		Column 3		Column 4		

SUMMARY OF INCOME AND EXPENSES COMPUTED ON AN ACCRUAL (INVENTORY) BASIS

CREDITS

1. Inventory of livestock, crops, etc., at end of year (Col. 4 above) \$ 2120.00
2. Sales of livestock, crops, etc., during year (Column 3 above) \$ 2770.00
3. TOTAL \$ 4890.00

DEBITS

4. Inventory of livestock, crops, etc., at beg. of year (Col. 1 above) \$ 1983.50
5. Cost of livestock, crops, etc., purchased during year (Col. 2 ") \$ 40.00
6. TOTAL \$ 2023.50
7. Gross profits (subtract item 6 from item 3) \$ 2866.50

DEDUCTIONS

8. Expenses - Feed purchased (Pages 14 and 15) \$ 54.25
9. Labor hired (Pages 16 and 17) \$ 20.00
10. \$ —
11. Other farm expenses (Pages 20 to 25) \$ 897.32
12. Repairs on permanent improvements (Page 26, Col. 2) \$ —
13. Repairs on machinery (Pages 18 and 19, Col. 1) \$ 30.00
14. Depreciation - Farm Property (Page 27, Col. 5) \$ 90.00
15. Farm Machinery (Page 29, Col. 5) \$ 127.80
16. TOTAL (Items 8 to 15) \$ 1219.37
17. Net Farm Profit (Subtract item 16 from item 7) \$ 1647.13

(Note - The page and column numbers given above refer to pages and columns in the account book in use during 1922-3-4 and not to pages in this publication.)

ACRES OWNED

	Crop Acres	Acre Yield	Total Yield
Corn	60	30	1800
Wheat	50	16	800
Oats	15	31	465
Alfalfa	8	2	16
Pasture	19		
Farmstead	4		
Public roads.....	4		
	<hr/> 160		

FROM WHERE DOES THE MONEY COME?

In looking over the enterprises Mr. Jones found, from the standpoint of gross sales, that they ranked as follows:

Oats—sales	\$98.85
Poultry— { sales	95.64
{ eggs	187.43
Cattle— { sales	263.00
{ butterfat	293.55
Wheat	676.15
Swine	1,155.38
Gross sales.....	<hr/> \$2,770.00

Which one of these enterprises did best? There was instant demand for the enterprise cost record on wheat, which John had kept as a supplement to the Farm Account Book. Here is John's summary, which Mr. Jones proceeded to analyze:

MONEY COST PER ACRE (YEAR 1922)

Seed, 1 bu.....	\$0.98
Twine, 2 lb.....	.22
Threshing, 16 bu. @ 8c.....	1.28
Machinery charge.....	.88
Insurance50
Board for threshing crew.....	.20
Total costs, labor and land excluded.....	<hr/> \$4.06

"I am going to set aside for use of land the customary grain rent of two-fifths of the crop," remarked Mr. Jones. "With a yield of 16 bushels, and with the two-fifths share or 6.4 bushels sold at 90 cents, the land rent amounts to \$5.76 per acre, or based on \$200 valuation, it amounts to 2.88 per cent gross interest. The remaining 9.6 bushels sold at 90 cents amounted to \$8.64, which, after subtracting the money cost of \$4.06 per acre, allows \$4.58 per acre for the 10.5 hours

of man labor and the 22 hours of horse labor. Our records show that horse labor costs us 11 cents per hour, or a total of \$2.42 for wheat. When horse labor costs are subtracted from \$4.58 the remainder, or \$2.16, is left to pay for 10.5 hours of man labor, which is at the rate of 20 cents per hour. Twenty cents per hour is too little for man labor. Wheat is an expensive crop to raise, and moreover, we do not have the chance to market it through livestock. I believe that we were right when we reduced our wheat acreage last August."

Mr. Jones kept the swine record, a supplementary sheet to the Account Book, a part of which follows, together with his analysis of that enterprise:

RECEIPTS

	Number	Weight	Value
A. Hogs sold (see Account Book).....	61	15,306	\$1,155.38
B. Hogs slaughtered	3	780	47.00
C. Inventory, end of year	10	1,850	198.00
D. TOTAL (add lines from "A" to "C")		17,936	\$1,400.38

PURCHASES

E. Hogs bought (see Account Book)....	1	170	\$ 40.00
F. Opening inventory	30	3,950	361.00
G. TOTAL (add lines "E" and "F")....		4,120	\$ 401.00
H. RECEIPTS (subtract "G" from "D")		13,816	\$ 999.38

"This part of our swine record shows that the pork produced on our farm amounted to 13,816 pounds and that the income from same was \$999.38, or an average price of \$7.23 per hundredweight," said Mr. Jones. "Now, what did it cost to produce a hundredweight of pork?" The records further show when analyzed that costs per hundredweight were:

8 bu. of corn @ an average of 45c.....	\$3.60
Alfalfa pasture and hay.....	.50
Skim milk, 150 lbs. @ 25c.....	.37
Oat 7c, tankage 25c.....	.32
Taxes, interest, shelter, vaccination.....	.93
Cost per hundredweight, labor not included.....	\$5.72

"The difference between costs and selling price amounts to \$1.51 per hundredweight, which allows 75 cents per hour for the two hours labor involved. In addition, a good market was provided for skim milk. The net profit on the swine

enterprise, labor not included, was \$209.11. The profit would have been more had not 15 of our spring pigs died. I believe that we ought to try out that hog sanitation project with which neighbor Wilson is so pleased. I am going to ask our county agent to help us with hog sanitation."

Commenting further, Mr. Jones said, "I notice that hog prices have generally shown a downward tendency this year while corn has been steadily rising, notwithstanding a series of large corn crops. For instance, at our local elevator during 1922 the following prices were paid: April, 39 cents; July, 47 cents; November, 57 cents; December, 59 cents. Local prices on hogs were as follows: June 6, \$9.10; August 15, \$7.10; November 23, \$6.00. At the end of the year, however, hogs were about \$1.00 higher than at the beginning, being \$7.60 at the close. Now, when hog and corn prices are behaving that way during the second year of profits in the swine business it signifies that one should proceed cautiously else there may be too many hogs for the amount of corn available. Our closing inventory, which becomes our opening inventory for the new year, shows that we have eight brood sows. Since making this study I have decided to sell two of those. A year or two later we shall probably find it safe to get back to a normal number."

The cattle enterprise had its own story to tell. Henry's testing changed Mr. Jones' estimate of the cows. Two were sold because of poor performance while three were valued considerably higher at the end of the year because of their good records. Their small cattle business, after making allowance for changes in the inventories, had brought in \$546.55. "That shows up very well," remarked Mr. Jones. "We shall make those red cows do even better than that. While we have fewer cows than at the beginning of the year, we shall make more money next year because the only ones we are keeping are those able to show a profit over the scales. Until our new alfalfa comes along it is better to have fewer cows, since we can now feed them more of the right kind of hay."

After making a study of the way labor had been distributed over the year it was decided that the cropping and livestock plans had not been well balanced in that there were periods when everybody seemed to be overworked while there were other periods when there was little to do except the regular chores. Mr. Jones said, "It may take us some time to bring it about, but I hope that we can arrange to have one or more

profitable enterprises to give us employment each season of the year. It does not seem from this record that we can expect a year's wages from part time employment."

After the various enterprises had been analyzed Mr. Jones opened the Account Book to the summary page and called attention to the net farm profit which remained to repay them for interest on their investment and for his own and for the family labor. He said, "Of course, this net farm profit of \$1,647.13 does not make up the entire income from our farm. We have an indirect income of considerable importance, as we can readily see when we fill out the page headed, 'Estimated Value of Food, Fuel and House Rent Furnished.'" By the aid of various accounts and by estimates based on what they would have had to pay for such items of like quantity and quality in town the Jones family found that it had an indirect income from milk, cream, butter, poultry and eggs, meat, fruit, vegetables and house rent amounting to \$1,065.00 for their family of eight. Adding this sum to the net farm profit the Jones family found that to have lived in town as well as they had on the farm and to have set aside the same amount of savings an income from investment and labor of \$2,712.13 for the year 1922 would have been needed.

Of the \$1,647.13 net farm profit it was estimated that a little over half had been used to pay family expenses, such as clothing, food, medical attention, churches and charity. The savings or increase in property resulting from income from labor and interest on investment was less than \$800. This \$800 might be hidden in part in increased inventories while the remainder would be found in the bank. In case the inventories had decreased there would be a larger sum in the bank. When the Jones family stopped to compare their property holdings of some 21 years before with their present holdings it was found that the average gain had been slightly above \$1,000 per year.

After planning to make the farm business do better for 1923, Mr. Jones and his family wrote on the back of the Account Book:

LESSONS LEARNED FROM THIS YEAR'S ACCOUNTING

1. A fair knowledge of production costs and profits.
2. That there were two unprofitable "boarders" among the cows while two others were much better than had been supposed.
3. That poultry properly managed and kept in reasonable numbers makes an excellent return on the investment and labor.
4. Greater ability and foresight in planning the swine industry.
5. That the amount of profit depends upon the spread between production costs and sales price.
6. A greater respect for the business of farming.

PROBLEMS FOR FURTHER INVESTIGATION

1. Continued study of production costs and profits.
2. The most profitable balance between the various farm enterprises.
3. A more uniform distribution of labor throughout the year.
4. Price trends and production shifts, more particularly with reference to the ratio between corn and hog prices.
5. Comparison of our farm business with records of other farmers similarly situated.
6. A record of family and personal expenses. (Household accounts.)
7. How to make the farm pay reasonable wages for labor expended.

(Farm Account Books can be secured from any County Extension Agent or from the Agricultural College Extension Service, Lincoln, Nebraska, for a nominal sum. Supplementary cost records are free.)

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