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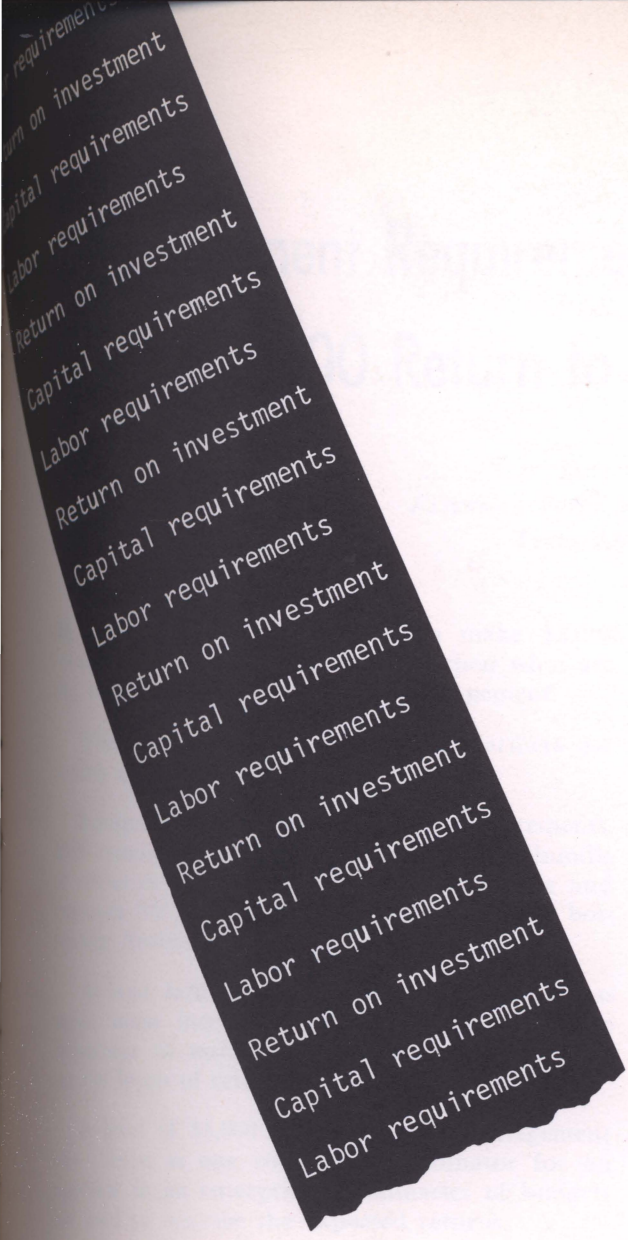

investment requirements

for

$3,000 LABOR-MANAGEMENT RETURN

TEXAS A&M UNIVERSITY
TEXAS AGRICULTURAL EXTENSION SERVICE
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Investment Requirements for an Approximate $3,000 Return to Labor-Management

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■ WHAT DOES IT TAKE to make $3,000 return to labor-management? And then what are the returns to land, labor and management?

These are the types of questions farmers ask county agents and agricultural lenders.

Equipment, livestock units, land requirements, feed resources and similar items are the bundle of resources considered in developing income and expenses for an enterprise and the bases for borrowing finances.

As land, farm equipment, livestock and various input items increase in price, it becomes more important to estimate the resources needed for certain levels of return.

A level of $3,000 return to labor-management was chosen as one common denominator for an operator in an enterprise. Summaries of budgets are used to describe the expected returns.

In analyzing the budgets on swine, egg production, broiler, dairy and beef (cow-calf) production, the following is found and summarized. **For resources** with an expected return of **$3,000** to labor-management gross income varies from $13,024 to $32,648; and gross expenses vary from $9,959 to $29,572 annually.

Return for labor-management on annual investment for the various enterprises is as follows:

Swine: With **20 brood sows;** $4,885 average annual investment; $3,012 return to labor-management.

Poultry: **5,000 hens** for egg production; a $3,076 return to labor-management with $18,160 average annual investment.

45,000 head broiler capacity; $21,050 average annual investment; $3,103 return to labor-management.

Dairy: With **36 cows** (10,000 pounds per cow); $47,783 average annual investment; $3,022 return to labor-management = **6.32 percent** at 12,000 pounds per cow = $5,375 return to labor-management = **11.24 percent.**

Beef (cow-calf): 200 mother cows; 1,666 hours labor required; $111,725 average annual investment; $3,125 return to labor management = **2.8 percent** return to labor-management or $6,425 return to land, labor and management or **5.75 percent.**

(This may be improved by including a stocker calf or conditioning program — or by a pasture-forage fertilization program.)

These figures indicate income potentials for several phases of livestock production, but do not indicate the full upper limit with superior management.

Land prices used in these analyses are based on new land studies as released in "Trends in the Texas Farm and Ranch Land Market" B-1063, and expected increases based on the new trends in consultation with Dr. A. B. Wooten, Professor, Department of Agricultural Economics and Sociology, Texas A&M University.

This total analysis is presented as a guide. Estimates for a particular individual operation will vary with resources available, location, price and other factors.

Past experience with this type information indicates it very useful in assisting farmers who come to the County Agent for information, and to agricultural lenders in making financial adjustments.

INVESTMENT REQUIREMENTS FOR AN APPROXIMATE $3,000 LABOR-MANAGEMENT RETURN

Enterprise	Price	No. of units	Hr. of labor	Av. annual investment	Return to labor-mgt.	Return to land,[3] labor & mgt.
Egg production	36½¢ @ Doz.	5,000 hens	2,500	$18,160	$3,076	$3,118
[1]Broiler	$1.90/cwt. Contract to produce for producing	45,000 capacity 97% liveability X 4½ batches = 196,425 birds sold annually	1,440	$21,050	$3,103	$3,160
[2]Swine	$18.50/cwt. (220 lb. hogs market)	20 sows 320 hogs marketed	640	$4,885	$3,012	$3,122
Dairy	Milk $5.50/cwt.	36 cows at 10,000 lb. per cow	3,600	$47,783	$3,022	$4,030
Dairy	Milk $5.50/cwt.	36 cows 12,000 lb.	3,600	$47,783	$5,375	$6,383
Beef Cow-calf	$24/cwt.	200 mother cows 92% calf, 10% replacement 500 lb. calves	1,666	$111,725	$3,125	$6,425

[1] (Based on mimeographed release of James T. Long, Extension area farm management specialist)

[2] (Based on mimeographed release of James S. Denton, Extension area farm management specialist)

[3]If land is owned, the opportunity cost charge returns to owner as an investment return.

RETURN TO LABOR-MANAGEMENT

*of an Approximate $3,000 for Egg Production**

Average Investment			**Your estimate**
Land $200 acre X 3 acres	= $	600	
Laying house ($10,000) average value over useful life ½ of cost	=	5,000	
Laying house equipment ($4,840) average value over useful life ½ of cost	=	2,420	
Egg room ($1,400) average value over useful life ½ of cost	=	700	
Misc. equipment ($580) average value over useful life ½ of cost	=	290	
Pick-up	=	900	
Average Investment	$	9,910	
Fixed expenses (annually)			
Land $600 × 7% Interest	= $	42	
Laying house $5,000 × 7% interest	=	350	
Laying house equipment $2,420 × 7% interest	=	169	
Egg room $700 × 7% Interest	=	49	
Misc. equipment $290 X 7% Interest	=	20	
Replacement	=	613	
Depreciation laying	=	500	
Depreciation laying equipment	=	242	
Depreciation egg room	=	70	
Depreciation misc. equipment	=	29	
	$	2,084	
Operating expenses (annually)			
Replacements	= $	8,250	
Feed 85 lb. × 4¢ = $3.40 × 4,400 birds	=	14,960	
Operating pick-up etc.	=	600	
Supplies	=	400	
Repairs and upkeep	=	1,300	
Utilities	=	1,048	
Operating capital interest	=	930	
Operating expenses		$27,488	
Fixed expenses		2,084	
Expenses		$29,572	
Income			
Eggs from 4,400 hens × 240 eggs = 1,056,000 eggs ÷ 12 = 88,000 doz. × 36½¢	=	$32,120[1]	
Cull hens 4,400 × 12¢ per head	=	528	
Income		$32,648	
Expenses		29,572	
Annual return to labor-management		$ 3,076	
Annual return to land, labor-management		$ 3,118	

[1]Producer will retail part of eggs.

*Adapted from B-1012 with revisions on prices, interest, etc. by Bill Cawley, Extension poultry specialist, and the author of this publication.

RETURN TO LABOR-MANAGEMENT

of an Approximate $3,000 Broiler Production
*3 Houses 15,000 Bird Capacity**
45,000 Bird Capacity
4½ Batches Annually

Labor 480 per house
3
1,440 hours
12 hours
Per Day
1st 5 days

Annual Income and Expenses

Item		Income	Your estimate
Income			
45,000 birds × 97% liveability	= 43,650 × 4½ = 196,425 birds 196,425 × 3.5 lb. = 687,487 lb. 687,487 × $1.90 cwt.	= $13,062	
Expense			
Fixed expenses			
Depreciation $40,500 ÷ 10 years		= $ 4,050	
Interest $40,500 × 7% ÷ 2		= 1,418	
Insurance		= 300	
Taxes		= 110	
Land (4 acres × 200 = $800 × 7%)		= 57	
	Fixed Expenses	$ 5,935	
Operating costs			
Electricity and gas		= $ 1,005	
Savings		= 1,188	
Clean-out (custom) $104 × 3 houses × 4½		= 1,404	
Spray and new bird preparation		= 203	
Repair and misc.		= 224	
	Operating Costs	$ 4,024	
	Expenses		$9,959
	Annual return to labor-management		$3,103
	Annual return to land-labor-management		$3,160

*Based on mimeographed materials of James T. Long, Extension area farm management specialist.

RETURN TO LABOR-MANAGEMENT

of an Approximate $3,000 in Swine Production

			Your estimate
Interest on investment (opportunity cost)			
Land charge – 10 acres @ $200 per acre = $2,000 @ 5½%	= $	110.00	
Breeding herd, $1,350 @ 7%	=	94.50	
Buildings and equipment $1,535 @ 7%	=	107.45	
Depreciation			
Buildings and equipment $2,000 @ 12½%	=	250.00	
Taxes			
Land, hogs & equipment a rendered value of $2,640 @ $1.93/HD)	=	50.98	
Other expenses			
Marketing costs of $1 per head	=	320.00	
Feed costs			
(Based on a very conservative estimate of 8 pigs marketed per litter and 100 pounds of live weight produced for each 400 lbs. of feed – this includes the feed eaten by the breeding herd.)*			
For each 220 lb. hog			
a. Creep feed 40 lb. @ $6.00 = $ 2.40			
b. Protein suppl. 140 lb. @ $5.75 = 8.05			
c. Grain 700 lb. @ $2.25 = 15.75			
Feed cost for each 220 lb. hog = $26.20			
Estimated feed cost for 320 hogs @ $26.20 each	=	8,384.00	
Pasture expenses	=	70.00	
Veterinary and medicines @ $1.25 per hog	=	400.00	
Miscellaneous and repairs	=	225.00	
Estimated Total Expenses	=	10,011.90**	
ESTIMATED INCOME AT 18½¢ × 220 lb. $40.70 × 320	=	13,024.00	
Annual return to labor-management			$3,012.10
Annual return to land, labor-management			$3,122.00

*Based on mimeographed releases by James S. Denton, Extension area farm management specialist, with revisions by T. D. Tanksley, Jr., Extension swine husbandman, and the author of this publication for 1968.

**All expenses covered at $14.23/cwt.

FEED NEEDED TO PRODUCE A 220 POUND HOG

BUDGET 2

(Good Producer)

Four pounds of feed per pound of gain (includes sow's feed)

Of This 880 Pounds of Feed:

700 pounds of grain
140 pounds of supplement
40 pounds of creep feed

RETURN TO LABOR-MANAGEMENT

on an Approximate $3,000 at 10,000 Pounds Milk Production

Current Estimate on Investment Per Dairy
36 Cows

	Investment	Interest on investment
Land	$25,183	$1,008
Improvements	4,832	194
Dairy equipment	2,904	174
Machinery and other equipment	2,904	174
Cows – the milking herd	17,280	1,037
TOTAL	$53,103	$2,587

*Original information in B-976 – *Planning For Profitable Dairying* adapted for use 1968. 12,000 pounds production gives $5,375 return for labor-management.

COST AND RETURN PROJECTION BASED ON A PREVIOUS STUDY AND CURRENT INFORMATION

36 COWS

	360,000 lb.	Your operation	432,000 lb.	Your operation
Dairy sales				
$5.50/cwt.				
Milk	$19,800		$23,760	
Cattle	1,440		1,440	
Total	$21,240		$25,200	
Gross sale income/cwt.	$ 5.90		$ 5.83	
Dairy expense				
Feed purchased	$ 6,996		$ 7,416	
Labor	230		300	
Seed & fert.	1,748		1,748	
Breeding cost	288		288	
Replacement cost	1,172		1,758	
Milk hauling	1,123		1,348	
Dues	375		375	
Supplies	105		126	
Vet. & medicine	187		224	
Utilities	117		140	
Taxes	522		522	
Machine operation	521		521	
Repairs & upkeep	603		603	
Depreciation	1,520		1,520	
Interest on investment	2,536		2,536	
Misc.	175		400	
Total	$18,218		$19,825	
Cost per cwt.	5.06		4.59	
Annual return to labor-management for 36 cows	$ 3,022		$ 5,375	
Annual return to land-labor-management	$ 4,030		$ 6,383	

Adapted for use 1968.

RETURN TO LABOR-MANAGEMENT

of an Approximate $3,000 Cow-Calf Operation

INVESTMENT — COST — RETURNS

Original investment	**Estimate**	**Your estimate**
1. Land — 400 acres at $200 per acre	$ 80,000	
2. Cattle — 200 cows at $175	35,000	
8 bulls at $450	3,600	
3. Tractor, pick-up and miscellaneous equipment	6,250	
Total	$124,850	
Estimated expenses		
Interest	$ 3,300	
1. Interest charge at 5½% × $60,000 for land Build fence $20,000 ÷ 2 = $10,000 at 5½% interest	550	
2. Interest on cattle $38,600 at 7%	2,702	
3. Interest on equipment $3,125 at 7%	219	
Sub Total	$ 6,771	
Depreciation		
4. Depreciation on equipment $6,250 — $1,250 salvage = $5,000 × 20%	$ 1,000	
5. Depreciation on building & fence $20,000 × 5%	1,000	
Taxes		
6. Taxes on cattle	158	
7. Taxes on land	772	
8. Taxes on equipment	40	
Sub Total	$ 9,741	
Other expenses		
9. Expense of keeping bull $3.75 per cow × 200 cows	$ 750	
10. Supplement $5 × 200 cows	1,000	
11. Hay $5 per cow × 200 cows	1,000	
12. Salt and bonemeal	200	

Other expenses	Estimate	Your estimate
13. Veterinary charge, vaccines and medicine $2.50 × 200 cows	$ 500	
14. Fertilizer and lime $15.50 × 400 acres	6,200	
15. Pick-up truck expense	250	
16. Marketing expenses $.70 × 941 cwt.	659	
17. Seed	200	
18. Weed control	600	
19. External parasites $.50 × 200 cows and misc.	455	
Sub total	$11,814	
Expense total	$21,555	

Estimated income

92% Calf crop _____
10 Replacement _____
500 lb. calves _____

184 calves 20 replacements 164 × 500 lb. = 82,000 lb. × 24¢	$19,680	
18 1,000 lb. (18,000 lb. × $.17) cull cows	3,060	
2 1,800 lb. cull bulls × 3,600 lb. × $.15	540	
Hay net $3.50 × 400 acres	1,400	
Income	$24,680	
Expense	$21,555	
Annual return to labor-management	$ 3,125	
Annual return to land-labor-management	$ 6,425	

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