

EBB-SW4-02

**Swine Budget
150-Sow, Farrow-to-Finish
Semi-Confinement; Open Front Facilities**

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Background and Assumptions

This budget presents both the average costs and returns per sow and total costs and returns for a typical 150-sow, farrow-to-finish operation. All feed except for the baby pig ration is processed on the farm and is either grown on the farm or purchased. Facilities are designed to provide a totally confined environment.

Livestock Investment

Livestock investment is 150 sows and 9 boars. Sows have a useful life of 2.5 years after they are placed in the breeding herd. The culling rate is 40 percent and the sow herd has a 3 percent death loss. The operation purchases its boars and replaces them every 3 years. Replacement sows are raised on the farm. Sows farrow an average of 1.85 times per year with 10.5 pigs per litter. Death loss from farrowing to market is 24 percent, with an average of 7.5 pigs marketed per litter.

Machinery and Equipment

Machinery and equipment investment is 75 percent use of a pickup, 75 percent use of a 45-HP tractor, 50 percent use of a 75-HP tractor with loader, and 100 percent use of feed processing, storage, and manure equipment.

Buildings and Improvements

Housing and improvement costs are based on current replacement costs. Facilities are constructed from new materials using outside labor.

Buildings include a gestation and boar barn, 25 farrowing huts, a nursery-grower barn, and a finishing barn. All buildings except for the farrowing units are pole frame construction with metal siding on girts, and have open fronts, and outside pens. The sheds are 16 feet wide and ventilated through the open front and doors in the back wall. The ceiling is insulated to control winter condensation and provide summer shade.

Pigs feed and water on the paved outside lots. The lots have a sloped concrete surface for adequate drainage and are enclosed by a wire mesh fence. They are designed to provide easy access for manure removal, and are equipped with watering and feeding facilities.

Farrowing occurs in small sheds or huts with one sow per hut. Farrowing huts are adequately insulated, ventilated, and heated. They are equipped with feeders and water supply lines. Buildings and improvements are valued at 80 percent of new replacement cost.

Management Practices

Sows farrow 1.85 times per year in six groups for a total of 14 farrowing periods. Baby pigs are weaned 5 weeks after farrowing and transferred from farrowing huts to the open-front style buildings. Initially, they are placed in an open front nursery unit where they are fed a baby pig ration. At 66 days of age (about 60 pounds) pigs are moved from the nursery into a grower unit for 5 weeks. After 5 weeks in the grower unit (about 100 pounds), the pigs are moved into a finisher unit where they remain until 180 days of age. Pigs are marketed at 240 pounds.

While in the grower and finisher units, pigs are fed three successive rations: a starter ration at 19 percent protein content, a grower ration at 16 percent protein content and a finisher ration at 14 percent protein content. Total quantities fed are approximately 50 pounds of starter ration at 2 pounds per day, 220 pounds of grower ration at 4 pounds per day, and 350 pounds of finisher ration at 7 pounds per day.

For more information on the feed components in these rations, see Table 4. The feed assumptions should not be considered fixed since it is probable that feed ration components will vary from one operation to another. All feed except barley is purchased and the producer does all ration mixing.

Each year 18 loads of market-weight pigs at 33,400 pounds per load are hauled 50 miles to market at a cost of 57 cents per hundredweight. When the pigs reach market, a 2 percent "pencil shrink" is assessed as a marketing cost.

Veterinary care is administered to maintain herd health. Baby pigs are given 3-way vaccinations at weaning and 3 weeks after weaning for control of atrophic rhinitis, erysipelas, and hemophilus. Iron shots are also administered. Sows receive one *E. coli* vaccination before each farrowing. For gilts, this vaccination is given twice before first farrowing. Before farrowing, sows are also treated for internal and external parasites, leptospirosis, and given the same 3-way vaccination as received by the baby pigs. Boars are treated for internal and external parasites, and given 3-way vaccinations twice a year.

Labor in this operation is provided by the owner and one full-time employee and valued at \$8.50 and \$11.50 per hour, respectively. The hired labor rate includes payroll taxes and other benefits paid by the producers.

Table1: Swine Budget
150 Sow Farrow to Finish
Semi-Confinement; Open Front Facilities

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	Weight Each	Unit	Total Number of Head or Units	Price or Cost/Unit	Total Value	Value or Cost/Head	Your Value
1. Gross Receipts							
Slaughter hogs	240.00	lb	2215	0.44	233,904.00	1559.36	_____
Cull sow	400.00	lb	60	0.28	6720.00	44.80	_____
Cull boar	450.00	lb	3	0.18	243.00	1.62	_____
Total Receipts					\$240,867.00	\$1605.78	_____
2. Operating Costs							
Lactation - 16%		cwt	1008.00	7.70	7761.60	51.74	_____
Gestation - 12%		cwt	2317.50	6.54	15,156.45	101.04	_____
Boar feed - 16%		cwt	180.36	7.70	1388.77	9.26	_____
Gilt feed - 14%		cwt	130.26	6.39	832.36	5.55	_____
Baby pig - 20%		cwt	183.60	30.00	5508.00	36.72	_____
Starter - 19%		cwt	1194.52	8.95	10,690.97	71.27	_____
Grower - 16%		cwt	5130.87	6.90	35,402.98	236.02	_____
Finisher - 14%		cwt	7959.91	6.39	50,863.82	339.09	_____
Marketing		head	150.00	32.12	4818.00	32.12	_____
Hauling		head	150.00	22.85	3427.50	22.85	_____
Utilities		head	150.00	60.00	9000.00	60.00	_____
Veterinary Medicine		\$	4365.09	1.00	4365.09	29.10	_____
Machinery (fuel, lubrication, repair)		\$	2687.40	1.00	2687.40	17.92	_____
Vehicles (fuel, repair)		\$	1736.25	1.00	1736.25	11.57	_____
Equipment (repair)		\$	1490.00	1.00	1490.00	9.93	_____
Housing and Improvements (repair)		\$	7573.49	1.00	7573.49	50.49	_____
Hired Labor		hour	3156.00	11.50	36,294.00	241.96	_____
Owner Labor		hour	732.00	8.50	6222.00	41.48	_____
Interest on Operating Capital		\$	1996.05	0.06	124.75	0.83	_____
Total Operating Costs					\$205,343.43	\$1368.96	_____
3. Income Above Operating Costs					\$35,523.57	\$236.82	_____
4. Ownership Costs							
Capital Recovery:							
Purchased Livestock		\$	914.20	1.00	914.20	6.09	_____
Housing and Improvements		\$	20,051.03	1.00	20,051.03	133.67	_____
Machinery		\$	2232.85	1.00	2232.85	14.89	_____
Equipment		\$	4480.97	1.00	4480.97	29.87	_____
Vehicles		\$	1552.87	1.00	1552.87	10.35	_____
Interest on Retained Livestock		\$	29,250.00	0.07	1974.38	13.16	_____
Taxes and Insurance		\$	894.18	1.00	894.18	5.96	_____
Overhead		\$	4900.00	1.00	4900.00	32.67	_____
Total Ownership Costs					\$37,000.48	\$246.67	_____
5. Total Costs					\$242,343.91	\$1615.63	_____
6. Returns to Risk and Management					-\$1476.91	-\$9.85	_____

Table 4: Investment Summary.

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	Purchase Price	Salvage/Cull Value	Livestock Share	Useful Life	Annual Taxes and Insurance	Annual Capital Recovery ¹
Buildings, Improvements and Equipment						
Gestation & boar barn	\$16,800.00	\$1680.00	100	15	\$55.44	\$1747.38
Farrowing sheds	\$41,000.00	\$4100.00	100	15	\$135.30	\$4264.43
Nursery-grower barn	\$35,000.00	\$3500.00	100	15	\$115.50	\$3640.37
Sow and finish barn	\$25,000.00	\$2500.00	100	15	\$82.50	\$2600.26
Feed processing and storage	\$66,000.00	\$6600.00	100	15	\$217.80	\$6864.70
Water system	\$7000.00	\$700.00	100	10	\$23.10	\$933.89
Manure equipment	\$10,600.00	\$1060.00	100	10	\$34.98	\$1414.18
Feeding equipment	\$9200.00	\$920.00	100	10	\$30.36	\$1227.40
Miscellaneous	\$10,000.00	\$0.00	100	7	\$30.00	\$1839.39
Total	\$220,600.00				\$724.98	\$24,532.00
Purchased Livestock						
Boars	\$3150.00	\$900.00	100	3		\$914.20
Total	\$3150.00					\$914.20
Retained Livestock						
Sows	\$22,500.00	\$18,000.00	100			\$1366.88 ²
Gilts	\$9000.00	\$9000.00	100			\$607.50 ²
Total	\$31,500.00					\$1974.38²
Machinery and Vehicles						
Tractor	\$14,000.00	\$3100.00	75	20	\$38.48	\$913.67
Tractor loader	\$29,000.00	\$6400.00	50	18	\$53.10	\$1319.18
Pickup 1/2 ton	\$11,500.00	\$2300.00	75	6	\$77.63	\$1552.87
Total	\$54,500.00				\$169.20	\$3785.72

¹ Annual capital recovery is the method of calculating depreciation and interest recommended by the National Task Force on Commodity Costs and Returns Measurement Methods.

² Interest on average investment.

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