

EBB-SW1-02

Swine Budget 100-Sow, Farrow-to-Finish Total Confinement

Robert L. Smathers, C. Wilson Gray, and Neil R. Rimbey



Background and Assumptions

This budget presents both the average costs and returns per sow and total costs and returns for a typical 100-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 100 sows and 6 boars. Sows have a useful life and 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. Sow replacements are raised on the farm. Sows farrow an average 1.95 times per year with 10.5 pigs per litter. Death loss from farrowing to market is 19 percent, with an average of 8.5 pigs marketed per litter.

Machinery and Equipment

Machinery and equipment investment is 50 percent use of a pickup and a tractor, and 100 percent use of feed processing, storage, and manure equipment. Values on these investments are calculated at 50 percent of new replacement cost to reflect typically aged, but functional 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, farrowing barn, nursery barn, grower barn, and a finishing barn. All buildings are pole frame construction with metal siding on girts, and have concrete floors, and gable roofs. There is adequate wiring, lighting, feed storage, water supply lines, insulation, and ventilation. Suspended heaters provide heat for the buildings. Each barn is equipped with pens, automatic waterers, and feeders, and the farrowing barn has approximately 20 farrowing crates. Buildings and improvements are valued at 80 percent of new replacement cost.

Management Practices

Sows farrow 1.95 times per year in six groups for a total of 14 farrowing periods. Baby pigs are weaned at 4 weeks, placed in a nursery unit, and fed a creep or baby pig ration. At 42 days of age (about 35 pounds), pigs are moved out of the nursery and into a pre-grower unit. After 4 weeks in the pre-grower unit (at about 70 pounds), the pigs are moved to a grower-finisher unit where they stay until 180 days. 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, 15 loads of market-weight pigs at 31,500 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 to the pigs. 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 operator and his family and valued at \$8.50 per hour.

**Table1: Swine Budget
100 Sow Farrow to Finish
Total Confinement**

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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 | 1658 | 0.44 | 175,084.80 | 1750.85 | _____ |
| Cull sow | 400.00 | lb | 40 | 0.28 | 4480.00 | 44.80 | _____ |
| Cull boar | 450.00 | lb | 2 | 0.18 | 162.00 | 1.62 | _____ |
| Total Receipts | | | | | \$179,726.80 | \$1797.27 | _____ |
| 2. Operating Costs | | | | | | | |
| Lactation - 16% | | cwt | 672.00 | 7.70 | 5174.40 | 51.74 | _____ |
| Gestation - 12% | | cwt | 1545.00 | 6.54 | 10,104.30 | 101.04 | _____ |
| Boar feed - 16% | | cwt | 120.24 | 7.70 | 925.85 | 9.26 | _____ |
| Gilt feed - 14% | | cwt | 86.17 | 6.39 | 550.64 | 5.51 | _____ |
| Baby pig - 20% | | cwt | 133.58 | 30.00 | 4007.25 | 40.07 | _____ |
| Starter - 19% | | cwt | 874.65 | 8.95 | 7828.12 | 78.28 | _____ |
| Grower - 16% | | cwt | 3782.14 | 6.90 | 26,096.79 | 260.97 | _____ |
| Finisher - 14% | | cwt | 5908.68 | 6.39 | 37,756.43 | 377.56 | _____ |
| Marketing | | head | 100.00 | 36.00 | 3600.00 | 36.00 | _____ |
| Hauling | | head | 99.97 | 26.93 | 2692.19 | 26.92 | _____ |
| Utilities | | head | 100.00 | 70.00 | 7000.00 | 70.00 | _____ |
| Veterinary Medicine | | \$ | 3187.93 | 1.00 | 3187.93 | 31.88 | _____ |
| Machinery (fuel, lubrication, repair) | | \$ | 823.33 | 1.00 | 823.33 | 8.23 | _____ |
| Vehicles (fuel, repair) | | \$ | 1192.50 | 1.00 | 1192.50 | 11.93 | _____ |
| Equipment (repair) | | \$ | 655.00 | 1.00 | 655.00 | 6.55 | _____ |
| Housing and Improvements (repair) | | \$ | 8841.34 | 1.00 | 8841.34 | 88.41 | _____ |
| Hired Labor | | hour | 2820.00 | 8.50 | 23,970.00 | 239.70 | _____ |
| Owner Labor | | hour | 480.00 | 8.50 | 4080.00 | 40.80 | _____ |
| Interest on Operating Capital | | \$ | 1331.46 | 0.06 | 83.22 | 0.83 | _____ |
| Total Operating Costs | | | | | \$148,569.29 | \$1485.69 | _____ |
| 3. Income Above Operating Costs | | | | | \$31,157.51 | \$311.58 | _____ |
| 4. Ownership Costs | | | | | | | |
| Capital Recovery: | | | | | | | |
| Purchased Livestock | | \$ | 609.47 | 1.00 | 609.47 | 6.09 | _____ |
| Housing and Improvements | | \$ | 22,417.27 | 1.00 | 22,417.27 | 224.17 | _____ |
| Machinery | | \$ | 806.11 | 1.00 | 806.11 | 8.06 | _____ |
| Equipment | | \$ | 2499.00 | 1.00 | 2499.00 | 24.99 | _____ |
| Vehicles | | \$ | 1125.27 | 1.00 | 1125.27 | 11.25 | _____ |
| Interest on Retained Livestock | | \$ | 19,500.00 | 0.07 | 1316.25 | 13.16 | _____ |
| Taxes and Insurance | | \$ | 851.00 | 1.00 | 851.00 | 8.51 | _____ |
| Overhead | | \$ | 3650.00 | 1.00 | 3650.00 | 36.50 | _____ |
| Total Ownership Costs | | | | | \$33,274.36 | \$332.74 | _____ |
| 5. Total Costs | | | | | \$181,843.65 | \$1818.44 | _____ |
| 6. Returns to Risk and Management | | | | | -\$2116.85 | -\$21.17 | _____ |

Table 4: Investment Summary.**EBB-SW1-02**

| | Purchase Price | Salvage/Cull Value | Livestock Share | Useful Life | Annual Taxes and Insurance | Annual Capital Recovery ¹ |
|--|---------------------|--------------------|-----------------|-------------|----------------------------|--------------------------------------|
| Buildings, Improvements and Equipment | | | | | | |
| Gestation & boar barn | \$29,000.00 | \$2900.00 | 100 | 15 | \$95.70 | \$3016.31 |
| Farrowing barn | \$35,000.00 | \$3500.00 | 100 | 15 | \$115.50 | \$3640.37 |
| Nursery barn | \$9250.00 | \$925.00 | 100 | 15 | \$30.53 | \$962.10 |
| Grower barn | \$13,300.00 | \$1330.00 | 100 | 15 | \$43.89 | \$1383.34 |
| Sow and finish barn | \$91,000.00 | \$9100.00 | 100 | 15 | \$300.30 | \$9464.96 |
| Feed processing and storage | \$29,000.00 | \$2900.00 | 100 | 15 | \$95.70 | \$3016.31 |
| Water system | \$7000.00 | \$700.00 | 100 | 10 | \$23.10 | \$933.89 |
| Manure equipment | \$6600.00 | \$660.00 | 100 | 10 | \$21.78 | \$880.53 |
| Feeding equipment | \$6500.00 | \$0.00 | 100 | 10 | \$19.50 | \$914.79 |
| Miscellaneous | \$5000.00 | \$0.00 | 100 | 10 | \$15.00 | \$703.68 |
| Total | \$231,650.00 | | | | \$761.00 | \$24,916.27 |
| Purchased Livestock | | | | | | |
| Boars | \$2100.00 | \$600.00 | 100 | 3 | | \$609.47 |
| Total | \$2100.00 | | | | | \$609.47 |
| Retained Livestock | | | | | | |
| Sows | \$15,000.00 | \$12,000.00 | 100 | | | \$911.25 ² |
| Gilts | \$6000.00 | \$6000.00 | 100 | | | \$405.00 ² |
| Total | \$21,000.00 | | | | | \$1316.25² |
| Machinery and Vehicles | | | | | | |
| Tractor loader | \$18,500.00 | \$4000.00 | 50 | 20 | \$33.75 | \$806.11 |
| Pickup 1/2 ton | \$12,500.00 | \$2500.00 | 50 | 6 | \$56.25 | \$1125.27 |
| Total | \$31,000.00 | | | | \$90.00 | \$1931.38 |

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.

The Authors - Robert L. Smathers is an Extension associate in the University of Idaho Department of Agricultural Economics and Rural Sociology, Moscow. C. Wilson Gray is an Extension agricultural economist in the UI District III Extension Office, Twin Falls. Neil R. Rimbey is an Extension range economist in the UI Southwest Idaho Research and Extension Center, Caldwell.

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