Guidelines For Estimating

Swine Farrow-Finish Costs

Based On 300 Sows and 6,204 Pigs Sold

Date: March, 2006

This publication is intended to provide a format and a set of guidelines for determining the cost of production for a swine enterprise. Adjustments will be necessary when applying these figures to your enterprise.

The assumptions on which the costs are based are outlined in the supporting pages. These assumptions were arrived at using the breeding stock, management practices, and facilities seen in modern, well managed swine operations of comparable size in Manitoba. Productivity and performance assumptions are based on information collected by department specialists, feed companies and other organizations. Where individual herd productivity and performance levels differ from those listed adjustments will be required.

Accurate, up to date, production and financial records are essential for the effective application of these guidelines to an individual operation. Without such information accurate cost of production projections cannot be determined.

The guideline can be useful for comparison purposes. Comparison of costs at different levels of production can be made with other farms, the farm over a period of time or comparing the plan with the actual results at the end of the planning period.

Disclaimer: This budget is only a guide and is not intended as an in depth study of the cost of production of this industry. Interpretation and utilization of this information is the responsibility of the user. If you require assistance with developing your individual budget, please contact your local MAFRI office.

Farrow-Finish Pig Cost of Production

The following farrow finish budget is based on the assumption that **creep and starter rations are purchased, all others are home mixed**. The budget assumes a land investment cost based on 160 acres, which would be required for this size operation, with 140 acres rented out at $25 per acre.

The budget includes an assumption that 1.5% of the market pigs are sold as lightweight pigs. It is assumed that when the lightweight pigs are sold, they will have a salvage value. Therefore, total marketings are reduced by only 1% to compensate for the lightweight pigs.

The budget includes an assumption that this particular operation is "all-in, all-out" by room. Space allocations for finishing pigs are in accordance with the Recommended Code of Practice for the Care and Handling of Farm Animals: Pigs.

The rations illustrated in this budget are examples only. Individual farm conditions should be taken into account when formulating the diets. Producers need to know the feed intakes of their animals. Please consult with a nutritionist for diet information and suggestions.

The Manitoba pork production industry profile is changing and this budget was specifically designed to address the need of producers who may want to analyze the cost of production for a farrow to finish operation. Several companies are offering contracts with varying levels of guarantees. Producers need to accurately calculate their costs before they can properly make a decision.

300 Sow Farrow-Finish Cost of Production Summary

March, 2006

	$/Pig Sold	$/Sow /Year	Total Cost	Your Cost
A. Operating Costs				
1. Feed Costs:				
1.01 Sow Lactation	$2.64	$54.54	$16,362	
1.02 Sow Gestation	$6.54	$135.19	$40,558	
1.03 Boar Ration	$0.36	$7.52	$2,256	
1.04 Pre Starter 1	$2.00	$41.27	$12,381	
1.05 Pre Starter 2	$3.30	$68.15	$20,446	
1.06 Starter 1	$3.47	$71.73	$21,518	
1.07 Starter 2	$1.65	$34.13	$10,238	
1.08 Starter	$12.64	$261.45	$78,434	
1.09 Grower	$14.12	$292.10	$87,630	
1.10 Finisher	$16.25	$335.98	$100,795	
Total Feed Cost	**$62.96**	**$1,302.06**	**$390,618**	
2. Other Operating Costs:				
2.01 Veterinary Medicine & Supplies	$2.35	$48.50	$14,549	
2.02 Maintenance & Repairs	$1.28	$26.42	$7,925	
2.03 Hydro & Propane	$3.92	$81.09	$24,328	
2.04 Insurance	$2.80	$57.96	$17,387	
2.05 Manure Costs	$3.40	$70.32	$21,097	
2.06 Office Supplies	$0.10	$2.00	$600	
2.07 Marketing & Transport.	$4.97	$102.79	$30,836	
2.08 Sow Replacement	$4.29	$88.79	$26,638	
2.09 Boar Replacement	$1.31	$27.14	$8,143	
2.10 Property Tax	$0.73	$15.00	$4,500	
Subtotal Operating Costs	$88.10	$1,822.07	$546,621	
2.11 Interest on Operating Costs	$1.33	$27.56	$8,267	
Total Operating Costs	**$89.44**	**$1,849.63**	**$554,888**	
B. Fixed Costs				
3. Depreciation:				
3.01 Buildings & Manure Storage	$5.47	$113.12	$33,936	
3.02 Equipment	$10.13	$209.40	$62,821	
Total Depreciation Cost	**$15.60**	**$322.53**	**$96,758**	
4. Investment:				
4.01 Land cost	$0.26	$5.33	$1,600	
4.02 Buildings & Manure Storage	$2.81	$58.14	$17,443	
4.03 Equipment	$2.48	$51.19	$15,356	
4.04 Breeding Herd	$0.79	$16.40	$4,920	
Total Investment Cost	**$6.34**	**$131.07**	**$39,320**	
Total Fixed Costs	**$21.93**	**$453.59**	**$136,078**	
C. Labour				
90 hours/week farrow wean	$10.56	$218.40	$65,520	
45 hours/week grower finish	$5.25	$108.54	$32,563	
Total Labour Cost	**$15.81**	**$326.94**	**$98,083**	
Total Cost of Production	**$127.18**	**$2,630.16**	**$789,049**	
Break-Even Price (carcass) [1]	**$/100 kg**	**$/CWT**		
Operating Cost	$90.85	$41.21		
Operating & Labour Cost	$106.91	$48.49		
Operating, Labour & Fixed Cost	$129.19	$58.60		

[1] FOOTNOTE: Break-even Price = Cost per Hog Sold ÷ (Slaughter Weight(-shrink) X Dressing Percentage X Index)

Disclaimer: This budget is only a guide and is not intended as an in depth study of the cost of production of this industry. Interpretation and utilization of this information is the responsibility of the user.

Farrow - Finish Pig Production Costs

1 This input table outlines the cost of production for a farrow finish operation.
2 Buildings and equipment are valued at new cost.
3 Purchased feed is used for creep and starter all other feed is home mixed.
4 Manure haulage is contracted out.
5 Gilts are purchased for herd replacement.
6 No weaner pigs are sold.

Farrow - Wean Pig Production Assumptions

Indicators of Productivity

Sows	**300**
Boars	**15**
Litters/Sow/Year	**2.20**
Average Weaning Age (days)	**21**
Average Born Alive per Litter	**11.10**
Percent Pre-Weaning Mortality	**10.0**
Percent Post-Weaning Mortality	**2.0**

Herd Profile	**Total**	**/Sow**	**/Litter**	**%Mortality**
Sows	300			
Boars	15			
Litters	660	2.20		
Pigs Born Alive	7,326	24.42	11.10	
Pigs Died, Pre-Weaning	733	2.44	1.11	10.0
Pigs Weaned	6,593	21.98	9.99	
Pigs Died, Post-Weaning	132	0.44	0.20	2.0
Weaner Pigs Transferred	6,461	21.54	9.79	

Feed Requirements and Costs			**Purchased**	**Home-Mixed**
Dry Sow Ration	**2.6**	kg/day	**$0.00**	$163.10 /tonne
Nursing Sow Ration	**6.0**	kg/day	**$0.00**	$196.75 /tonne
Boar Ration	**2.5**	kg/day	**$0.00**	$164.84 /tonne
Pre Starter 1	**1.3**	kg	**$1,300.00**	$0.00 /tonne
Pre Starter 2	**2.8**	kg	**$1,130.00**	$0.00 /tonne
Starter 1	**9.0**	kg	**$370.00**	$0.00 /tonne
Starter 2	**15.0**	kg	**$325.00**	$0.00 /tonne

Weaner Pig Efficiency	**Pre Starter 1**	**Pre Starter 2**	**Starter 1**	**Starter 2**	**Total**
Days Post-Weaning (nursery)	**7.0**	**10.0**	**17.0**	**18.0**	52
Target Starting Weight (kg)	**5.0**	**6.0**	**8.0**	**14.0**	5.0
Target Ending Weight (kg)	**6.0**	**8.0**	**14.0**	**23.0**	23.0
Feed Conversion Ratio	1.30	1.40	1.50	1.67	1.56
Average Daily Gain (kg)	0.14	0.20	0.35	0.50	0.40

Labour

Total Hours per 7-day week	15.60	**90.0**	hours/week (include manage	4,680
Hourly Wage (including hired manager)		**$14.00**	/hour (weighted)	

Grower-Finisher Pig Production Assumptions

Livestock values are based on a Market Price for Pork of:	**$127.00**	/100 kg	**110**	Market Index
or:	$57.61	/cwt	**80**	% Dressing
Premium:	**$2.00**	/head		

Indicators of Productivity	**Starter**	**Grower**	**Finish**	**Total**
No. of Pigs (Beginning)	6,461	6,396	6,332	--
Average Beginning Weight (kg)	**23.0**	50.0	80.0	--
Average Ending Weight (kg)	**50.0**	**80.0**	**113.0**	--
Percent Mortality	**1.00**	**1.00**	**1.00**	3.00
Days on Feed	**36**	**33**	**40**	109.00
Feed Conversion Ratio [1]	**2.60**	**2.90**	**3.30**	2.96
No. of Pigs (Ending)	6,396	6,332	6,269	--
Weight Gain/Pig (kg)	27.0	30.0	33.0	90.0
Feed Disappearance/Pig (kg)	70.2	87.0	108.9	266.1
Average Daily Gain (kg)	**0.750**	**0.900**	**0.830**	0.826
Average No. Pigs in Barn [2]	1,920	1,901	1,882	1,901

[1] FOOTNOTE: The Feed Conversion Ratio (FCR) in the 'Total' column is a weighted average of the other feed conversion ratios. Also note that an accurate feed conversion ratio for the grower-finisher enterprise is calculated by dividing 'Total Feed used per Year' by 'Total Gain per Year'; where 'Total Gain per Year' equals 'Total Hogs Sold' times 'Gain per Hog'. When calculated in this way, the feed conversion ratio includes feed lost through wastage and weight gain lost through death of pigs.

[2] FOOTNOTE: Assume that "Avg. No. of Pigs in Barn" equals "Pig Places".

Productivity Profile	**Total**		
Pigs transferred	6,461		
Pigs Died	194	3.00	% mortality
Pigs available for marketing	6,267		
Less light weight pig adjustment	63	**1.00**	% light weight adjustment
Pigs Sold at full market value	6,204	20.68	sold/sow
Total Days to Market	184		
Turnover (365 ÷ days to market)	1.98		

Feed Requirements and Costs

			Ration Cost		
	FCR*	**kg/pig**	**Purchased**	**Home-Mixed**	
Starter	2.60	70.2	**$0.00**	$180.08	/tonne
Grower	2.90	87.0	**$0.00**	$162.34	/tonne
Finish	3.30	108.9	**$0.00**	$149.18	/tonne

*** FCR = Feed Conversion Ratio (Feed:Gain)**

Labour

Total Hours per year	0.36	**45**	hours/week	2,326	hours/year
Wage (incl. benefits @15%)		**$14.00**	/hour (weighted)		

Capital Costs

2,154 pig places feeder barn

				$/Sq.Ft.	Total	/Sow
Buildings						
Gestation	8,100	sq.ft.		**$18.80**	$152,280	$507.60
Farrowing/Nursing	9,900	sq.ft.		**$21.40**	$211,860	$706.20
Feeder Barn	19,814	sq.ft.		**$17.00**	$336,833	$1,122.78
Office & Loading	**288**	sq.ft.		**$24.00**	$6,912	$23.04
Standby Generator					**$25,000**	$83.33
Feed Mill (building only)					**$10,000**	$33.33
Total Building Cost					**$742,885**	$2,476.28
Equipment				**$/Sq.Ft.**		
Gestation				**$16.75**	$135,675	$452.25
Farrowing/Nursing				**$22.00**	$217,800	$726.00
Finishing Barn				**$13.20**	$261,541	$871.80
Fire Alarm System					**$3,000**	$10.00
Feed Mill (equipment only).					**$80,000**	$266.67
Total Equipment Cost					**$698,016**	**$2,326.72**
Total Buildings and Equipment Cost					**$1,440,902**	**$4,803.01**
Breeding Stock						
Value of Replacement Sow	$350	/sow			$105,000	$350.00
Value of Replacement Boar	$1,200	/boar			$18,000	$60.00
Total Breeding Stock Cost					**$123,000**	**$410.00**
Land Value						
Land Investment	20	acres @	$500	/acre	$10,000	$33.33
Other Costs						
Site Preparation					**$30,000**	$100.00
Manure Storage					**$55,000**	$183.33
Total Other Costs					**$85,000**	**$283.33**
Total Capital Investment					**$1,628,902**	**$5,429.67**

[1] FOOTNOTE: The number of square feet allocated for buildings and equipment are approximations. Cost per sow for buildings and equipment will vary around the province.

FOOTNOTE: 1 sq.ft. = 0.0929 sq.m; 1 sq.m.= 10.764 sq.ft.; 1 ft.= 0.3048 m

Feed Ingredient Costs

	Price ($/tonne)	Your Cost
Wheat	$135	
Barley	$120	
Corn	$170	
Soybean Meal	$290	
Canola Meal	$165	
Peas	$130	
Creep Premix	$850	
Sow Micro Premix	$3,000	
Grower Micro Premix	$2,500	
Canola Oil	$900	
Whey Powder	$800	
Herring Meal	$1,500	
Plasma	$7,500	
Limestone	$80	
Dical (16% Ca-21% P)	$455	
Salt - 96%	$125	
Phytase	$11,000	
L-Lysine HCL	$2,500	
L-Threonine	$4,800	
D L-Methionine	$4,500	
Oats - Steam rolled	$400	
Processing Cost		
(Hydro, Repairs/Maintenance & Insurance	$3.25	
Percent Weight loss due to processing	1.25	
Labour Cost	$4.00	

Ration Formulas

	Sow Gestation (kg)	Sow Lactation (kg)	Boar Ration (kg)
Wheat	259.00	568.70	233.64
Barley	539.00	200.00	539.00
Corn	0.00	0.00	0.00
Soybean Meal	0.00	196.00	0.00
Canola Meal	80.00	0.00	102.00
Peas	91.00	0.00	91.00
Creep Premix	0.00	0.00	0.00
Sow Micro Premix	5.00	5.00	5.00
Grower Micro Premix	0.00	0.00	0.00
Canola Oil	0.00	0.00	0.00
Whey Powder	0.00	0.00	0.00
Herring Meal	0.00	0.00	0.00
Plasma	0.00	0.00	0.00
Limestone	10.00	12.00	12.00
Dical (16% Ca-21% P)	11.00	12.00	12.00
Salt - 96%	3.50	5.00	3.50
Phytase	0.50	0.50	0.50
L-Lysine HCL	1.00	0.80	1.36
L-Threonine	0.00	0.00	0.00
D L-Methionine	0.00	0.00	0.00
Oats - Steam rolled	0.00	0.00	0.00
Total Must Equal 1000kg	**1,000.00**	**1,000.00**	**1,000.00**

	Pre Starter 1 (kg)	Pre Starter 2 (kg)	Starter 1 (kg)	Starter 2 (kg)
Wheat	106.00	134.50	400.00	407.60
Barley	0.00	0.00	0.00	65.00
Corn	0.00	0.00	223.00	250.00
Soybean Meal	120.00	130.00	204.50	227.00
Canola Meal	0.00	0.00	0.00	0.00
Peas	0.00	0.00	0.00	0.00
Creep Premix	0.00	0.00	0.00	0.00
Sow Micro Premix	5.00	5.00	5.00	5.00
Grower Micro Premix	0.00	0.00	0.00	0.00
Canola Oil	27.00	19.00	11.30	0.00
Whey Powder	121.00	125.00	90.70	0.00
Herring Meal	61.00	75.00	45.50	25.00
Plasma	59.00	0.00	0.00	0.00
Limestone	12.50	12.50	7.00	7.00
Dical (16% Ca-21% P)	10.00	10.00	8.00	8.00
Salt - 96%	3.50	3.50	3.50	3.50
Phytase	0.00	0.00	0.50	0.50
L-Lysine HCL	0.50	0.50	1.00	1.40
L-Threonine	0.00	0.00	0.00	0.00
D L-Methionine	0.00	0.00	0.00	0.00
Oats - Steam rolled	474.50	485.00	0.00	0.00
Total Must Equal 1000kg	**1000.00**	**1000.00**	**1000.00**	**1,000.00**

	Starter Ration (kg)	Grower Ration (kg)	Finisher Ration (kg)
Wheat	532.56	372.39	220.04
Barley	183.30	268.60	408.35
Corn	0.00	0.00	0.00
Soybean Meal	158.80	45.37	0.00
Canola Meal	0.00	84.39	79.40
Peas	100.00	204.07	272.13
Creep Premix	0.00	0.00	0.00
Sow Micro Premix	0.00	0.00	0.00
Grower Micro Premix	3.00	3.00	3.00
Canola Oil	0.00	0.00	0.00
Whey Powder	0.00	0.00	0.00
Herring Meal	0.00	0.00	0.00
Plasma	0.00	0.00	0.00
Limestone	12.21	11.71	10.38
Dical (16% Ca-21% P)	4.85	5.38	2.84
Salt - 96%	3.50	3.50	3.50
Phytase	0.20	0.20	0.20
L-Lysine HCL	1.36	1.36	0.00
L-Threonine	0.09	0.00	0.02
D L-Methionine	0.13	0.03	0.14
Oats - Steam rolled	0.00	0.00	0.00
Total Must Equal 1000kg	**1,000.00**	**1,000.00**	**1,000.00**

Feed Requirement and Cost Summary

	Amount (kg)		Price ($ /tonne)		Ration Cost ($ /tonne)	Your Cost
Sow Gestation						
Wheat	259.00		$135.00		$34.97	
Barley	539.00		$120.00		$64.68	
Canola Meal	80.00		$165.00		$13.20	
Peas	91.00		$130.00		$11.83	
Sow Micro Premix	5.00		$3,000.00		$15.00	
Limestone	10.00		$80.00		$0.80	
Dical (16% Ca-21% P)	11.00		$455.00		$5.01	
Salt - 96%	3.50		$125.00		$0.44	
Phytase	0.50		$11,000.00		$5.50	
L-Lysine HCL	1.00		$2,500.00		$2.50	
Total Sow Gestation:	**1,000.00**				**$153.93**	
Adjusted For Weight Loss			1.25	%	$155.85	
Plus Processing Cost			$3.25		$159.10	
Plus Labour Cost			$4.00		**$163.10**	
Sow Lactation						
Wheat	568.70		$135.00		$76.77	
Barley	200.00		$120.00		$24.00	
Soybean Meal	196.00		$290.00		$56.84	
Sow Micro Premix	5.00		$3,000.00		$15.00	
Limestone	12.00		$80.00		$0.96	
Dical (16% Ca-21% P)	12.00		$455.00		$5.46	
Salt - 96%	5.00		$125.00		$0.63	
Phytase	0.50		$11,000.00		$5.50	
L-Lysine HCL	0.80		$2,500.00		$2.00	
Total Sow Lactation:	**1,000.00**	**kg**			**$187.16**	
Adjusted For Weight Loss			1.25	%	$189.50	
Plus Processing Cost			$3.25		$192.75	
Plus Labour Cost			$4.00		**$196.75**	
Boar Ration:						
Wheat	233.64		$135.00		$31.54	
Barley	539.00		$120.00		$64.68	
Canola Meal	102.00		$165.00		$16.83	
Peas	91.00		$130.00		$11.83	
Sow Micro Premix	5.00		$3,000.00		$15.00	
Limestone	12.00		$80.00		$0.96	
Dical (16% Ca-21% P)	12.00		$455.00		$5.46	
Salt - 96%	3.50		$125.00		$0.44	
Phytase	0.50		$11,000.00		$5.50	
L-Lysine HCL	1.36		$2,500.00		$3.40	
Total Boar:	**1,000.00**	**kg**			**$155.64**	
Adjusted For Weight Loss			1.25	%	$157.59	
Plus Processing Cost			$3.25		$160.84	
Plus Labour Cost			$4.00		**$164.84**	

	Amount (kg)		Price ($ /tonne)		Ration Cost ($ /tonne)	Your Cost
Pre Starter 1						
Wheat	106.00		$135.00		$14.31	
Soybean Meal	120.00		$290.00		$34.80	
Sow Micro Premix	5.00		$3,000.00		$15.00	
Canola Oil	27.00		$900.00		$24.30	
Whey Powder	121.00		$800.00		$96.80	
Herring Meal	61.00		$1,500.00		$91.50	
Plasma	59.00		$7,500.00		$442.50	
Limestone	12.50		$80.00		$1.00	
Dical (16% Ca-21% P)	10.00		$455.00		$4.55	
Salt - 96%	3.50		$125.00		$0.44	
L-Lysine HCL	0.50		$2,500.00		$1.25	
Oats - Steam rolled	474.50		$400.00		$189.80	
Total Pre Starter 1:	**1,000.00**	**kg**			**$916.25**	
Adjusted For Weight Loss			1.25	%	$927.70	
Plus Processing Cost			$3.25		$930.95	
Plus Labour Cost			$4.00		**$934.95**	
Pre Starter 2						
Wheat	134.50		$135.00		$18.16	
Soybean Meal	130.00		$290.00		$37.70	
Sow Micro Premix	5.00		$3,000.00		$15.00	
Canola Oil	19.00		$900.00		$17.10	
Whey Powder	125.00		$800.00		$100.00	
Herring Meal	75.00		$1,500.00		$112.50	
Limestone	12.50		$80.00		$1.00	
Dical (16% Ca-21% P)	10.00		$455.00		$4.55	
Salt - 96%	3.50		$125.00		$0.44	
L-Lysine HCL	0.50		$2,500.00		$1.25	
Oats - Steam rolled	485.00		$400.00		$194.00	
Total Pre Starter 2	**1,000.00**	**kg**			**$501.70**	
Adjusted For Weight Loss			1.25	%	$507.97	
Plus Processing Cost			$3.25		$511.22	
Plus Labour Cost			$4.00		**$515.22**	
Starter 1						
Wheat	400.00		$135.00		$54.00	
Corn	223.00		$170.00		$37.91	
Soybean Meal	204.50		$290.00		$59.31	
Sow Micro Premix	5.00		$3,000.00		$15.00	
Canola Oil	11.30		$900.00		$10.17	
Whey Powder	90.70		$800.00		$72.56	
Herring Meal	45.50		$1,500.00		$68.25	
Limestone	7.00		$80.00		$0.56	
Dical (16% Ca-21% P)	8.00		$455.00		$3.64	
Salt - 96%	3.50		$125.00		$0.44	
Phytase	0.50		$11,000.00		$5.50	
L-Lysine HCL	1.00		$2,500.00		$2.50	
Total Starter 1	**1,000.00**	**kg**			**$329.84**	
Adjusted For Weight Loss			1.25	%	$333.96	
Plus Processing Cost			$3.25		$337.21	
Plus Labour Cost			$4.00		**$341.21**	

	Amount (kg)		Price ($ /tonne)		Ration Cost ($ /tonne)	Your Cost
Starter 2						
Wheat	407.60		$135.00		$55.03	
Barley	65.00		$120.00		$7.80	
Corn	250.00		$170.00		$42.50	
Soybean Meal	227.00		$290.00		$65.83	
Sow Micro Premix	5.00		$3,000.00		$15.00	
Herring Meal	25.00		$1,500.00		$37.50	
Limestone	7.00		$80.00		$0.56	
Dical (16% Ca-21% P)	8.00		$455.00		$3.64	
Salt - 96%	3.50		$125.00		$0.44	
Phytase	0.50		$11,000.00		$5.50	
L-Lysine HCL	1.40		$2,500.00		$3.50	
Total Starter 2	**1,000.00**	**kg**			**$237.30**	
Adjusted For Weight Loss			1.25	%	$240.27	
Plus Processing Cost			$3.25		$243.52	
Plus Labour Cost			$4.00		**$247.52**	
Starter						
Wheat	532.56		$135.00		$71.90	
Barley	183.30		$120.00		$22.00	
Soybean Meal	158.80		$290.00		$46.05	
Peas	100.00		$130.00		$13.00	
Grower Micro Premix	3.00		$2,500.00		$7.50	
Limestone	12.21		$80.00		$0.98	
Dical (16% Ca-21% P)	4.85		$455.00		$2.21	
Salt - 96%	3.50		$125.00		$0.44	
Phytase	0.20		$11,000.00		$2.20	
L-Lysine HCL	1.36		$2,500.00		$3.40	
L-Threonine	0.09		$4,800.00		$0.43	
D L-Methionine	0.13		$4,500.00		$0.59	
Total Starter	**1,000.00**	**kg**			**$170.70**	
Adjusted For Weight Loss			1.25	%	$172.83	
Plus Processing Cost			$3.25		$176.08	
Plus Labour Cost			$4.00		**$180.08**	
Grower						
Wheat	372.4		$135.00		$50.27	
Barley	268.6		$120.00		$32.23	
Soybean Meal	45.4		$290.00		$13.16	
Canola Meal	84.4		$165.00		$13.92	
Peas	204.1		$130.00		$26.53	
Grower Micro Premix	3.0		$2,500.00		$7.50	
Limestone	11.7		$80.00		$0.94	
Dical (16% Ca-21% P)	5.4		$455.00		$2.45	
Salt - 96%	3.5		$125.00		$0.44	
Phytase	0.2		$11,000.00		$2.20	
L-Lysine HCL	1.36		$2,500.00		$3.40	
D L-Methionine	0.03		$4,500.00		$0.14	
Total Grower	**1,000.00**	**kg**			**$153.18**	
Adjusted For Weight Loss			1.25	%	$155.09	
Plus Processing Cost			$3.25		$158.34	
Plus Labour Cost			$4.00		**$162.34**	

	Amount (kg)		Price ($ /tonne)		Ration Cost ($ /tonne)	Your Cost
Finisher						
Wheat	220.04		$135.00		$29.71	
Barley	408.35		$120.00		$49.00	
Canola Meal	79.40		$165.00		$13.10	
Peas	272.13		$130.00		$35.38	
Grower Micro Premix	3.00		$2,500.00		$7.50	
Limestone	10.38		$80.00		$0.83	
Dical (16% Ca-21% P)	2.84		$455.00		$1.29	
Salt - 96%	3.50		$125.00		$0.44	
Phytase	0.20		$11,000.00		$2.20	
L-Threonine	0.02		$4,800.00		$0.10	
D L-Methionine	0.14		$4,500.00		$0.63	
Total Finisher	**1,000.00**	**kg**			**$140.18**	
Adjusted For Weight Loss			1.25	%	$141.93	
Plus Processing Cost			$3.25		$145.18	
Plus Labour Cost			$4.00		**$149.18**	

Farrow Finish Pig Production Cost Worksheet

			Your Cost
A. Operating Costs			
1. Feed Requirements and Costs			
1.01 Sow Lactation			
	21	days average weaning age	
x	2.20	litters/sow/year	
=	46.2	days lactation	
x	6.0	kg ration/day	
x	$196.75	/tonne ration	
÷	1,000	kg/tonne	
÷	20.68	pigs sold/sow/year	
=	**$2.64**	**/pig sold**	
1.02 Sow Gestation			
	365	days/year	
-	46.2	days lactation	
=	318.8	days gestation	
x	2.6	kg ration/day	
x	$163.10	/tonne ration	
÷	1,000	kg/tonne	
÷	20.68	pigs sold/sow/year	
=	**$6.54**	**/pig sold**	
1.03 Boar Ration			
	365	days	
x	2.5	kg ration/day	
x	$164.84	/tonne ration	
÷	1,000	kg/tonne	
x	15	boars	
÷	300	sows	
÷	20.68	pigs sold/sow/year	
=	**$0.36**	**/pig sold**	
1.04 Pre Starter 1			
	6.0	kg target sale weight	
-	5.0	kg target weaning weight	
=	1.0	kg weight gain	
x	1.3	feed conversion ratio	
=	1.3	kg ration/pig	
x	$1,300.00	/tonne of creep feed	
÷	1,000	kg/tonne	
x	24.42	pigs born alive/sow/year	
÷	20.68	pigs sold/sow/year	
=	**$2.00**	**/pig sold**	

			Your Cost
1.05 Pre Starter 2			
	8.0	kg target sale weight	
-	6.0	kg target weaning weight	
=	2.0	kg weight gain	
x	1.4	feed conversion ratio	
=	2.8	kg ration/pig	
x	$1,130.00	/tonne starter ration #1	
÷	1,000	kg/tonne	
x	21.54	weaners transferred/sow/year	
÷	20.68	pigs sold/sow/year	
=	**$3.30**	**/pig sold**	
1.06 Starter 1			
	14.00	kg target sale weight	
-	8.00	kg target weaning weight	
=	6.00	kg weight gain	
x	1.50	feed conversion ratio	
=	9.00	kg ration/pig	
x	$370.00	/tonne starter ration #2	
÷	1,000	kg/tonne	
x	21.54	weaners transferred/sow/year	
÷	20.68	pigs sold/sow/year	
=	**$3.47**	**/pig sold**	
1.07 Starter 2			
	23.0	kg target sale weight	
-	14.0	kg target weaning weight	
=	9.0	kg weight gain	
x	1.67	feed conversion ratio	
=	15.00	kg ration/pig	
x	$325.00	/tonne starter ration #2	
÷	1,000	kg/tonne	
x	7.00	weaners transferred/sow/year	
÷	20.68	pigs sold/sow/year	
=	**$1.65**	**/pig sold**	
1.08 Starter Ration			
	27.0	kg weight gain/pig	
x	2.60	feed conversion ratio	
=	70.2	kg ration/pig	
x	$180.08	/tonne ration	
÷	1,000	kg/tonne	
=	**$12.64**	**/pig sold**	

			Your Cost
1.09 Grower Ration			
	30.0	kg weight gain/pig	
x	2.90	feed conversion ratio	
=	87.0	kg ration/pig	
x	$162.34	/tonne ration	
÷	1,000	kg/tonne	
=	**$14.12**	**/pig sold**	
1.10 Finisher Ration			
	33.0	kg weight gain/pig	
x	3.30	feed conversion ratio	
=	108.9	kg ration/pig	
x	$149.18	/tonne ration	
÷	1,000	kg/tonne	
=	**$16.25**	**/pig sold**	
2. Other Operating Costs			
2.01 Veterinary Medicine & Supplies			
	$7.29	/sow/year services	
+	$21.83	/sow/year medication	
÷	20.68	pigs sold/sow/year	
=	$1.41	/pig sold	
	$0.90	/pig transferred in	
x	6,461	pigs transferred in	
÷	6,204	pigs sold	
=	$0.94	/pig sold	
=	**$2.35**	**/pig sold**	
2.02 Maintenance & Repairs			
	$1,440,902	building & equipment	
x	0.55	%/sow/year repair & maintenance	
÷	6,204	pigs sold/sow/year	
=	**$1.28**	**/pig sold**	
2.03 Hydro & Propane/Natural Gas			
	$14,070	propane/natural gas	
x	$10,258	hydro	
÷	6,204	pigs sold	
=	**$3.92**	**/pig sold**	
2.04 Insurance			
	$1,440,902	buildings & equipment	
x	$0.78	rate/$100	
÷	100	/$100 capital invested	
÷	6,204	pigs sold	
=	$1.81	/pig sold	
	$123,000	breeding stock	
+	$256,590	market hogs value	
÷	$0.88	/$100 capital invested	
÷	6,204	pigs sold	

			Your Cost
=	$0.54	/pig sold	
	$1,200.00	business interruption coverage/sow	
x	300	sows	
x	$0.78	/$100 capital invested	
÷	6,204	pigs sold	
=	$0.45	/pig sold	
=	**$2.80**	**/pig sold**	

2.05 Manure Costs

Haulage	63.0	litres/sow/day	
x	$0.002	/litres haulage rate	
x	365	days	
÷	20.68	pigs sold/sow/year	
=	$2.22	/pig sold	
Odour control	$7,300	total costs	
÷	6,204	pigs sold	
=	$1.18	/pig sold	
Total =	**$3.40**	**/pig sold**	

2.06 Office Supplies

	$2.00	$/sow	
÷	20.68	pigs sold/sow/year	
=	**$0.10**	**/pig sold**	

2.07 Marketing & Transportation

	$0.00	trucking in	
+	$3.80	trucking out	
+	$0.80	council levy	
+	$0.12	grading charge	
+	$0.25	insurance	
+	$0.00	special levy	
=	**$4.97**	**/pig sold**	

			Your Cost
2.08 Sow Replacement			
	180.0	kg/sow (cull weight)	
x	$71.12	/100 kg live	
=	$128.02	/sow value of cull	
	$350.00	/sow value of replacement	
-	$128.02	/sow value of cull	
=	$221.98	net replacement cost	
x	40.0	percent sow culling rate	
÷	20.68	pigs sold/sow/year	
=	**$4.29**	**/pig sold**	
2.09 Boar Replacement			
	225.0	kg/boar (cull weight)	
x	$50.80	/100 kg live	
=	$114.30	/boar value of cull	
	$1,200	/boar value of replacement	
-	$114.30	/boar value of cull	
=	$1,085.70	net replacement cost	
x	50.0	% culling rate	
x	15	number of boars	
÷	300	number of sows	
÷	20.68	pigs sold/sow/year	
=	**$1.31**	**/pig sold**	
2.10 Property Taxes			
	$4,500	total taxes	
÷	6,204	pigs sold	
=	**$0.73**	**/pig sold**	

2.11 Interest on Operating Cost:

Sub-total Operating Cost x days to market x interest
2 365

	$88.10	subtotal operating	
÷	2	average	
x	184	days farrow to farrow	
÷	365	days per year	
x	6.0	% operating interest rate	
=	**$1.33**	**/pig sold**	

Your Cost

B. Fixed Costs

3. Depreciation: $\frac{\text{Original cost - Salvage Value}}{\text{Useful Life}}$

3.01 Buildings

	$753,016	building cost (including earthen manure storage)	
-	$74,289	salvage value (building only)	
÷	20	years useful life	
÷	6,204	pigs sold	
=	**$5.47**	**/pig sold**	

3.02 Equipment

	$698,016	equipment cost	
-	$69,802	salvage value	
÷	10	years useful life	
÷	6,204	pigs sold	
=	**$10.13**	**/pig sold**	

4. Investment:

$$\frac{\text{(Original Cost + Salvage Value)}}{2} \text{ X \% Investment Interest}$$

4.01 Land Cost

	$10,000	land investment	
+	$30,000	site preparation	
x	4.0	% investment rate	
÷	6,204	pigs marketed	
=	**$0.26**	**/pig sold**	

4.02 Buildings

	$797,885	building cost (including earthen manure storage)	
+	$74,289	salvage value (building only)	
÷	2	average	
x	4.0	% investment rate	
÷	6,204	pigs sold	
=	**$2.81**	**/pig sold**	

4.03 Equipment

	$698,016	equipment cost/sow	
+	$69,802	salvage value/sow	
÷	2	average	
x	4.0	% investment rate	
÷	6,204	pigs sold	
=	**$2.48**	**/pig sold**	

				Your Cost
4.04 Breeding Stock				
		$123,000	value of breeding stock	
	x	4.0	% investment rate	
	÷	6,204	pigs sold	
	=	**$0.79**	**/pig sold**	

C. Labour

Farrow Wean		90.0	hours/week	
	x	52	weeks/year	
	x	$14.00	/hour	
	÷	300	sows	
	÷	20.68	pigs sold/sow/year	
	=	**$10.56**	**/pig sold**	
Grower Finish		2,326	total hours/year	
	x	$14.00	/hour	
	÷	6,204	pigs sold/sow/year	
	=	**$5.25**	**/pig sold**	
Total	**=**	**$15.81**	**/pig sold**	

Summary of Purchased Feeds Used

Farrow finish **300** **sows**
Total sold **6,204** **pigs sold**

	Total per Year (tonnes)	Total per Month (tonnes)	Total per Pig (kgs)	Total per Pig (lbs)
Dry Sow Ration	0	0.0	0.0	0.0
Nursing Sow Ration	0	0.0	0.0	0.0
Boar Ration	0	0.0	0.0	0.0
Pre Starter 1	9	0.7	1.4	3.0
Pre Starter 2	18	1.5	3.0	6.6
Starter 1	59	4.9	9.6	21.1
Starter 2	99	8.2	15.9	35.1
Starter	0	0.0	0.0	0.0
Grower	0	0.0	0.0	0.0
Finish	0	0.0	0.0	0.0
Total	**185.3**	**15.4**	**29.9**	**65.8**

Summary of Home Mixed Feed Ingredients Used

	Total per Year (tonnes)	Total per Month (tonnes)	Total per Pig (kgs)	Total per Pig (lbs)
Wheat	720.6	60.0	116.1	256.0
Barley	679.5	56.6	109.5	241.4
Corn	0.0	0.0	0.0	0.0
Soybean Meal	113.8	9.5	18.3	40.4
Canola Meal	124.6	10.4	20.1	44.3
Peas	375.4	31.3	60.5	133.4
Creep Premix	0.0	0.0	0.0	0.0
Sow Micro Premix	1.7	0.1	0.3	0.6
Grower Micro Premix	5.2	0.4	0.8	1.8
Canola Oil	0.0	0.0	0.0	0.0
Whey Powder	0.0	0.0	0.0	0.0
Herring Meal	0.0	0.0	0.0	0.0
Plasma	0.0	0.0	0.0	0.0
Limestone	23.1	1.9	3.7	8.2
Dical (16% Ca-21% P)	11.1	0.9	1.8	4.0
Salt - 96%	7.4	0.6	1.2	2.6
Phytase	0.5	0.0	0.1	0.2
L-Lysine HCL	1.7	0.1	0.3	0.6
L-Threonine	0.1	0.0	0.0	0.0
D L-Methionine	0.2	0.0	0.0	0.1
Oats - Steam rolled	0.0	0.0	0.0	0.0
Total Ration Used	**2,064.8**	**172.1**	**332.8**	**733.7**
Total	**2,250.0**	**187.5**	**362.7**	**799.5**

For further information contact your local MAFRI office.

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Return On Assets (ROA)

Assumptions

Total Assets	$1,763,920	asset value
Number of Sows	300	sows
Total Hogs Sold	6,269	hogs sold
Sold/Sow/Year	20.68	pigs marketed
Days to Market	184	days
Market Weight (shrunk)	111.9	kg/hog (live)
Dressing %	80	%
Carcass Weight	89.5	kg/hog carcass
Market Index	110	
Market Price	$127.00	/100 kg carcass

Return On Assets Calculation	**$/Hog Sold**	**% Of Total**
Revenue		
Based on Pork Price	$125.03	
Plus Premium per Head	$2.00	
Total Revenue	**$127.03**	
Expenses		
Feed Costs	$62.96	49.5%
Other Operating Costs	$25.14	19.8%
Interest on Operating Costs	$1.33	1.0%
Total Operating Costs	**$89.44**	**70.3%**
Depreciation	$15.60	12.3%
Interest on Investment	$6.34	5.0%
Labour (Family + Hired)	$15.81	12.4%
Total Expenses (Cost Of Production)	**$127.18**	**100.0%**
Net Income	**($0.15)**	
Return On Assets (ROA)		**2.67%**

Return on Assets = $\dfrac{\text{Net Income + Operating Interest + Investment Interest - Value of Unpaid Family and Operator Labour}}{\text{Total Assets}}$

Total Assets Definition: Total assets includes the buildings, equipment, land, manure storage and breeding stock valued at replacement cost.