



**COST OF PRODUCTION
PILOT STUDY RESULTS
2014**

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ACKNOWLEDGEMENT

This report is indebted to the 14 dairy goat producers who willingly participated in the Project during 2014. These people went to considerable effort and inconvenience to help the Project representatives collect and verify information. Without this excellent co-operation, this report would not be possible.

The Project representatives, whose job it was to collect, record, and verify all information, were vital to the Project. Their initiative, perseverance and positive attitude has provided the Project with high quality dairy farm data.

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ONTARIO DAIRY GOAT FARM COST OF PRODUCTION RESULTS 2014

The 2014 results for the 14 farms on the project are presented in the following tables.

Farm revenue and expenses are summarized in Table 1. Balance sheet information is summarized in Table 2. Physical characteristics are summarized in Table 3.

It should be noted that livestock and crop inventories are valued at an average of market values or prices at the beginning and end of the year for purposes of accruing the revenue value of inventory changes in the Farm Revenue and Expense Statement in Table 1. As such, the reported revenue items for inventory changes only reflect income changes associated with changes in the quantities of the related inventories held. They do not capture any change in value associated with market price changes during the year.

Revenue and expense information for the dairy enterprise is broken out in Tables 4 and 5. For purposes of these tables, the dairy enterprise is defined to consist of dairy goats, the raising of replacements and/or any related livestock borne of the dairy goat herd, and the supporting crop production associated with both.

FARM REVENUE AND EXPENSES; 2014.

Table 1

NUMBER OF FARMS	All 14
REVENUE	\$
Milk Sales	281,145
Doe & Buck Sales	17,972
Other Goat Sales	9,345
Crop Sales	35,379
Other Farm Income	37,924
Total Cash Revenue	381,765
Doe & Doeling Enterprise	12,875
Other Livestock	-88
Feeds, Crops, Supplies	-18,149
Total Farm Revenue	376,403
EXPENSES	
Dairy Goat Enterprise	
Dairy Doe & Buck Purchases	3,115
Commercial Feed Purchases	118,764
Milk & Livestock Marketing Expense	21,256
Breeding Fees	366
Stable & Milkhouse Supplies	7,867
Vet. and Drugs	4,644
Other Goat Expenses ¹	4,852
Crop Enterprise	
Grains and Forages Purchases	15,175
Seed	5,408
Fertilizer	10,515
Sprays	3,093
Custom Work	14,267
Gas & Diesel Fuel	7,221
Machinery Repairs	8,478
Other Crop Expenses ²	2,619
Other Farm Expenses	
Direct Expenses Non-Dairy Livestock ³	746
Direct Expenses Other Crops	11,466
Wages & Salaries	24,915
Land Rent	3,891
Interest Paid	33,649
Real Estate Taxes	4,607
Hydro & Telephone	12,775
Insurance	8,496
Equipment & Building Repairs	14,379
Other General Cash Expenses ⁴	12,854
Total Cash Expenses	355,418
Building Depreciation	18,185
Machinery Depreciation	13,058
Total Farm Expenses	386,661
Net Farm Income	-10,258

¹ Other Dairy Expenses include registration/testing fees, building rent, straw & bedding, & livestock insurance for the dairy herd.

² Other Crop Expenses include crop insurance, seed cleaning, twine, propane for corn drying & misc. crop expenses.

³ Since rebates are recorded as negative expenses, the direct expense for non-dairy livestock enterprises may be negative for farms which have no such livestock.

⁴ Other General Cash Expenses include car expenses and miscellaneous farm expenses.

Table 2

**FARM BALANCE SHEET;
DECEMBER 31, 2014.**

NUMBER OF FARMS	All 14
A. WITH ASSETS AT MARKET VALUE	\$
Machinery and Equipment	168,546
Personal Equipment	1,182
Land and Farm Buildings	2,234,680
Farm House & Personal Structures	137,500
Dairy Does	134,396
Dairy Doelings	42,122
Other Livestock	3,610
Feed, Crops, Supplies, Inventory	68,549
Total Assets	<u>2,790,585</u>
B. WITH FIXED ASSETS AT COST LESS DEPRECIATION¹	
Machinery and Equipment	125,381
Personal Equipment	1,325
Land and Farm Buildings	759,490
Farm House & Personal Structures	11,507
Dairy Does	134,396
Dairy Doelings	42,122
Other Livestock	3,610
Feed, Crops, Supplies, Inventory	68,549
Total Assets	<u>1,146,380</u>
C. LIABILITIES	
Operating & Short-Term Trade Credit	59,168
Intermediate & Long Term Loans	349,746
F.C.C. Loans	436,581
Total Liabilities	<u>845,495</u>
D. OWNER'S EQUITY	
(A) Assets At Market Value	1,945,090
(B) Fixed Assets at Cost Less Depreciation	300,885

Depreciation was not subtracted from the cost of the farm house, land, or personal equipment.

Table 3 **BASIC FARM PRODUCTION PARAMETERS; 2014.**

NUMBER OF FARMS	All 14
Dairy Does & Doelings (hd)	389.5
Milk Sold/Farm (litres) ¹	309,691
Milk Sold/Doe (litres) ¹	799.4
Butterfat Test (kg/hl)	4.00
Person-Equivalents of Labour	2.00
Workable Land Farmed (hectares) ²	59
Average Age of Principal Operator	41.9

¹ *Milk is expressed in terms of milk actually sold.*

² *One hectare = 2.47 acres.*

Table 4 DAIRY ENTERPRISE REVENUE AND EXPENSES; 2014.
- PER DOE -

NUMBER OF FARMS	All 14
REVENUE	\$
Milk Sales	728.10
Quality Penalties & Levies	-2.71
Does & Bucks Sold	53.96
Other Dairy Livestock Sold	29.16
Dairy Livestock Inventory Change	26.01
Net Revenue	834.52
DIRECT DAIRY EXPENSE	
Dairy Ration & Protein Supplements	259.10
Salt & Minerals	15.54
Milk Replacer & Doeling Ration	25.56
Other Purchased Feeds	1.78
Vet & Drugs	13.26
A.I. Fees (Including semen & embryos)	1.54
Stable & Milk House Supplies	24.03
Milk Transport & Related Marketing Fees	55.43
Goat Livestock Marketing	1.51
Other Direct Goat Enterprise Expense ¹	11.75
Total Direct Expense	409.50
DAIRY SHARE OF CROP EXPENSES	
Bulk Grain & Forage Purchases	39.18
Seed	5.79
Fertilizers	10.39
Herbicides & Pesticides	2.57
Custom Work	19.63
Fuel & Lubricants	12.39
Field Machinery Repairs	12.79
Land Rent	4.25
Other Crop Expense ²	4.55
Total Crop Expense	111.54
Returns Over Direct & Crop Expenses	313.48
ALLOCATED INDIRECT & OVERHEAD EXPENSES	
Barn Equipment & Building Repairs	34.21
Hired Labour Expenses	53.91
Interest Expense	71.14
Insurance	20.06
Hydro & Telephone	34.04
Taxes	8.07
Other Overhead Expenses ³	14.95
Total Indirect & Overhead Expenses	236.38
Returns Over Expenses	77.10
DAIRY LIVESTOCK PURCHASES	
Does & Bucks Purchased	8.26
Other Dairy Livestock Purchased	0.69
Total Dairy Livestock Purchased	8.95
Net Returns	68.16
TOTAL LABOUR REQUIRED (Hrs)⁴	16.81

¹ Other Dairy Expense includes bedding materials, feed processing expense, livestock testing and registration, livestock insurance, livestock promotion expense and building rent.

² Other Crop Expense includes twine, seed cleaning, crop insurance and machine rentals.

³ Other Overhead Expense includes hardware, car expenses and miscellaneous expense.

⁴ Labour estimated based on the recorded hours from daily time sheets (see section B.4).

Table 5 DAIRY ENTERPRISE REVENUE AND EXPENSES; 2014.
- PER HL OF MILK SOLD -

NUMBER OF FARMS	All 14
REVENUE	\$
Milk Sales	91.47
Quality Penalties & Levies	-0.44
Does & Bucks Sold	6.30
Other Goats Sold	3.24
Goat Livestock Inventory Change	3.22
Net Revenue	103.79
DIRECT DAIRY EXPENSE	
Dairy Ration & Protein Supplements	32.29
Salt & Minerals	2.10
Milk Replacer & Doeling Ration	3.06
Other Purchased Feeds	0.24
Vet & Drugs	1.59
A.I. Fees (Including semen & embryos)	0.19
Stable & Milk House Supplies	3.04
Milk Transport & Related Marketing Fees	7.30
Goat Livestock Marketing	0.22
Other Direct Goat Enterprise Expense ¹	1.42
Total Direct Expense	51.45
DAIRY SHARE OF CROP EXPENSES	
Bulk Grain & Forage Purchases	5.28
Seed	0.74
Fertilizers	1.34
Herbicides & Pesticides	0.33
Custom Work	2.41
Fuel & Lubricants	1.50
Field Machinery Repairs	1.50
Land Rent	0.54
Other Crop Expense ²	0.52
Total Crop Expense	14.16
Returns Over Direct & Crop Expenses	38.18
ALLOCATED INDIRECT & OVERHEAD EXPENSES	
Barn Equipment & Building Repairs	4.55
Hired Labour Expenses	6.34
Interest Expense	9.53
Insurance	2.67
Hydro & Telephone	4.49
Taxes	1.07
Other Overhead Expenses ³	1.95
Total Indirect & Overhead Expenses	30.60
Returns Over Expenses	7.58
DAIRY LIVESTOCK PURCHASES	
Does & Bucks Purchased	1.38
Other Dairy Livestock Purchased	0.08
Total Dairy Livestock Purchased	1.46
Net Returns	6.12
TOTAL LABOUR REQUIRED (Hrs)⁴	2.21

¹ Other Dairy Expense includes bedding materials, feed processing, expense, livestock testing and registration, livestock insurance, livestock promotion expense and building rent.

² Other Crop Expense includes twine, seed cleaning, crop insurance and machine rentals.

³ Other Overhead Expense includes hardware, car expenses and miscellaneous expense.

⁴ Labour estimated based on the recorded hours from daily time sheets (see section B.4)

APPENDIX A

SAMPLE DESIGN AND CHARACTERISTICS

A.1 Project Methodology

To provide uniformity of data collection, Project representatives are assigned to do on-farm recording of financial transactions. Farms are visited, on average, two to three times a year, to record financial transactions and collect relevant production information. Various techniques are used to solicit data due to the many differences in farm types and the level of organization.

A.2 Sample Selection


The sample was selected from the files of Ontario Goat.

A.3 Enrolment Procedure

Farms selected for enrolment were initially contacted and recruited by Ontario Goat. A serious attempt was made to handle all contacts in the same manner and to give essentially the same message in all cases. In discussions with the farmers, and in seeking their co-operation, it was emphasized that the confidentiality of individual records would be respected, that there were benefits to the industry and to the individual and that we were seeking their co-operation. It was also stressed that the data collection visits would occur at the convenience of the producer.

B.4 Labour Data Collection

Labour data for the project is collected using daily time sheets. Producers are asked to complete the time sheets for their first year on the project. Sheets are completed for all individuals contributing labour to the farm. Completion of the time sheets in the second and subsequent years on the project is encouraged, but not mandatory, unless changes have occurred which would significantly alter the labour requirements for the operation.

 **Name:** _____ **FARM #** _____ **YEAR** _____ **MONTH** _____ **DAY** _____ **YEAR BORN** _____ **EFFICIENCY** _____ **EMPLOYEE NAME** _____

Year Born: _____

Month: _____

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	TOTAL HOURS
WORK IN THE BARN																																
Daily Milking Dams and Bucks *Feed management, milking, feeding, milking equipment maintenance, health care, etc.																																
Daily Non-Milking Dams/Bucks *Feeding, health care, management, etc.																																
Other Livestock: Cows, Beef, Swine, Etc. *Feeding, health care, management, etc. Indicate type of livestock.																																
Common Livestock Work *Main dairy barn, stock maintenance/care, preparing ration, etc. unloader, building repair																																
Field Machinery *Maintenance and repair of field machinery																																
Other Buildings *Maintenance and repair of other farm buildings other than main dairy barn.																																
Barbed and Fences *Maintenance and repair of barbed and farm fences.																																
Land *Dune picking, farm lands, recreational, ponds.																																
Administration and Management *Book keeping, records, contracts, professional meeting, agricultural courses, banking.																																
Field Work																																
Hay and Haylage *Flowing, baling, fertilizing, spraying, planting, spreading manure, harvesting, etc.																																
Small Grains, Winter Wheat, Oats *Flowing, baling, fertilizing, spraying, planting, spreading manure, harvesting, etc.																																
Corn Grain and Corn Silage *Flowing, baling, fertilizing, spraying, planting, spreading manure, harvesting, etc.																																
Soybeans, Other Crops, Bush Beans *Flowing, baling, fertilizing, spraying, planting, spreading manure, harvesting, etc.																																
Construction, Land Clearing *Building construction, tree removal, etc.																																
Other																																
Custom Hire or Others *Farm related work performed for others but not part of your own farming operation.																																

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APPENDIX B

ACCOUNTING PROCEDURES

B.1 Account Structure

A computerized accounting program is used as the data collection vehicle for the Project. The computer program permits separating information into enterprises or profit centres and accounts or cost centres. Five basic enterprises are being registered:

- (i) general farm
- (ii) dairy goat herd
- (iii) small grain
- (iv) corn/corn silage
- (v) hay/haylage/pasture

The general farm account includes any other crop or type of livestock. Specialized enterprises are not registered. One overhead cost account is registered.

B.2 On-Farm Recording

Project representatives work within very specific guidelines in order to get as much uniformity as possible. As a general rule, the recording methods required for filing tax returns are used. All income and expense items are recorded on an accrual basis. A complete list of items recorded and the recording procedure can be obtained from Ontario Goat.

B.3 Valuation of Fixed Assets

All fixed assets (land, buildings, houses, machinery, and intangibles) are recorded at both original cost and estimated current market value.

Depreciation is recorded using a diminishing balance rate: 5% for buildings and structures, 10% for farm machinery and 15% motorized equipment and machinery. The assumption is made that the equipment will reach its salvage value when it is worth 20 per cent of its original cost.

B.4 Valuation of Livestock

Dairy livestock is valued according to three different quality categories. Beginning and ending inventory values, used for 2014, are as indicated in Table B.1.

Table B.1 **LIVESTOCK INVENTORY VALUES; 2014.**

Description	Beginning (\$)	Ending (\$)
Dairy Milking Does	325	325
Dairy Bucks	400	400
Non-Milking Doelings	200	200
Dairy Buck Kids	15	15

Note: Information in the table is provided by Ontario Goat.
Beef, swine and poultry were valued at current market value.

B.5 Valuation of Crops

Grain values are based on estimates obtained from the Ontario Ministry of Agriculture and Food. Forage values are based on the equivalent feed value of grain corn. Values for 2014 are as indicated in Table B.2.

Table B.2 CROP INVENTORY AND TRANSFER VALUES; 2014.

- Per Tonne Basis -

Values used for	Inventory Valuation		Transfer Value
	Beginning	Ending	
	\$	\$	\$
Home-grown Feed:			
Wheat (Feed)	260.00	290.00	275.00
Barley	250.00	176.00	213.00
Oats	260.00	238.00	249.00
Mixed Grain	265.00	150.00	207.50
Grain Corn	235.00	182.00	208.50
Hay	100.00	151.00	125.50
Corn Silage	45.00	36.00	40.50
Haylage @ 45% DM	90.00	75.00	82.50
Straw	100.00	136.00	118.00
Oatlage/Barlage	90.00	47.60	68.80

B.6 Allocation of Expenses

Direct expense items, such as seed and fertilizer, pose no problem with respect to allocation as their use is generally confined to a single farm enterprise.

Indirect and overhead expenses are more difficult to allocate as they are normally used in more than one enterprise. These expenses are allocated on the basis of the following guidelines.

(a) Building Depreciation

Allocated to livestock enterprises according to the building space used. If the buildings used for certain types of enterprises are obviously depreciating at a higher rate than others, the allocation is accordingly adjusted.

(b) Machinery Depreciation

Allocated according to use as defined on the basis of the classification of individual machinery and equipment items.

(c) Heating Fuels

Normally all personal use unless auxiliary heating is required for certain livestock enterprises (e.g. broilers).

(d) Barn Equipment Repair

Normally about 100 per cent to the dairy herd (milking equipment, milk tank, stable cleaners, etc. are used mainly for the dairy enterprise). If other livestock enterprises are on the farm, costs are allocated according to use.

(e) Building Repair (*building repair, fence repair, hardware*)

Normally about 100 per cent dairy herd.

(f) Gas, Diesel (*gas, diesel, oil, grease*)

Allocated to crops on the basis of hectares or use. Gasoline for personal use is being recorded directly, and not allocated.

(g) Field Machinery (*equipment repair*)

Allocated according to hectares or use.

(h) Machinery Miscellaneous Expenses (*hardware, tools, machine insurance, licence, rent*)

Allocated according to hectares or use.

(i) House Repairs and Maintenance

Almost always 100 per cent personal.

(j) Labour (*wages, EI, CPP, WSIB, EHT*)

According to use.

(k) Interest (*interest, life insurance premium*)

Allocation of short term interest is based on the percentage that the direct expense for each enterprise represents of the total direct expense for the farm. Intermediate and long term interest including life insurance premium is allocated 50 per cent to the livestock enterprises based on the percentage overhead allocated, and 50 per cent to crops according to hectares.

(l) Farm Insurance (*fire, liability, accident*)

Allocated to livestock.

(m) Car (*car insurance, maintenance*)

Normally 70 per cent personal, 15 per cent livestock, 15 per cent crops.

(n) Hydro

Normally, if highly mechanized, 30 per cent personal, 70 per cent livestock. If low mechanization, 50 per cent personal, 50 per cent livestock.

(o) Water

Allocated to livestock.

(p) Telephone

Normally 50 per cent personal, 25 per cent livestock, 25 per cent crops.

(q) Real Estate Taxes

Approximately half land, half buildings, allocated 10 per cent to personal use for the house, pro-rated 40 per cent to livestock according to animal units, 50 per cent to crops according to hectares of each crop.

(r) Other Overhead Expenses (*Fees, accounting, legal, office supplies, advertising, etc.*)

Fifty per cent livestock, 50 per cent crops.

C.7 Allocation of Home-grown Feed

All home-grown feed is allocated to the various livestock enterprises based on information supplied by the farmer. In order to check for accuracy, an edit is carried out at the end of the year. This involves checking the estimated feed consumption

(Beginning Inventory + Production + Purchases - Sales - Ending Inventory)

for each farm to make sure that it is in line with accepted industry benchmarks for feed consumption. If feed consumption is not close to the benchmarks, the crop yields and other related information are double-checked to clarify the discrepancy.