

Cost of Production Study Results 2015

Released July 2016

ACKNOWLEDGEMENT

This report is indebted to the 17 dairy goat producers who willingly participated in the Project during 2015. 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 2015

The 2015 results for the 17 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; 2015.

| ٦ | Γ_{α} | h | ما | 1 |
|---|-------------------|---|-----|---|
| | 11 | | 16. | |

| Table 1 | |
|--|---------|
| NUMBER OF FARMS | All 17 |
| REVENUE | \$ |
| Milk Sales | 322,695 |
| Doe & Buck Sales | 22,250 |
| Other Goat Sales | 38,185 |
| Crop Sales | 19,774 |
| | |
| Other Farm Income | 29,230 |
| Total Cash Revenue | 432,134 |
| | |
| Doe & Doeling Enterprise | 698 |
| Other Livestock | 3,500 |
| Feeds, Crops, Supplies | 3,495 |
| Total Farm Revenue | 439,827 |
| | , |
| EXPENSES | |
| Dairy Goat Enterprise | |
| Dairy Doe & Buck Purchases | 10,537 |
| | |
| Commercial Feed Purchases | 119,913 |
| Milk & Livestock Marketing Expense | 22,616 |
| Breeding Fees | 311 |
| Stable & Milkhouse Supplies | 9,184 |
| Vet. and Drugs | 4,684 |
| Other Goat Expenses ¹ | 6,132 |
| Crop Enterprise | -, - |
| Grains and Forages Purchases | 27,106 |
| Seed | 4,221 |
| Fertilizer | 4,672 |
| | |
| Sprays | 971 |
| Custom Work | 18,387 |
| Gas & Diesel Fuel | 6,995 |
| Machinery Repairs | 10,508 |
| Other Crop Expenses ² | 1,172 |
| Other Farm Expenses | |
| Direct Expenses Non-Dairy Livestock ³ | 12,275 |
| Direct Expenses Other Crops | 4,094 |
| Wages & Salaries | 22,550 |
| Land Rent | 2,741 |
| | |
| Interest Paid | 20,082 |
| Real Estate Taxes | 3,529 |
| Hydro & Telephone | 15,460 |
| Insurance | 5,927 |
| Equipment & Building Repairs | 16,028 |
| Other General Cash Expenses ⁴ | 9,741 |
| Total Cash Expenses | 359,836 |
| | 22,,000 |
| Building Depreciation | 16,065 |
| Machinery Depreciation | 14,668 |
| | |
| Total Farm Expenses | 390,569 |
| N.4 E I | 40.250 |
| Net Farm Income | 49,258 |

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

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

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.

FARM BALANCE SHEET; DECEMBER 31, 2015.

| NUMBER OF FARMS | All 17 |
|---|-----------|
| A. WITH ASSETS AT MARKET VALUE | \$ |
| Machinery and Equipment | 187,418 |
| Personal Equipment | 473 |
| Land and Farm Buildings | 1,844,576 |
| Farm House & Personal Structures | 132,353 |
| Dairy Does | 123,985 |
| Dairy Doelings | 41,612 |
| Other Livestock | 12,863 |
| Feed, Crops, Supplies, Inventory | 41,933 |
| Total Assets | 2,385,213 |
| B. WITH FIXED ASSETS AT COST LESS DEPRECIATION ¹ | |
| Machinery and Equipment | 137,313 |
| Personal Equipment | 1,532 |
| Land and Farm Buildings | 758,856 |
| Farm House & Personal Structures | 20,771 |
| Dairy Does | 123,985 |
| Dairy Doelings | 41,612 |
| Other Livestock | 12,863 |
| Feed, Crops, Supplies, Inventory | 41,933 |
| Total Assets | 1,138,865 |
| C. LIABILITIES | |
| Operating & Short-Term Trade Credit | 27,494 |
| Intermediate & Long Term Loans | 196,499 |
| F.C.C. Loans | 467,729 |
| Total Liabilities | 691,722 |
| D. OWNER'S EQUITY | |
| (A) Assets At Market Value | 1,693,491 |
| (B) Fixed Assets at Cost Less Depreciation | 447,143 |

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

BASIC FARM PRODUCTION PARAMETERS; 2015.

| NUMBER OF FARMS | All 17 |
|--|---------|
| Dairy Does & Doelings (hd) | 377.0 |
| Milk Sold/Farm (litres) ¹ | 322,839 |
| Milk Sold/Doe (litres) ¹ | 859.8 |
| Butterfat Test (kg/hl) | 4.00 |
| Person-Equivalents of Labour | 2.00 |
| Workable Land Farmed (hectares) ² | 42 |
| Average Age of Principal Operator | 41.6 |

¹ Milk is expressed in terms of milk actually sold. ² One hectare = 2.47 acres.

DAIRY ENTERPRISE REVENUE AND EXPENSES; 2015. Table 4 - PER DOE -

| NUMBER OF FARMS | All 17 |
|--|------------------------|
| REVENUE | \$ |
| Milk Sales | 859.50 |
| Quality Penalties & Levies | -1.12 |
| Does & Bucks Sold | 62.55 |
| Other Dairy Livestock Sold | 83.65 |
| Dairy Livestock Inventory Change Net Revenue | 15.11 1,019.69 |
| | |
| DIRECT DAIRY EXPENSE | |
| Dairy Ration & Protein Supplements | 270.91 |
| Salt & Minerals | 11.52 |
| Milk Replacer & Doeling Ration | 32.57 |
| Other Purchased Feeds | 0.52 |
| Vet & Drugs A.I. Fees (Including semen & embryoes) | 16.05 1.10 |
| Stable & Milk House Supplies | 28.83 |
| Milk Transport & Related Marketing Fees | 64.01 |
| Goat Livestock Marketing | 3.08 |
| Other Direct Goat Enterprise Expense ¹ | 15.02 |
| Total Direct Expense | 443.61 |
| DAIRY SHARE OF CROP EXPENSES | |
| Bulk Grain & Forage Purchases | 50.94 |
| Seed | 7.30 |
| Fertilizers | 8.16 |
| Herbicides & Pesticides | 1.27 |
| Custom Work | 19.33 |
| Fuel & Lubricants | 13.03 14.74 |
| Field Machinery Repairs Land Rent | 2.32 |
| Other Crop Expense ² | 4.28 |
| Total Crop Expense | 121.37 |
| Returns Over Direct & Crop Expenses | 454.71 |
| ALLOCATED INDIRECT & OVERHEAD EXPENSES | |
| Barn Equipment & Building Repairs | 38.09 |
| Hired Labour Expenses | 41.95 |
| Interest Expense | 48.75 |
| Insurance | 15.64 |
| Hydro & Telephone Taxes | 37.01 8.53 |
| Other Overhead Expenses ³ | 12.62 |
| Total Indirect & Overhead Expenses | $\frac{12.02}{202.59}$ |
| Returns Over Expenses | 252.12 |
| DAIRY LIVESTOCK PURCHASES | |
| Does & Bucks Purchased | 29.27 |
| Other Dairy Livestock Purchased | 0.60 |
| Total Dairy Livestock Purchased | 29.87 |
| Net Returns | 222.25 |
| TOTAL LABOUR REQUIRED (Hrs) ⁴ | 17.66 |

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

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; 2015. - PER HL OF MILK SOLD -

| NUMBER OF FARMS | All 17 |
|--|----------------------|
| REVENUE | \$ |
| Milk Sales Quality Penalties & Levies | 100.24 -0.14 |
| Does & Bucks Sold | 7.02 |
| Other Goats Sold | 9.52 |
| Goat Livestock Inventory Change | 2.78 |
| Net Revenue | 119.42 |
| DIRECT DAIRY EXPENSE | |
| Dairy Ration & Protein Supplements | 31.87 |
| Salt & Minerals | 1.43 |
| Milk Replacer & Doeling Ration | 3.90 |
| Other Purchased Feeds | 0.06 |
| Vet & Drugs | 1.91 |
| A.I. Fees (Including semen & embryos) | 0.10 |
| Stable & Milk House Supplies Milk Transport & Poletad Modulating Food | 3.61 |
| Milk Transport & Related Marketing Fees Goat Livestock Marketing | 7.72 0.42 |
| Other Direct Goat Enterprise Expense ¹ | 1.68 |
| Total Direct Expense | $\frac{1.08}{52.70}$ |
| DAIRY SHARE OF CROP EXPENSES | |
| Bulk Grain & Forage Purchases | 6.27 |
| Seed | 0.90 |
| Fertilizers | 0.95 |
| Herbicides & Pesticides | 0.15 |
| Custom Work | 2.17 |
| Fuel & Lubricants | 1.63 |
| Field Machinery Repairs | 1.86 |
| Land Rent | 0.28 |
| Other Crop Expense ² | 0.49 |
| Total Crop Expense | 14.70 |
| Returns Over Direct & Crop Expenses | 52.02 |
| ALLOCATED INDIRECT & OVERHEAD EXPENSES | 116 |
| Barn Equipment & Building Repairs | 4.16 |
| Hired Labour Expenses | 4.88 |
| Interest Expense Insurance | 5.91 1.82 |
| Hydro & Telephone | 4.48 |
| Taxes | 1.01 |
| Other Overhead Expenses ³ | 1.53 |
| Total Indirect & Overhead Expenses | 23.79 |
| Returns Over Expenses | 28.23 |
| DAIRY LIVESTOCK PURCHASES | |
| Does & Bucks Purchased | 4.33 |
| Other Dairy Livestock Purchased | 0.08 |
| Total Dairy Livestock Purchased | 4.41 |
| Net Returns | 23.82 |
| TOTAL LABOUR REQUIRED (Hrs) ⁴ | 2.15 |
| | |

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

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

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

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.

The 2015 sample is composed of two sub-samples of dairy goat farms. The first sub-sample consists of 11 farms which were recruited in late 2013 and enrolled in the Project for 2014. The second sub-sample consists of 6 farms recruited in late 2014 for enrolment in 2015.

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.

| | ontario ne: | ~ | | | FARM | Ħ | | | | YI | EAR | | МО | NTH | PAY | STAT | | YEAR | BORN | | | IENCY | | | | | E IND TO A | EE NA II | E | | | | |
|-------------|--|---|---|---|------|---|---|---|---|----|----------|----|----|-----|-----|------|----|------|------|----------|-------|-------|----|----|----|----|------------|----------|----|----|----|----|-------------|
| | ar Born: | _ | - | | 1 | _ | 1 | _ | | | <u> </u> | ш | _ | L | | | | | | <u> </u> | - 311 | 00 | | | | | | | | | | ш | |
| | onth: | 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 |
| BARN | Dairy Miking Does and Bucks • Herd management, milking, feeding, milking equipment maintenance, health care, etc. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 至 | Dairy Non-Milking Does/Doelings • Feeding, health care, management, etc. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| WORK IN THE | Other Livestock: Cows, Beef, Swine, Etc • Feeding, health care, management, etc. Indicate type of livestock: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| WOR | Common Livestock Work Main dairy barn, stable maintenance/dearing, preparing rations, silo unloader, building repair. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NRS. | Field Machinery • Maintenance and repairing of field machinery. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| & REPAIRS | Other Buildings Maintenance and repairing of other farm buildings other than main dairy barn. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | AREAS |
| | Barryard and Fences • Maintenance and repairing of barryard and farm fences. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | ADED |
| MAINTENANCE | Land Stone picking, farm lanes, snowremoval, ponds. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | THE M SH |
| MAIN | Administration and Management Bookkeeping, meetings, errands, professional reading, agricultural courses, banking. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | NOTWE |
| | Hay and Haylage • Plowing, tillage, fertilizing, spraying, planting, spreading manure, harvesting, etc. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | EASE DO |
| WORK | Small Grains, Winter Wheat, Straw • Plowing, tillage, fertillizing, spraying, planting, spreading manure, harvesting, etc. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | P. |
| FIELD | Corn Grain and Corn Silage • Plowing, tillage, fertilizing, spraying, planting, spreading manure, harvesting, etc. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ш | Soybeans, Other Crops, Maple Syrup Plowing, tillage, fertilizing, spraying, spreading manure, planting, harvesting. Crop. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 亞 | Construction, Land Clearing Building construction, tree removal, etc. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| OTHER | Custom Hire For Others Farm related work performed for others but not part of your own farming operation. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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 2015, are as indicated in Table B.1.

Table B.1 LIVESTOCK INVENTORY VALUES; 2015.

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 2015 are as indicated in Table B.2.

Table B.2 CROP INVENTORY AND TRANSFER VALUES; 2015.

- Per Tonne Basis -

| | Inventory | Transfer | | | | |
|------------------|-----------|----------|--------|--|--|--|
| Values used for | Beginning | Ending | Value | | | |
| | \$ | \$ | \$ | | | |
| Home-grown Feed: | | | | | | |
| Wheat (Feed) | 290.00 | 219.00 | 254.50 | | | |
| Barley | 176.00 | 165.00 | 170.50 | | | |
| Oats | 238.00 | 246.00 | 242.00 | | | |
| Mixed Grain | 150.00 | 156.00 | 153.00 | | | |
| Grain Corn | 182.00 | 181.00 | 181.50 | | | |
| Hay | 151.00 | 155.00 | 153.00 | | | |
| Corn Silage | 36.00 | 36.00 | 36.00 | | | |
| Haylage @ 45% DM | 75.00 | 80.00 | 77.50 | | | |
| Straw | 136.00 | 159.00 | 147.50 | | | |
| Oatlage/Barlage | 47.60 | 45.00 | 46.30 | | | |

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.

(I) 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.