Dairy Farm Benchmark Report

May 26, 2018

Summary

The overall efficiency score provides a measure of how efficiently an operation converts all of its inputs (feed, labour, capital, and miscellaneous expenses) into milk output (litres shipped). It is a measure of overall productivity of the operation and allows for comparison to peers' operations as well as your own operation year-to-year in order to track performance. The higher the score, the more efficiently the operation converts inputs into milk shipped.

Your operation's overall efficiency score is 0.25. The most efficient performing operation has an overall efficiency score of 1. The average overall efficiency score for all operations is 0.29.

The feed efficiency score provides a measure of how efficiently an operation converts feed into milk shipped. Feed expenses are often the highest variable cost for dairy operations and therefore a higher score may result lower costs per litre of milk shipped. Feed consumption is also highly correlated with greenhouse gas emissions from bovine animals. Therefore, herds with higher feed efficiency scores may produce lower levels of greenhouse gas emissions than comparative herds with lower scores.

Your feed efficiency score is 0.25. The most efficient performing operation has a feed efficiency score of 1. The average feed efficiency score for all operations is 0.25.

The following Table 1 provides a comparison between your operation, the average operation and the most efficient performing operation. The far right column calculates the difference between your operation and the top 10 most efficient Operations.

Table 1: Operation Comparison

	My Operation	Average Operation	Top 10 Operations	Difference
Milk Shipped (L)	3	3.2	9.64	-6.64
Number of Lactating Cows	1	1.1	1.07	-0.07
Feed Expenses (\$)	2	2.2	2.36	-0.36
Labour Expenses (\$)	2	2.4	2.18	-0.18
Capital Expenses (\$)	1	1.1	1.00	0.00
Miscellaneous Expenses (\$)	1	1.0	0.73	0.27

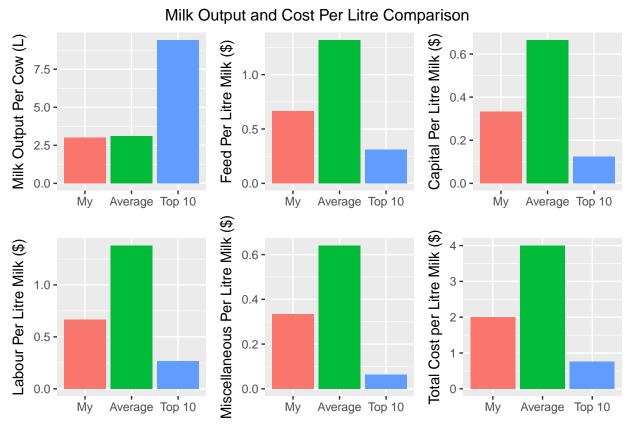
Table 2: Milk Output and Cost Per Litre Comparison

	My	Average	Top 10
Milk Output Per Cow (L)	3.00	3.10	9.43
Cost of Feed Per Litre Milk (\$)	0.67	1.32	0.31
Cost of Capital Per Litre Milk (\$)	0.33	0.67	0.12
Cost of Labour Per Litre Milk (\$)	0.67	1.38	0.27
Cost of Miscellaneous Per Litre Milk (\$)	0.33	0.64	0.06
Total Cost per Litre Milk (\$)	2.00	4.01	0.76

Productivity Measures

The following Table 2 provides a milk output per cow and cost per litre comparison between your operation, the average operation and the top 10 most performing operations.

The following Figures visually displays the information above.

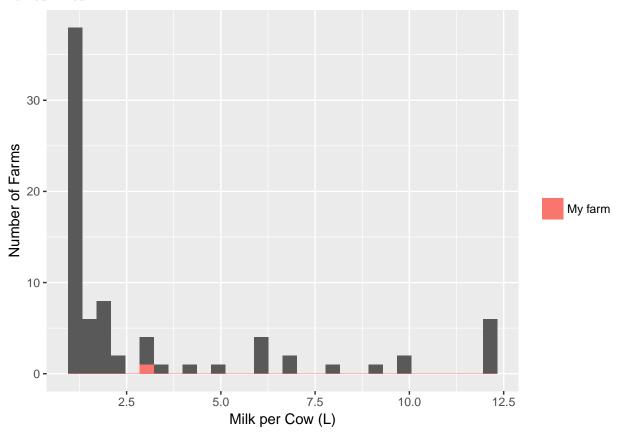


Milk Yield Comparison

Your Milk Yield is 3 litres per cow. The average milk yield of all farms is 3.1 litres per cow.

Milk Yield is calculated by dividing the total amount of milk shipped by the average number of milking cows in the benchmark year.

The following figure shows the distribution of milk yield per cow. The milk yield per cow on your farm is marked in red.

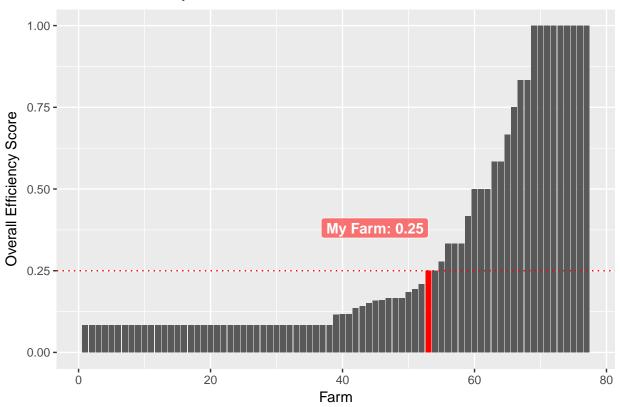


Overall Efficiency

This figure displays your **overall efficiency score** in comparison to all other operations. The efficiency score of your farm is red.

The most efficient operations are located in the right of the graph and the least efficient operations are located in the left.

Overall Efficiency Scores

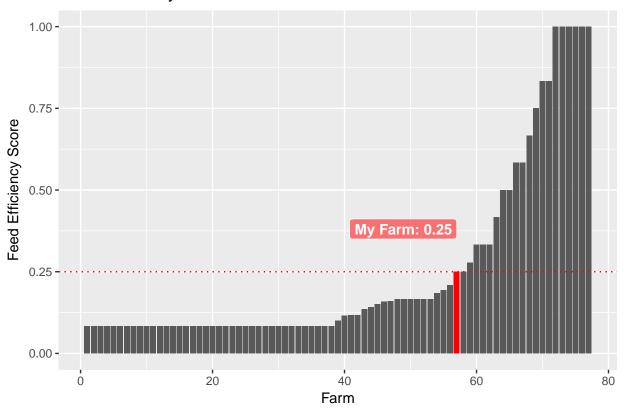


Feed Efficiency

This figure displays your **feed efficiency score** in comparison to all other operations. The efficiency score of your farm is red.

The most efficient operations are located in the right of the graph and the least efficient operations are located in the left.

Feed Efficiency Scores



Farm Characteristics and Performance

Overall Efficiency Score and Farm Characteristics

Farm Characteristics	Average Overall Efficiency Score
business type	
Corporation	0.68
Sole Propritor	0.19
Partnership	0.62
Education of Principal Operator	
Primary School	0.19
High School	1
Diploma	0.48
Community College	0.54
Bachelor's Degree	0.6
Post Grad Degree	1
Housing System	
Tie Stall	0.26
Free Stall	0.58
Loose Housing	0.08
Milking System	
Pipeline	0.26
Parlour	0.53
Feeding System	

Manual 0.26 Semi-automated 0.59 Fully automated 0.44 Were milking cows milked using robots Yes 0.26 No 0.59 Were milking cows fed using Total Mixed Ration Yes 0.19 No 0.71 Were heifers fed using Total Mixed Ration Yes 0.26 No 0.58 Were milking cows separated and fed according to production level Yes 0.26 No 0.58 Were milking cows separated and fed according to production level Yes 0.26 No 0.58 Manure Handling System Manual 0.26 Stable Cleaner 0.62 Manure Pack 0.74 Liqud System 0.39 Breed of Herd Holstein 0.26 Guernsey 1 Jersey 0.08 Brown Swiss 0.34 Milking Shorthorn 1 Ayrshire 0.62 Enrolled in Milk Recording Yes 0.26 No 0.69	Farm Characteristics	Average Overall Efficiency Score
Fully automated Were milking cows milked using robots Yes 0.26 No 0.59 Were milking cows fed using Total Mixed Ration Yes 0.19 No 0.71 Were heifers fed using Total Mixed Ration Yes 0.26 No 0.58 Were milking cows separated and fed according to production level Yes 0.26 No 0.58 Were milking cows separated and fed according to production level Yes 0.26 No 0.58 Manure Handling System Manual 0.26 Stable Cleaner 0.62 Manure Pack 0.74 Liqud System 0.39 Breed of Herd Holstein 0.26 Guernsey 1 Jersey 0.08 Brown Swiss 0.34 Milking Shorthorn 1 Ayrshire 0.62 Enrolled in Milk Recording Yes 0.26	Manual	0.26
Were milking cows milked using robots Yes 0.26 No 0.59 Were milking cows fed using Total Mixed Ration Yes 0.19 No 0.71 Were heifers fed using Total Mixed Ration Yes 0.26 No 0.58 Were milking cows separated and fed according to production level Yes 0.26 No 0.58 Manure Handling System Manual 0.26 Stable Cleaner 0.62 Manure Pack 0.74 Liqud System 0.39 Breed of Herd Holstein 0.26 Guernsey 1 Jersey 0.08 Brown Swiss 0.34 Milking Shorthorn 1 Ayrshire 0.62 Enrolled in Milk Recording Yes 0.26	Semi-automated	0.59
Yes 0.26 No 0.59	Fully automated	0.44
No 0.59	Were milking cows milked using robots	
Were milking cows fed using Total Mixed Ration Yes 0.19 No 0.71 Were heifers fed using Total Mixed Ration Yes 0.26 No 0.58 Were milking cows separated and fed according to production level Yes 0.26 No 0.58 Manure Handling System Manual Manual 0.26 Stable Cleaner 0.62 Manure Pack 0.74 Liqud System 0.39 Breed of Herd Holstein 0.26 Guernsey 1 Jersey 0.08 Brown Swiss 0.34 Milking Shorthorn 1 Ayrshire 0.62 Enrolled in Milk Recording Yes 0.26	Yes	0.26
Yes 0.19 No 0.71	No	0.59
Were heifers fed using Total Mixed Ration Yes 0.26 No 0.58 Were milking cows separated and fed according to production level Yes 0.26 No 0.58 Manure Handling System Manual 0.26 Stable Cleaner 0.62 Manure Pack 0.74 Liqud System 0.39 Breed of Herd Holstein 0.26 Guernsey 1 Jersey 0.08 Brown Swiss 0.34 Milking Shorthorn 1 Ayrshire 0.62 Enrolled in Milk Recording Yes 0.26	Were milking cows fed using Total Mixed Ration	
Were heifers fed using Total Mixed Ration $Yes = 0.26$ $No = 0.58$ Were milking cows separated and fed according to production level $Yes = 0.26$ $No = 0.58$ $No = 0.62$ No	Yes	0.19
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	No	0.71
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Were heifers fed using Total Mixed Ration	
Were milking cows separated and fed according to production level $ \begin{array}{ccccccccccccccccccccccccccccccccccc$		0.26
Were milking cows separated and fed according to production level $ \begin{array}{ccccccccccccccccccccccccccccccccccc$	No	0.58
Yes 0.26 No 0.58 Manure Handling System Manual 0.26 Stable Cleaner 0.62 Manure Pack 0.74 Liqud System 0.39 Breed of Herd Holstein 0.26 Guernsey 1 Jersey 0.08 Brown Swiss 0.34 Milking Shorthorn 1 Ayrshire 0.62 Enrolled in Milk Recording Yes 0.26		
No 0.58		0.26
Manure Handling System Manual 0.26 Stable Cleaner 0.62 Manure Pack 0.74 Liqud System 0.39 Breed of Herd Holstein Holstein 0.26 Guernsey 1 Jersey 0.08 Brown Swiss 0.34 Milking Shorthorn 1 Ayrshire 0.62 Enrolled in Milk Recording Yes Yes 0.26		
Manual 0.26 Stable Cleaner 0.62 Manure Pack 0.74 Liqud System 0.39 Breed of Herd Holstein Holstein 0.26 Guernsey 1 Jersey 0.08 Brown Swiss 0.34 Milking Shorthorn 1 Ayrshire 0.62 Enrolled in Milk Recording Yes Yes 0.26		
Stable Cleaner 0.62 Manure Pack 0.74 Liqud System 0.39 Breed of Herd Holstein 0.26 Guernsey 1 Jersey 0.08 Brown Swiss 0.34 Milking Shorthorn 1 Ayrshire 0.62 Enrolled in Milk Recording Yes 0.26	- ·	0.26
Manure Pack 0.74 Liqud System 0.39 Breed of Herd Holstein Holstein 0.26 Guernsey 1 Jersey 0.08 Brown Swiss 0.34 Milking Shorthorn 1 Ayrshire 0.62 Enrolled in Milk Recording Yes 0.26	Stable Cleaner	
Liqud System 0.39 Breed of Herd Holstein 0.26 Guernsey 1 Jersey 0.08 Brown Swiss 0.34 Milking Shorthorn 1 Ayrshire 0.62 Enrolled in Milk Recording Yes 0.26		
Breed of Herd		
Holstein 0.26 Guernsey 1 Jersey 0.08 Brown Swiss 0.34 Milking Shorthorn 1 Ayrshire 0.62 Enrolled in Milk Recording Yes 0.26	- *	
Guernsey 1 Jersey 0.08 Brown Swiss 0.34 Milking Shorthorn 1 Ayrshire 0.62 Enrolled in Milk Recording Yes 0.26		0.26
$\begin{array}{ccc} & & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\$		
Brown Swiss 0.34 Milking Shorthorn 1 Ayrshire 0.62 Enrolled in Milk Recording Yes 0.26		
Milking Shorthorn 1 Ayrshire 0.62 Enrolled in Milk Recording Yes 0.26	· ·	
Ayrshire 0.62 Enrolled in Milk Recording Yes 0.26		
Enrolled in Milk Recording Yes 0.26		
Yes 0.26		0.02
	-	0.26
	No	0.69

Feed Efficiency Score and Farm Characteristics

Farm Characteristics	Average Feed Efficiency Score
business type	
Corporation	0.55
Sole Propritor	0.18
Partnership	0.29
Education of Principal Operator	
Primary School	0.18
High School	0.55
Diploma	0.42
Community College	0.54
Bachelor's Degree	0.6
Post Grad Degree	0.56
Housing System	
Tie Stall	0.25
Free Stall	0.26
Loose Housing	0.08
Milking System	

Farm Characteristics	Average Feed Efficiency Score
Pipeline	0.26
Parlour	0.21
Feeding System	
Manual	0.25
Semi-automated	0.33
Fully automated	0.13
Were milking cows milked using robots	
Yes	0.25
No	0.22
Were milking cows fed using Total Mixed Ration	
Yes	0.18
No	0.54
Were heifers fed using Total Mixed Ration	
Yes	0.25
No	0.26
Were milking cows separated and fed according to production level	
Yes	0.25
No	0.26
Manure Handling System	
Manual	0.25
Stable Cleaner	0.29
Manure Pack	0.21
Liqud System	0.28
Breed of Herd	
Holstein	0.25
Guernsey	0.33
Jersey	0.08
Brown Swiss	0.26
Milking Shorthorn	0.1
Ayrshire	0.29
Enrolled in Milk Recording	
Yes	0.25
No	0.25

Table 5: Breakdown of My Expenses

	Cost	Value (\$)	Share (%)
feed	Feed	2	33
labour	Labour	2	33
capital	Capital	1	17
misc	Misc	1	17

Expenses Breakdown

Breakdown of My Expenses

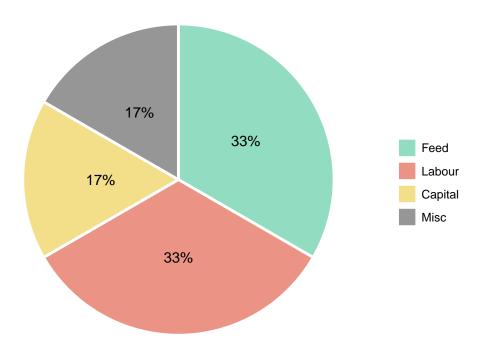


Table 6: Breakdown of Average Operation's Expenses

Cost	Value (\$)	Share (%)
Feed	2.4	36
Labour	2.2	33
Capital	1.1	17
Misc	1.0	15

Breakdown of Average Operation's Expenses

