



DAIRY FARM SURVEY

For the 2021/2022 Season

AN ECONOMIC SURVEY OF

FACTORY SUPPLY DAIRY FARMERS

FOR THE 2021/2022 SEASON
FROM THE PRACTICE OF
GRAHAM BROWN & CO LTD

A. THOSE SURVEYED

1. The population includes categories for Farm Owners, Sharemilkers and Farm Owners with Sharemilkers, of the practice of Graham Brown & Co Ltd, who:
 - (i) are factory supply, and
 - (ii) derive at least 95% of their gross income from dairying
2. The area represented by this survey is predominantly that of the South Waikato.
3. We are accredited to input data into Dairy Base so have enclosed a snap shot of the Economic Farm Surplus results from Dairy Base for the 2021/2022 season for Farm Owners in Waikato, Canterbury and Southland and Sharemilkers in Waikato. We have also provided from Dairybase a comparison of the profitability of the various production systems for the 2021/2022 season.

We encourage you to compare your results with these benchmarks.

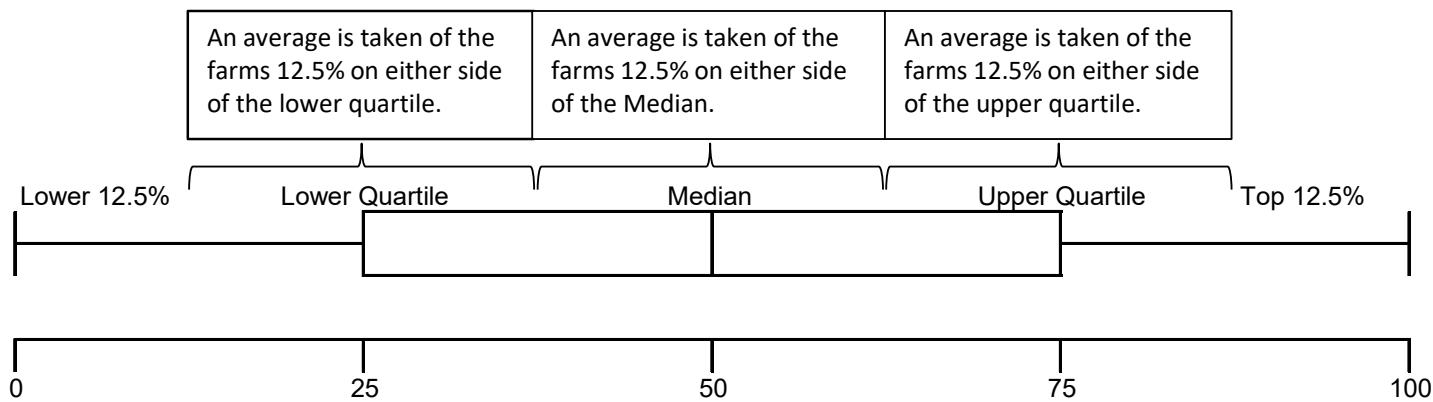
If you want more detail regarding Dairy Base reporting please contact us.

B. ECONOMIC FARM SURPLUS (EFS)

The surplus remaining after expenditure on farming operations (ie. repairs and maintenance, vehicle and standing charges) is called EFS. It measures relative profitability per hectare without being influenced by such items as levels of indebtedness, capital expenditure, taxation and personal drawings. For this reason we are firstly taking the farm surplus from the farm working account. This is prior to book entries for building depreciation, off farm income such as interest received and taxation provisions. It includes any increase or decrease in stock numbers at market values. Secondly, we are adding back interest and lease payments for stock and for land which is milked on. We are leaving in lease payments for land which is used as a run-off. Thirdly, we are deducting a management salary based on "unpaid" labour utilised in the farming operation. This primarily gives the proprietor a return for their labour. It also eliminates any anomalies which may exist where there are more or less than one full time proprietor.

C. FORMAT OF COMPARISONS

We have collated the data as averages of the Lower, Median and Upper Quartile. ie. If 100 farms were in the survey, we would first order them from smallest to largest by their EFS and the average of the quartiles would be calculated as per the following



D. OTHER POINTS

1. Separate statistics are prepared for the three distinct areas of:
 - Farm Owners
 - Sharemilkers
 - Farm Owners Employing Sharemilkers
2. No adjustment is made for interim and deferred final payments when calculating EFS which may in isolated circumstances cause some distortions.
3. Where a farmer utilises a run-off the effective hectares used for these calculations are those that are milked upon.
4. Effective hectares only excludes from total hectares unfarmable areas, (by way of contour for example) and does not exclude areas for tanker tracks, houses etc.
5. In some instances the figures will not add vertically. This is due to rounding when the figures are averaged.

STATISTICS 2021-2022 YEAR

FARM OWNERS

	AVERAGE Around LOWER QUARTILE	AVERAGE Around MEDIAN	AVERAGE Around UPPER QUARTILE	AVERAGE OF TOP 10%
BASIC DATA				
EFFECTIVE HA's	151	162	148	253
COWS AS AT 31st October	420	466	456	920
PRODUCTION				
TOTAL MILK SOLIDS				
KG's/HA	1095	1229	1303	1858
KG's/COW	392	424	434	505
INCOME/HA				
TOTAL SOLIDS	9557.70	10772.36	12030.97	17040.35
OTHER INCOME	167.72	197.43	213.57	394.76
LIVESTOCK INCOME				
- CASH	685.16	740.24	726.92	823.43
- NUMBER CHANGE	-107.41	-29.98	50.82	234.86
TOTAL INCOME/HA	10306.63	11680.05	13022.28	18493.40
COSTS/HA				
FARM WORKING	4949.95	5124.42	5134.72	7619.64
LABOUR	810.70	922.78	970.96	1210.70
FINANCIAL EXPENSES	1289.03	1240.46	1404.48	1505.03
ADMINISTRATION	401.03	375.33	346.46	446.06
EXPENSES/HA	7450.71	7662.99	7856.62	10781.43
FARM SURPLUS/HA	2855.93	4017.06	5165.66	7711.97
ECONOMIC FARM SURPLUS				
<u>ADJUSTMENT/HA</u>				
INTEREST & LEASE CHARGES	1288.61	1239.30	1404.24	1504.39
INCREASE IN FEED ON HAND	0.00	3.12	0.00	0.00
EXTRAORDINARY EXPENSES	0.15	0.00	67.32	0.00
<u>Less</u>				
Managerial Salary & Unpaid Labour/Ha	408.07	340.12	341.41	366.27
Decrease in Feed on Hand	0.00	0.00	0.00	0.00
Depreciation	453.30	445.01	439.76	760.96
Runoff Rental	9.04	33.61	15.99	13.90
ECONOMIC FARM SURPLUS/HA	3274.28	4440.73	5840.06	8075.24
Return on Dairy Assets (Plant at Opening Book, Stock at Opening MV, Land, Building & Shares at MV)	8.86%	10.46%	12.70%	11.64%
RATIOS				
Term Debt & OD/Total Assets	0.48	0.44	0.45	0.51
Interest Cover (Farm Cash Surplus <i>before</i> Interest, Lease & Long-term grazing <i>less</i> Tax & Drawings/Interest, Lease & Long Term Grazing)	2.90	3.19	3.07	3.69

STATISTICS 2021-2022 YEAR

FARM OWNERS

	AVERAGE Around LOWER QUARTILE	AVERAGE Around MEDIAN	AVERAGE Around UPPER QUARTILE	AVERAGE OF TOP 10%
<u>ANALYSIS/KG OF MILKSOLIDS</u>				
EXPENSES:				
FARM WORKING	4.51	4.05	3.90	4.03
LABOUR	0.72	0.75	0.75	0.67
ADMINISTRATION	0.11	0.09	0.08	0.08
STANDING CHARGES	0.25	0.22	0.19	0.15
	5.60	5.10	4.91	4.94
Less				
OTHER INCOME	0.27	0.23	0.21	0.34
LIVESTOCK CASH INCOME	0.87	0.61	0.56	0.47
	4.46	4.27	4.14	4.12
Plus				
INTEREST & LEASE CHARGES	1.26	1.06	1.10	0.82
PRINCIPAL	1.05	1.05	1.02	1.11
DRAWINGS	0.51	0.49	0.61	0.33
TAX	0.36	0.58	0.67	0.98
NET CAPITAL REPLACEMENT	0.33	0.43	0.25	0.20
<u>NET FARM COSTS</u>	7.98	7.88	7.80	7.57
BREAKDOWN OF FARM WORKING COSTS:				
<u>VARIABLE COSTS:</u>				
FERTILISER & SPREADING/HA	579.04	550.65	616.65	517.73
REPAIRS & MAINTENANCE/HA	722.88	580.08	562.00	597.78
NITROGEN/HA	119.29	126.48	91.70	213.20
<u>SEMI-VARIABLE COSTS:</u>				
ANIMAL HEALTH/COW	140.30	153.36	133.99	165.66
BREEDING/COW	51.57	57.25	50.84	54.49
CALF REARING/COW	61.25	40.78	29.75	37.00
HERD TESTING/COW	4.20	6.45	9.67	4.77
BROUGHT IN FEED/COW	696.18	780.42	761.95	1130.60
CONCENTRATES/COW	102.02	172.73	137.99	233.51
CROPPING EXPENSES/COW	64.23	43.21	33.57	26.76
GRASS SILAGE/COW	69.52	62.08	38.01	65.54
GRAZING CALVES/COW	3.56	20.45	13.31	38.27
GRAZING HEIFERS/COW	84.12	73.16	95.56	101.26
GRAZING COWS/COW	9.50	28.93	15.86	60.60
GRAZING LAND/COW	4.87	6.89	10.03	0.03
HAY/COW	13.23	16.85	13.43	20.34
MAIZE/COW	61.11	51.75	116.21	128.71
NITROGEN/COW	42.38	43.59	30.71	58.83
MEAL/PALM KERNEL/GRAIN ETC	284.02	312.57	286.52	437.50
HARVESTING/COW	47.32	45.76	45.98	58.56
PASTURE RENOVATION	86.57	102.32	79.98	41.26
WEED & PEST CONTROL/HA	41.46	54.67	46.40	25.70
VEHICLE EXPENSES/HA	310.04	251.91	263.85	396.90
WAGES/CONTRACT MILKING/COW	284.91	317.12	316.93	340.69
WAGES/CONTRACT MILKING & MANAGERIAL	432.07	438.92	429.77	437.49
SALARY/COW				
<u>FIXED COSTS:</u>				
FARM POWER/COW	43.28	40.08	34.58	34.34
SHED EXPENSES/COW	26.34	21.91	29.31	40.78
DRAWINGS	76827	86467	126834	134243

STATISTICS 2021-2022 YEAR

SHAREMILKERS

	AVERAGE Around LOWER QUARTILE	AVERAGE Around MEDIAN	AVERAGE Around UPPER QUARTILE	AVERAGE OF TOP 10%
<u>BASIC DATA</u>				
EFFECTIVE HA's	152	176	158	157
COWS AS AT 31st October	441	512	490	555
<u>PRODUCTION</u>				
TOTAL MILK SOLIDS				
KG's/HA	1052	1180	1326	1656
KG's/COW	360	413	427	467
<u>INCOME/HA</u>				
TOTAL SOLIDS	4715.44	5360.13	6104.44	7794.46
OTHER INCOME	143.94	46.71	156.11	259.13
LIVESTOCK INCOME				
- CASH	701.45	480.42	549.44	1080.37
- NUMBER CHANGE	-303.08	37.65	69.96	379.80
<u>TOTAL INCOME/HA</u>	5257.74	5924.91	6879.95	9513.75
<u>COSTS/HA</u>				
FARM WORKING	2290.89	2361.65	2872.88	3562.12
LABOUR	604.97	972.33	629.18	901.39
FINANCIAL EXPENSES	185.41	92.90	426.44	239.41
ADMINISTRATION	170.24	198.24	216.40	261.52
<u>EXPENSES/HA</u>	3251.51	3625.11	4144.90	4964.43
<u>FARM SURPLUS/HA</u>	2047.40	2299.79	2735.05	4348.03
<u>ECONOMIC FARM SURPLUS</u>				
<u>ADJUSTMENT/HA</u>				
INTEREST & LEASE CHARGES	182.61	92.49	425.36	232.52
INCREASE IN FEED ON HAND	0.00	0.00	0.00	0.00
EXTRAORDINARY EXPENSES	0.00	0.00	0.00	0.00
<u>Less</u>				
Managerial Salary & Unpaid Labour/Ha	459.57	320.24	413.39	464.97
Decrease in Feed	0.00	0.00	0.00	0.00
Depreciation	220.26	194.21	238.72	343.98
Runoff Rental	0.00	0.00	0.00	0.00
<u>ECONOMIC FARM SURPLUS/HA</u>	1550.19	1877.84	2508.30	3771.59
Return on Dairy Assets (Plant at Opening Book, Stock at Opening MV, Shares at MV)	25.04%	28.82%	33.89%	37.25%
<u>RATIOS</u>				
Term Debt & OD/Total Assets	0.29	0.25	0.29	0.30
Interest Cover (Farm Cash Surplus <i>before</i> Interest, Lease & Long-term Grazing <i>less</i> Tax & Drawings/Interest, Lease & Long Term Grazing)	7.49	4.42	4.17	5.00

STATISTICS 2021-2022 YEAR

SHAREMILKERS

	AVERAGE Around LOWER QUARTILE	AVERAGE Around MEDIAN	AVERAGE Around UPPER QUARTILE	AVERAGE OF TOP 10%
<u>ANALYSIS/KG OF MILKSOLIDS</u>				
EXPENSES:				
FARM WORKING	2.18	2.06	2.16	2.10
LABOUR	0.56	0.78	0.47	0.52
ADMINISTRATION	0.10	0.08	0.07	0.07
STANDING CHARGES	0.07	0.04	0.08	0.11
	2.90	2.96	2.78	2.80
Less				
OTHER INCOME	0.16	0.04	0.13	0.26
LIVESTOCK CASH INCOME	0.49	0.42	0.44	0.72
	2.08	2.50	2.21	1.82
Plus				
INTEREST & LEASE CHARGES	0.17	0.09	0.29	0.14
PRINCIPAL	0.51	0.56	0.67	1.17
DRAWINGS	0.68	0.52	0.50	0.45
TAX	0.22	0.21	0.31	0.47
NET CAPITAL REPLACEMENT	0.12	0.16	0.17	0.37
NET FARM COSTS	3.78	4.03	4.16	4.41
BREAKDOWN OF FARM WORKING COSTS:				
<u>VARIABLE COSTS:</u>				
FERTILISER & SPREADING/HA	99.49	94.51	107.75	134.18
REPAIRS & MAINTENANCE/HA	140.34	117.97	108.50	186.42
NITROGEN/HA	76.25	83.10	84.09	94.17
<u>SEMI-VARIABLE COSTS:</u>				
ANIMAL HEALTH/COW	114.99	127.71	147.01	120.72
BREEDING/COW	53.68	56.42	56.42	56.50
CALF REARING/COW	32.37	17.90	24.85	47.13
HERD TESTING/COW	10.24	7.11	6.77	12.21
BROUGHT IN FEED/COW	264.62	290.87	370.87	436.13
CONCENTRATES/COW	0.00	13.49	10.43	67.40
CROPPING EXPENSES/COW	23.55	20.96	21.82	11.48
GRASS SILAGE/COW	21.19	13.93	23.02	23.64
GRAZING CALVES/COW	19.97	9.63	18.76	10.72
GRAZING HEIFERS/COW	60.80	50.77	50.91	27.42
GRAZING COWS/COW	9.56	0.00	20.78	8.18
GRAZING LAND/COW	0.23	0.51	0.00	0.00
HAY/COW	4.46	5.59	2.88	3.95
MAIZE/COW	30.47	61.89	56.44	77.50
NITROGEN/COW	25.68	29.02	27.15	26.73
OTHER BROUGHT IN FEED/SQUASH ETC	94.37	114.11	159.87	205.85
HARVESTING/COW	19.21	22.80	23.84	19.63
PASTURE RENOVATION	5.51	10.24	40.45	47.37
WEED & PEST CONTROL/HA	5.52	10.27	18.89	35.99
VEHICLE EXPENSES/HA	261.03	262.74	240.24	252.26
WAGES/CONTRACT MILKING/COW	206.95	340.52	203.37	249.35
WAGES/CONTRACT MILKING & MANAGERIAL	364.47	450.12	338.84	382.28
SALARY/COW				
<u>FIXED COSTS:</u>				
FARM POWER/COW	46.72	39.37	45.67	41.80
SHED EXPENSES/COW	22.00	23.27	19.77	13.99
DRAWINGS	98871	111933	76310	110344

STATISTICS 2021-2022 YEAR

FARM OWNERS WITH SHAREMILKERS

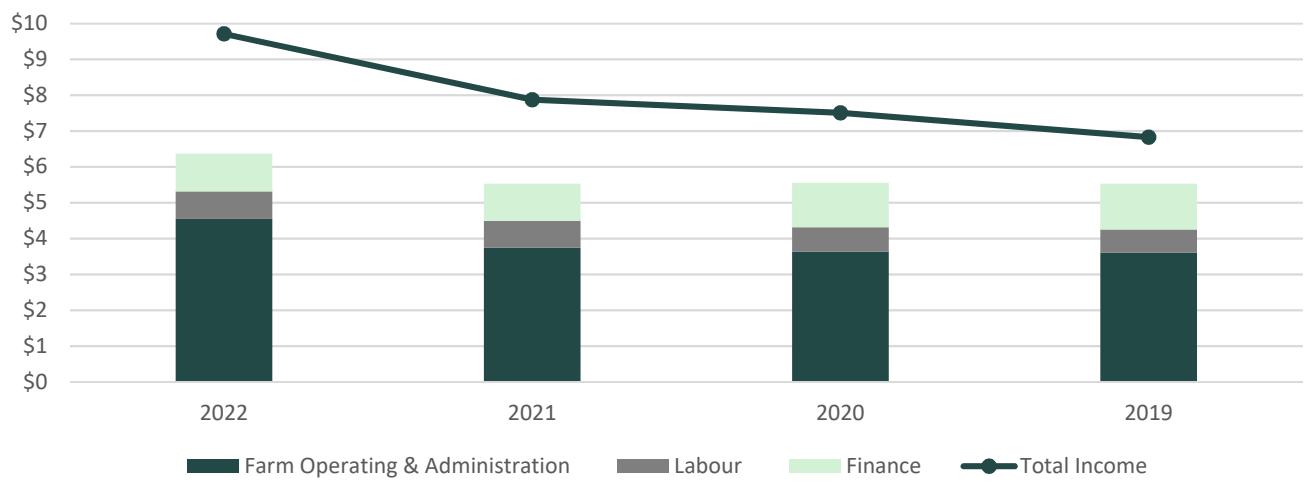
	AVERAGE Around LOWER QUARTILE	AVERAGE Around MEDIAN	AVERAGE Around UPPER QUARTILE
<u>BASIC DATA</u>			
EFFECTIVE HA's	153	125	214
COWS AS AT 31st October	416	334	674
<u>PRODUCTION</u>			
TOTAL MILK SOLIDS			
KG's/HA	917	1037	1428
KG's/COW	321	379	450
<u>INCOME/HA</u>			
TOTAL SOLIDS	4283.61	5267.76	6751.84
OTHER INCOME	126.89	115.46	496.11
LIVESTOCK INCOME			
- CASH	-0.82	36.01	-8.69
- NUMBER CHANGE	0.00	35.01	27.88
<u>TOTAL INCOME/HA</u>	4409.67	5454.24	7253.49
<u>COSTS/HA</u>			
FARM WORKING	1706.77	1813.59	2668.18
LABOUR	34.17	88.69	21.01
FINANCIAL EXPENSES	347.19	467.48	760.55
ADMINISTRATION	274.89	295.61	313.35
<u>EXPENSES/HA</u>	2363.02	2665.38	3763.10
<u>FARM SURPLUS/HA</u>	2046.66	2788.86	3490.39
<u>ECONOMIC FARM SURPLUS/HA</u>			
<u>ADJUSTMENT/HA</u>			
INTEREST & LEASE CHARGES	347.15	467.68	759.54
INCREASE IN FEED ON HAND	0.00	0.00	0.00
EXTRAORDINARY EXPENSES	0.00	0.00	0.00
<u>Less</u>			
Decrease in Feed	0.00	0.00	0.00
Depreciation	323.82	254.29	353.80
Runoff Rental	0.00	22.29	0.00
<u>ECONOMIC FARM SURPLUS/HA</u>	2069.99	2979.96	3896.12
Return on Dairy Assets (Plant at Opening Book, Land, Building & Shares at MV)	3.50%	6.97%	8.19%
<u>RATIOS</u>			
Term Debt & OD/Total Assets	0.22	0.16	0.30
Interest Cover (Farm Cash Surplus <i>before</i> Interest, Lease & Long-term Grazing <i>less</i> Tax & Drawings/Interest, Lease & Long Term Grazing)	3.32	8.23	6.86

STATISTICS 2021-2022 YEAR

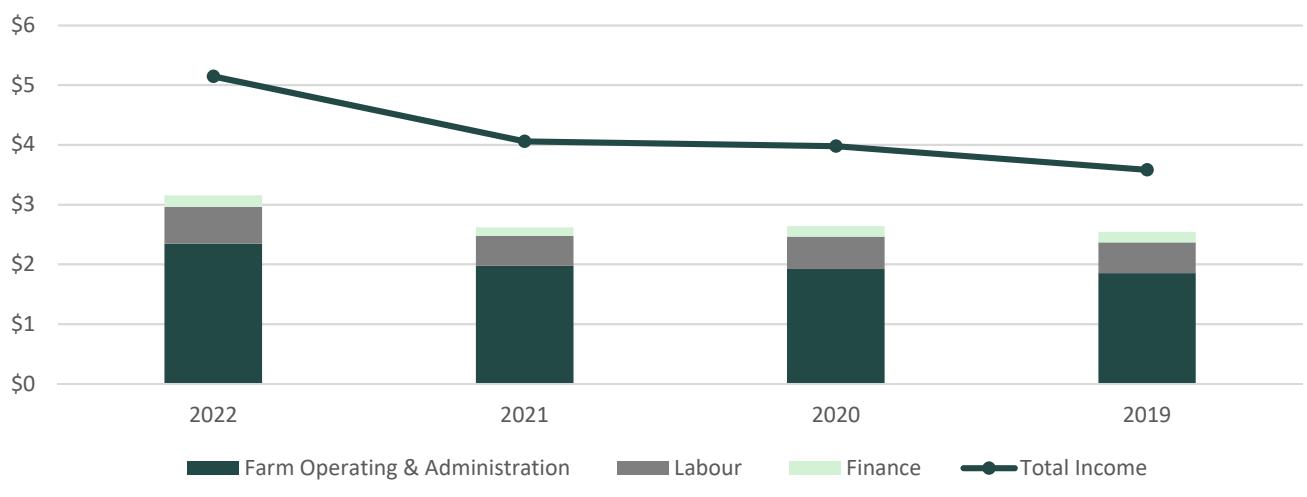
FARM OWNERS WITH SHAREMILKERS

	AVERAGE Around LOWER QUARTILE	AVERAGE Around MEDIAN	AVERAGE Around UPPER QUARTILE
<u>ANALYSIS/KG OF MILKSOLIDS</u>			
EXPENSES:			
FARM WORKING	1.83	1.78	1.90
LABOUR	0.03	0.14	0.01
ADMINISTRATION	0.06	0.10	0.07
STANDING CHARGES	0.25	0.19	0.16
	2.17	2.21	2.14
Less			
OTHER INCOME	0.16	0.13	0.20
LIVESTOCK CASH INCOME	0.00	0.06	-0.01
	2.01	2.03	1.95
Plus			
INTEREST & LEASE CHARGES	0.43	0.55	0.57
PRINCIPAL	0.74	0.75	0.69
DRAWINGS	0.43	0.25	0.41
TAX	0.44	0.46	0.33
NET CAPITAL REPLACEMENT	0.17	0.27	-0.06
<u>NET FARM COSTS</u>	4.23	4.31	3.90
BREAKDOWN OF FARM WORKING COSTS:			
<u>VARIABLE COSTS:</u>			
FERTILISER & SPREADING/HA	470.99	367.34	424.77
REPAIRS & MAINTENANCE/HA	465.68	470.86	554.18
NITROGEN/HA	48.42	40.54	74.94
<u>SEMI-VARIABLE COSTS:</u>			
ANIMAL HEALTH/COW	2.25	12.35	2.18
BREEDING/COW	0.00	9.73	0.24
CALF REARING/COW	1.97	9.10	6.16
HERD TESTING/COW	0.00	1.18	0.00
BROUGHT IN FEED/COW	171.41	210.81	430.10
CONCENTRATES/COW	9.56	0.00	108.51
CROPPING EXPENSES/COW	4.59	21.64	22.25
GRASS SILAGE/COW	15.94	10.79	46.50
GRAZING CALVES/COW	4.50	2.01	16.02
GRAZING HEIFERS/COW	19.96	37.29	62.37
GRAZING COWS/COW	0.00	0.00	23.46
GRAZING LAND/COW	21.77	0.00	0.00
HAY/COW	1.72	6.60	9.10
MAIZE/COW	34.35	12.69	34.21
NITROGEN/COW	15.80	13.88	23.21
OTHER BROUGHT IN FEED/SQUASH ETC	59.02	119.78	107.69
HARVESTING/COW	14.98	16.45	8.54
PASTURE RENOVATION	41.67	28.48	38.06
WEED & PEST CONTROL/HA	13.58	22.85	47.92
VEHICLE EXPENSES/HA	43.21	64.11	48.52
WAGES/CONTRACT MILKING/COW	10.61	43.75	7.18
<u>FIXED COSTS:</u>			
FARM POWER/COW	0.87	5.91	0.00
SHED EXPENSES/COW	9.99	13.40	3.26
DRAWINGS	39877	38397	85239

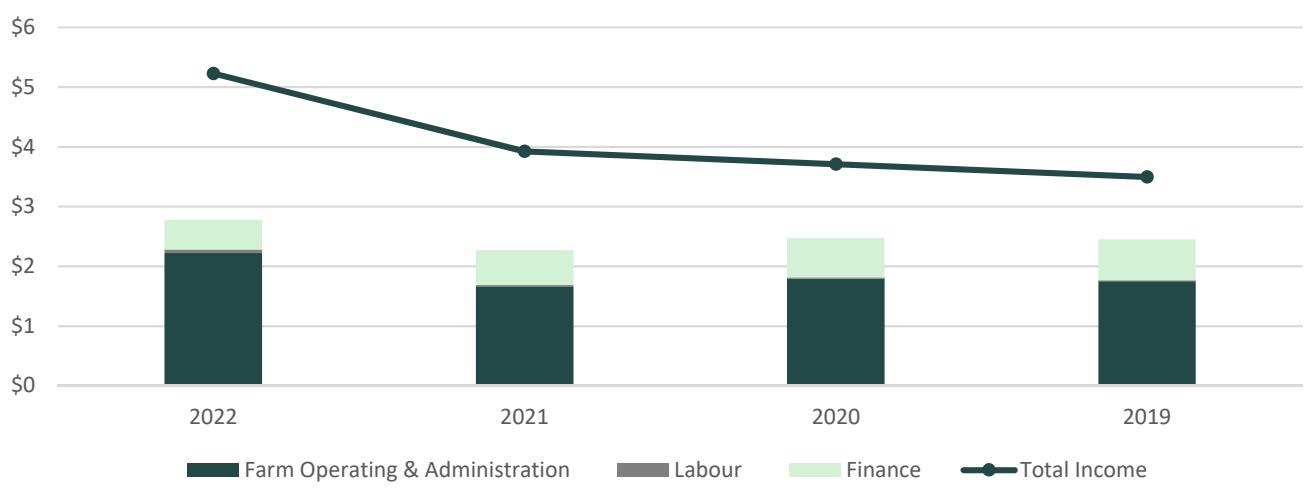
Practice Averages for Farm Owners



Practice Averages for Sharemilkers



Practice Averages for Farm Owners with Sharemilkers



DAIRY BASE EFS BENCHMARKS

(for the 2021/2022 season)

When comparing your results to Dairy Base please be aware there are different assumptions made and calculations used to arrive at the EFS and Operating Costs/Kg MS.

The key difference in the EFS calculation reported in our statistics and those calculated by Dairy Base is the treatment of livestock. In our statistics we make an allowance for changes in market value and numbers whereas Dairy Base only calculate the change in the value of the stock.

When calculating the Operating Costs/Kg MS Dairy Base includes the management salary expense (based on "unpaid" labour utilised in the farming operation) and the depreciation expense.

FARM OWNERS – Based on region

	Operating Costs/Kg MS	EFS/Ha
New Zealand	\$6.41	\$4,287
Waikato	\$6.64	\$4,183
Canterbury	\$5.89	\$6,459
Southland	\$6.55	\$3,983

FARM OWNERS – Based on production system

	Operating Costs/Kg MS	EFS/Ha
System 1	N/A	N/A
System 2	\$6.37	\$3,163
System 3	\$6.15	\$4,062
System 4	\$6.38	\$4,853
System 5	\$6.94	\$4,620

SHAREMILKERS – Based on region

	Operating Costs/Kg MS	EFS/Ha
New Zealand	\$3.69	\$1,774
Waikato	\$3.73	\$1,693

Regions

Waikato
Canterbury
Southland

South of Auckland to Taupo incl. Waipa, Waitomo & Otorohanga
Timaru, Ashburton, Kaiapoi, Culverden
Southland, Invercargill, Gore, Balclutha