

NATIONAL DAIRY MODEL

The national dairy budget depicted below has been constructed via a weighted average of the MAF dairy farm monitoring models. The weighting is based on the number of dairy cows in each region from the 2008 Livestock Improvement survey. The weightings, on the model basis, are as follows:

› Northland	8.0%
› Waikato/Bay of Plenty	41.8%
› Taranaki	12.5%
› Lower North Island	10.2%
› Canterbury	15.5%
› Southland	11.9%

KEY POINTS

2008/09

- › 2008/09 was a relatively forgettable year for dairying in New Zealand, coming on the back of variable weather, a significant decline in the payout throughout the 2008/09 season, and a forecast \$4.55 payout going into 2009/10.
- › Nationally, production was up by 9.8 percent compared with 2007/08, with most of this being a post-drought recovery from 2007/08.
- › Despite the increased production, net cash income dropped 27 percent compared with 2007/08 to \$750 000, very much as a result of the drop in the payout, from an original forecast of \$7.00 per kilogram of milksolids down to \$5.20.
- › Farm working expenses increased again in 2008/09 to an average of \$3.86 per kilogram milksolids, driven by increased feed expenses due to the variable weather, and increased prices pushing up fertiliser expenses.
- › The average dairy farm finishes the year with a cash loss of \$58 500, a 141 percent drop on 2007/08. In the absence of off-farm income, new borrowing, and introduced funds, this loss would be \$130 600.

2009/10

- › Farms in most areas of New Zealand went into the 2009 winter with less than desirable pasture covers and cow condition. While supplementary feed was readily available, the cash to buy it was not.
- › Despite this, farmers are budgeting for a 3 percent increase in production over 2008/09 levels. This helps somewhat to offset the drop in payout, with the result that net cash income decreases 5 percent to \$714 900 in 2009/10.
- › A significant feature of the 2009/10 budgets was farmers' expectation of decreasing their farm working expenses, which are budgeted to drop by 11 percent, to \$3.34 per kilogram milksolids. Major decreases are budgeted for feed, fertiliser, and repairs and maintenance expenses.
- › The average farm, as depicted by the model, still makes a cash loss of \$15 500 in 2009/10. In the absence of off-farm income, new borrowing, and introduced funds, this would grow to almost \$40 000.
- › As a result of the financial losses in 2008/09, the lower than expected payout of \$4.55 per kilogram of milksolids in 2009/10, and some uncertainty around the final payout price, farmer morale is subdued.



Photo: Bob Zuur.

»» TABLE 1: NATIONAL DAIRY MODEL BUDGET¹

	2008/09			2009/10 BUDGET			CHANGE BETWEEN 2008/09 AND 2009/10 (%)
	WHOLE FARM (\$)	PER COW (\$)	PER KG MILKSOLIDS (\$)	WHOLE FARM (\$)	PER COW (\$)	PER KG MILKSOLIDS (\$)	
REVENUE							
Milksolids	701 000	1 788	5.12	673 000	1 717	4.77	-4
Cattle	50 000	128	0.37	44 300	113	0.31	-11
Other farm income	5 800	15	0.04	4 300	11	0.03	-26
LESS:							
Cattle purchases	6 900	18	0.05	6 700	17	0.05	-3
Net cash income	750 000	1 913	5.48	714 900	1 824	5.07	-5
Farm working expenses	528 600	1 349	3.86	470 200	1 200	3.34	-11
Cash operating surplus	221 400	565	1.62	244 700	624	1.74	11
Interest	186 000	474	1.36	174 000	444	1.23	-6
Rent and/or leases	0	0	0.00	0	0	0.00	..
Stock value adjustment	3 700	10	0.03	2 300	6	0.02	-39
Minus depreciation	45 400	116	0.33	45 200	115	0.32	-1
Farm profit before tax	-6 300	-16	-0.05	27 800	71	0.20	-539
Taxation	18 600	47	0.14	2 200	6	0.02	-88
Farm profit after tax	-24 900	-64	-0.18	25 600	65	0.18	-203
Add back depreciation	45 400	116	0.33	45 200	115	0.32	-1
Reverse stock value adjustment	-3 700	-10	-0.03	-2 300	-6	-0.02	-39
Off-farm income	7 800	20	0.06	7 900	20	0.06	1
Discretionary cash	24 600	63	0.18	76 400	195	0.54	211
APPLIED TO:							
Net capital purchases	44 400	113	0.32	29 200	74	0.21	-34
Development	26 200	67	0.19	11 200	29	0.08	-57
Principal repayments	9 600	24	0.07	5 900	15	0.04	-38
Drawings	67 200	171	0.49	61 800	158	0.44	-8
New borrowings	55 700	142	0.41	2 800	7	0.02	-95
Introduced funds	8 600	22	0.06	13 400	34	0.10	56
Cash surplus/deficit	-58 500	-149	-0.43	-15 500	-39	-0.11	-74
Farm surplus for reinvestment²	-50 400	-129	-0.37	6 600	17	0.05	-113
ASSETS AND LIABILITIES							
Farm, forest and building (opening)	5 645 700	14 402	41.25	5 136 400	13 103	36.44	-9
Plant and machinery (opening)	165 600	423	1.21	172 000	439	1.22	4
Stock valuation (opening)	566 400	1 445	4.14	570 200	1 455	4.05	1
Dairy company shares	786 000	2 005	5.74	629 200	1 605	4.46	-20
Other farm related investments (opening)	6 300	16	0.05	0	0	0.00	..
Total farm assets	7 170 000	18 291	52.38	6 507 800	16 602	46.17	-9
Total liabilities (opening)	2 240 300	5 715	16.37	2 359 900	6 020	16.74	5
Total equity (assets-liabilities)	4 929 700	12 576	36.02	4 148 000	10 582	29.43	-16

Notes

1 Figures may not add to totals due to rounding.

2 Farm surplus for reinvestment is the cash available from the farm business, after meeting living costs, which is available for investment on the farm or for principal repayments. It is calculated as discretionary cash less off-farm income and drawings.

Symbol

.. Not applicable.

»» TABLE 2: NATIONAL DAIRY MODEL EXPENDITURE¹

	2008/09			2009/10 BUDGET			CHANGE BETWEEN 2008/09 AND 2009/10 (%)
	WHOLE FARM (\$)	PER COW (\$)	PER KG MILKSOLIDS (\$)	WHOLE FARM (\$)	PER COW (\$)	PER KG MILKSOLIDS (\$)	
FARM WORKING EXPENSES							
Permanent wages	70 800	181	0.52	70 100	179	0.50	-1
Casual wages	5 600	14	0.04	5 100	13	0.04	-8
ACC	1 700	4	0.01	2 000	5	0.01	18
Total labour expenses	78 000	199	0.57	77 300	197	0.55	-1
Animal health	28 700	73	0.21	27 900	71	0.20	-3
Breeding	16 000	41	0.12	15 300	39	0.11	-4
Dairy shed expenses	8 500	22	0.06	8 300	21	0.06	-2
Electricity	19 900	51	0.15	21 300	54	0.15	7
Feed (hay and silage)	53 900	138	0.39	43 500	111	0.31	-19
Feed (feed crops)	2 200	6	0.02	2 200	6	0.02	-1
Feed (grazing)	59 800	152	0.44	50 800	130	0.36	-15
Feed (other)	50 100	128	0.37	39 100	100	0.28	-22
Fertiliser	76 700	196	0.56	66 600	170	0.47	-13
Lime	3 000	8	0.02	2 600	7	0.02	-12
Freight (not elsewhere deducted)	4 900	12	0.04	4 600	12	0.03	-6
Regrassing costs	7 200	18	0.05	5 500	14	0.04	-24
Weed and pest control	3 900	10	0.03	3 800	10	0.03	-3
Fuel	11 800	30	0.09	11 300	29	0.08	-4
Vehicle costs (excluding fuel)	14 700	38	0.11	13 600	35	0.10	-7
Repairs and maintenance	38 500	98	0.28	31 000	79	0.22	-19
Total other working expenses	399 900	1 020	2.92	347 500	886	2.47	-13
Communication costs (phone and mail)	4 000	10	0.03	4 000	10	0.03	0
Accountancy	4 300	11	0.03	4 400	11	0.03	2
Legal and consultancy	3 800	10	0.03	3 100	8	0.02	-17
Other administration	4 527	12	0.03	5 200	13	0.04	14
Water charges (irrigation)	2 200	5	0.02	2 200	6	0.02	2
Rates	10 900	28	0.08	11 400	29	0.08	5
Insurance	6 700	17	0.05	6 900	18	0.05	3
Other expenditure ²	14 200	36	0.10	8 200	21	0.06	-42
Total overhead expenses	50 700	129	0.37	45 400	116	0.32	-10
Total farm working expenses	528 600	1 349	3.86	470 200	1 200	3.34	-11
Wages of management	84 100	215	0.61	83 700	214	0.59	0
Depreciation	45 400	116	0.33	45 200	115	0.32	-1
Total farm operating expenses	658 200	1 679	4.81	599 200	1 528	4.25	-9
CALCULATED RATIOS							
Economic farm surplus (EFS ³)	95 600	244	0.70	118 000	301	0.84	
Farm working expenses/NCI ⁴	71%			65%			
EFS/total farm assets	1%			2%			
EFS less interest and lease/equity	-2%			-2%			
Interest+rent+lease/NCI	24%			24%			
EFS/NCI	10%			15%			
PHYSICAL PARAMETERS							
Effective area (ha)	135			135			
Cows milked	392			392			
Milksolids (kg)	136 873			140 941			

Notes

1 Figures may not add to totals due to rounding.

2 Includes Dairy NZ levy and Accident Compensation Corporation (ACC) employer levy.

3 EFS (or earnings before interest and tax) is calculated as follows: net cash income plus change in livestock values less farm working expenses less depreciation less wages of management (WOM). WOM is calculated as follows: \$38 000 allowance for labour input plus 1 percent of opening total farm assets to a maximum of \$85 000.

4 Net cash income.

»» TABLE 3: KEY PARAMETERS, FINANCIAL RESULTS AND BUDGET FOR THE NATIONAL DAIRY MODEL¹

	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10 BUDGET
Total milksolids revenue/cow (\$)	1 400	1 405	1 488	2 538	1 788	1 717
Kg milksolids/ha	873	958	1 034	992	1 014	1 044
Kg milksolids/cow milked	327	346	361	342	349	360
Milksolids advance to end June (\$/kg)	3.95	3.60	3.65	6.62	4.15	3.77
Milksolids deferred payment (\$/kg)	0.5	0.64	0.50	0.81	1.00	1.05
Cattle income (\$)	38 000	42 900	40 000	55 900	50 000	44 300
Other farm income (\$)	1 200	1 700	2 300	2 700	5 800	4 300
Net cash income (\$)	486 200	536 700	577 900	1 021 900	750 000	714 900
Farm working expenses (\$)	286 000	326 500	369 000	468 400	528 600	470 200
Cash operating surplus	200 100	210 200	208 800	553 400	221 400	244 700
Farm profit before tax (\$)	111 900	110 400	70 000	384 000	-6 300	27 800
Farm surplus for reinvestment ²	39 600	33 600	1 700	263 500	-50 400	6 600
EFS ³ per cow (\$)	302	302	300	1 175	244	301
Farm working expenses/NCI (%)	57	61	63	45	71	65
EFS/total farm assets (%)	3	3	2	8	1	2

Notes

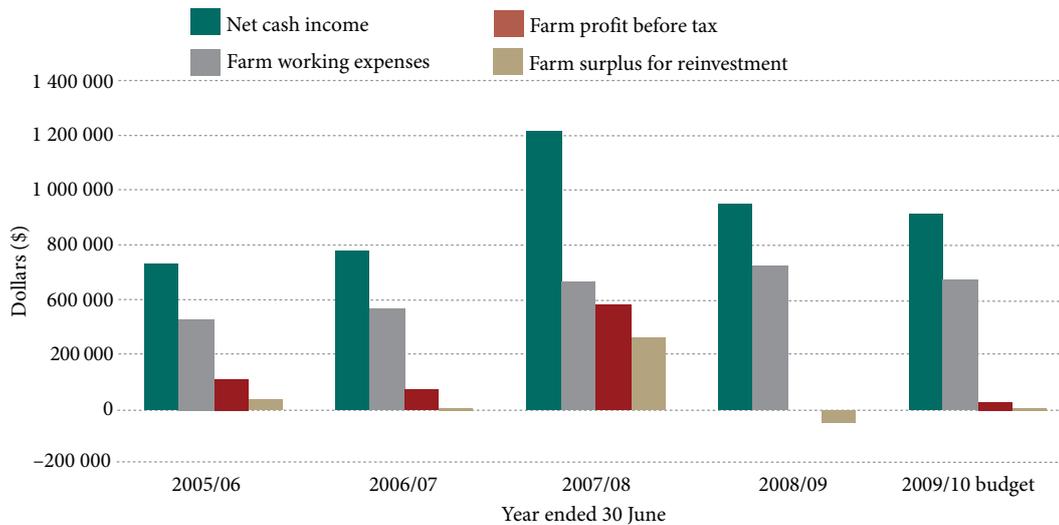
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»» FIGURE 1: NATIONAL DAIRY MODEL PROFITABILITY TRENDS



FURTHER INFORMATION

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