

**Summary Farm Performance - Dairy**  
**South Africa Production Systems Analysis**  
**Increasing Pasture Percentage of Diet**



	Base Year 41%	Model #1 45%	Model #2 49%	Model #3 53%	Model #4 57%
<b>PHYSICAL PARAMETERS</b>					
Number of Cows in Herd	603	580	561	546	532
Total Effective Dairy Hectares	134,0	134,0	134,0	134,0	134,0
<b>Effective Milking Hectares</b>	<b>134,0</b>	<b>134,0</b>	<b>134,0</b>	<b>134,0</b>	<b>134,0</b>
<b>Cows per Milking Hectare</b>	<b>4,50</b>	<b>4,33</b>	<b>4,19</b>	<b>4,07</b>	<b>3,97</b>
<b>Litres per Cow</b>	<b>6 100</b>	<b>5 984</b>	<b>5 868</b>	<b>5 752</b>	<b>5 636</b>
Litres per Cow (ECM)	6 171	6 054	5 936	5 819	5 702
<b>Litres per Milking Hectare</b>	<b>27 450</b>	<b>25 901</b>	<b>24 567</b>	<b>23 437</b>	<b>22 376</b>
Litres per Milking Hectare (ECM)	27 770	26 203	24 853	23 710	22 637
<b>Litre Price</b>	<b>R 4,600</b>	<b>R 4,600</b>	<b>R 4,600</b>	<b>R 4,600</b>	<b>R 4,600</b>
Litre Price (ECM)	R 4,547	R 4,547	R 4,547	R 4,547	R 4,547
<b>Pasture Dry Matter Harvested (tDM/Ha)</b>	<b>11,34</b>	<b>11,79</b>	<b>12,23</b>	<b>12,69</b>	<b>13,12</b>
<b>KEY PERFORMANCE INDICATORS</b>					
<b>Operating Profit per Hectare</b>	<b>R 13 800</b>	<b>R 14 824</b>	<b>R 15 876</b>	<b>R 16 969</b>	<b>R 17 864</b>
<b>Operating Profit per Cow</b>	<b>R 3 067</b>	<b>R 3 425</b>	<b>R 3 792</b>	<b>R 4 165</b>	<b>R 4 500</b>
Operating Profit per Litre (ECM)	R 0,497	R 0,566	R 0,639	R 0,716	R 0,789
Total Assets per Ha at Start of Year (Avg Values)	R 300 832	R 297 971	R 295 531	R 293 715	R 291 787
<b>EQUITY % at Average Values</b>	<b>82,6 %</b>	<b>82,5 %</b>	<b>82,3 %</b>	<b>82,2 %</b>	<b>82,1 %</b>
<b>RETURN ON CAPITAL (ROC) at Average Values</b>	<b>6,01 %</b>	<b>6,41 %</b>	<b>6,82 %</b>	<b>7,23 %</b>	<b>7,59 %</b>
<b>Return on Assets (ROA) at Average Values</b>	<b>5,6 %</b>	<b>6,0 %</b>	<b>6,4 %</b>	<b>6,8 %</b>	<b>7,2 %</b>
ROA including Capital Gain at Average Values	5,6 %	6,0 %	6,4 %	6,8 %	7,2 %
<b>RETURN ON EQUITY (ROE) at Average Values</b>	<b>5,5 %</b>	<b>6,0 %</b>	<b>6,5 %</b>	<b>7,0 %</b>	<b>7,5 %</b>
ROE including Capital Gain at Average Values	5,5 %	6,0 %	6,5 %	7,0 %	7,5 %
<b>OPERATING PROFIT MARGIN</b>	<b>10,2 %</b>	<b>11,6 %</b>	<b>13,1 %</b>	<b>14,6 %</b>	<b>16,1 %</b>
<b>Cost of Production per Litre</b>	<b>R 4,097</b>	<b>R 4,028</b>	<b>R 3,954</b>	<b>R 3,876</b>	<b>R 3,802</b>
Cost of Production per Litre (ECM)	R 4,050	R 3,981	R 3,908	R 3,831	R 3,758
Financing Costs per Litre	R 0,156	R 0,166	R 0,175	R 0,183	R 0,192
Cost of Prod'n + Financing Cost per Litre	R 4,098	R 4,028	R 3,954	R 3,877	R 3,802
<b>Total Operating Expenses per Litre</b>	<b>R 4,417</b>	<b>R 4,355</b>	<b>R 4,289</b>	<b>R 4,219</b>	<b>R 4,150</b>
Total Operating Expenses per Litre (ECM)	R 4,366	R 4,304	R 4,239	R 4,171	R 4,102
Total Operating Expenses as % Gross Revenue	80,9 %	80,2 %	79,5 %	78,7 %	78,0 %
Financing Costs as % Gross Revenue	3,2 %	3,4 %	3,5 %	3,7 %	3,9 %
<b>Core per Cow Cost</b>	<b>R 5 485</b>	<b>R 5 395</b>	<b>R 5 299</b>	<b>R 5 198</b>	<b>R 5 096</b>
<b>Core per Hectare Cost per tDM Pasture Harvest</b>	<b>R 1 253</b>	<b>R 1 168</b>	<b>R 1 094</b>	<b>R 1 028</b>	<b>R 971</b>
<b>Management + Staff Cost per Cow</b>	<b>R 3 465</b>	<b>R 3 406</b>	<b>R 3 344</b>	<b>R 3 281</b>	<b>R 3 217</b>
Management + Staff Cost per Litre	R 0,57	R 0,57	R 0,57	R 0,57	R 0,57
<b>Cows per Full Time Staff Equivalent</b>	<b>38</b>	<b>38</b>	<b>38</b>	<b>38</b>	<b>38</b>
<b>Total Feed (Supplement+Pasture) Cost / Litre</b>	<b>R 2,752</b>	<b>R 2,691</b>	<b>R 2,629</b>	<b>R 2,563</b>	<b>R 2,498</b>
<b>Pasture Cost per Litre</b>	<b>R 0,495</b>	<b>R 0,525</b>	<b>R 0,553</b>	<b>R 0,580</b>	<b>R 0,608</b>
<b>Supplement Cost per Litre</b>	<b>R 2,257</b>	<b>R 2,166</b>	<b>R 2,075</b>	<b>R 1,983</b>	<b>R 1,891</b>
<b>Pasture as % of Total Consumed</b>	<b>41,0 %</b>	<b>45,0 %</b>	<b>49,0 %</b>	<b>53,0 %</b>	<b>57,0 %</b>
<b>Average Cost of All Consumed Feed (/tDM)</b>	<b>R 3 287</b>	<b>R 3 193</b>	<b>R 3 098</b>	<b>R 2 998</b>	<b>R 2 899</b>
<b>Pasture Cost (Per tDM)</b>	<b>R 2 516</b>	<b>R 2 442</b>	<b>R 2 373</b>	<b>R 2 305</b>	<b>R 2 246</b>
<b>Forage Cost (/tDM Consumed incl.wastage)</b>	<b>R 2 495</b>	<b>R 2 493</b>	<b>R 2 490</b>	<b>R 2 487</b>	<b>R 2 484</b>
<b>Concentrate Cost (/tDM Consumed incl.wastage)</b>	<b>R 4 611</b>	<b>R 4 589</b>	<b>R 4 567</b>	<b>R 4 546</b>	<b>R 4 525</b>
Pasture Direct Cost (Per tDM consumed)	R 1 199	R 1 154	R 1 112	R 1 071	R 1 036
Forage Purchase/Production Cost (/tDM consumed)	R 1 677	R 1 676	R 1 675	R 1 674	R 1 672
Concentrate Purchase/Production Cost (/tDM con.)	R 4 425	R 4 402	R 4 379	R 4 355	R 4 332



**Physical Summary - Dairy**  
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**Increasing Pasture Percentage of Diet**



	Base Year 41%	Model #1 45%	Model #2 49%	Model #3 53%	Model #4 57%
<b>PHYSICAL PARAMETERS</b>					
Number of Cows in Herd	603	580	561	546	532
Effective Milking Hectares	134,0	134,0	134,0	134,0	134,0
<b>Cows per Milking Hectare</b>	<b>4,50</b>	<b>4,33</b>	<b>4,19</b>	<b>4,07</b>	<b>3,97</b>
Cows per Milking Pasture Hectare	4,63	4,45	4,30	4,19	4,08
Cow Liveweight per Milking Hectare	2 520	2 415	2 328	2 257	2 192
<b>Litre Price</b>	<b>R 4,600</b>	<b>R 4,600</b>	<b>R 4,600</b>	<b>R 4,600</b>	<b>R 4,600</b>
<b>Litres per Cow</b>	<b>6 100</b>	<b>5 984</b>	<b>5 868</b>	<b>5 752</b>	<b>5 636</b>
Litres (ECM) as Multiple of Cow Liveweight	11,02	10,85	10,68	10,50	10,33
<b>Litres per Milking Hectare</b>	<b>27 450</b>	<b>25 901</b>	<b>24 567</b>	<b>23 437</b>	<b>22 376</b>
Milkfat Percentage (mass/mass)	3,89 %	3,89 %	3,89 %	3,89 %	3,89 %
Protein Percentage (mass/mass)	3,36 %	3,36 %	3,36 %	3,36 %	3,36 %
Protein as a Percentage of Milkfat	86,3 %	86,3 %	86,3 %	86,3 %	86,3 %
<b>PASTURE &amp; SUPPLEMENTS</b>					
<b>Pasture Dry Matter Harvested (tDM/Ha)</b>	<b>11,34</b>	<b>11,79</b>	<b>12,23</b>	<b>12,69</b>	<b>13,12</b>
Estimated Dryland Pasture Harvest (tDM/Ha)	6,30	6,55	6,79	7,05	7,29
Estimated Irrigated Pasture Harvest (tDM/Ha)	12,60	13,10	13,59	14,10	14,58
<b>Percentage Hectares Irrigated</b>	<b>80,0 %</b>	<b>80,0 %</b>	<b>80,0 %</b>	<b>80,0 %</b>	<b>80,0 %</b>
Nitrogen Applied per Hectare	315,0	315,0	315,0	315,0	315,0
Total Grazed & Conserved Pasture (tDM/Ha)	11,34	11,79	12,23	12,69	13,12
Grazed Pasture (tDM/Ha)	11,19	11,63	12,07	12,54	12,97
Conserved Pasture (tDM/Ha)	0,15	0,15	0,15	0,15	0,15
<b>Pasture as % of Total Consumed</b>	<b>41,0 %</b>	<b>45,0 %</b>	<b>49,0 %</b>	<b>53,0 %</b>	<b>57,0 %</b>
Supplement as % of Total Consumed	59,0 %	55,0 %	51,0 %	47,0 %	43,0 %
- Forage as % of Total Consumed	22,0 %	20,5 %	19,0 %	17,5 %	16,0 %
- Concentrate as % of Total Consumed	37,0 %	34,5 %	32,0 %	29,5 %	27,0 %
Pasture Consumed Per Cow (estimated tDM)	2,37	2,56	2,76	2,94	3,13
Forage Consumed Per Cow (estimated tDM)	1,40	1,29	1,18	1,08	0,97
- Homegrown Forage Consumed (est tDM/cow)	1,35	1,24	1,14	1,04	0,93
- Imported Forage Consumed (est tDM/cow)	0,05	0,05	0,04	0,04	0,03
Concentrate Consumed Per Cow (estimated tAF)	1,99	1,84	1,68	1,53	1,38
<b>Total Consumed Per Cow (estimated tDM)</b>	<b>5,52</b>	<b>5,47</b>	<b>5,42</b>	<b>5,37</b>	<b>5,31</b>
Feed Conversion Efficiency (kgsDM/kgMS)	11,89	11,97	12,06	12,14	12,23
<b>Pasture Cost per Litre</b>	<b>R 0,495</b>	<b>R 0,525</b>	<b>R 0,553</b>	<b>R 0,580</b>	<b>R 0,608</b>
<b>Supplement Cost per Litre</b>	<b>R 2,257</b>	<b>R 2,166</b>	<b>R 2,075</b>	<b>R 1,983</b>	<b>R 1,891</b>
<b>Total Feed (Supplement+Pasture) Cost / Litre</b>	<b>R 2,752</b>	<b>R 2,691</b>	<b>R 2,629</b>	<b>R 2,563</b>	<b>R 2,498</b>
<b>Heifer &amp; 'Other' Total Feed Cost per Litre</b>	<b>R 0,622</b>	<b>R 0,639</b>	<b>R 0,656</b>	<b>R 0,672</b>	<b>R 0,690</b>
<b>Average Cost of All Consumed Feed (/tDM)</b>	<b>R 3 287</b>	<b>R 3 193</b>	<b>R 3 098</b>	<b>R 2 998</b>	<b>R 2 899</b>
<b>Pasture Cost (Per tDM)</b>	<b>R 2 516</b>	<b>R 2 442</b>	<b>R 2 373</b>	<b>R 2 305</b>	<b>R 2 246</b>
- Direct Pasture Cost (Per tDM)	R 1 199	R 1 154	R 1 112	R 1 071	R 1 036
- Variable Pasture Cost (Per tDM)	R 434	R 431	R 429	R 426	R 423
- Capital Pasture Cost (Per tDM)	R 883	R 857	R 833	R 808	R 787
Average Cost of All Supplements (/tDM Consumed)	R 3 822	R 3 808	R 3 793	R 3 778	R 3 766
<b>Forage Cost (/tDM Consumed incl.wastage)</b>	<b>R 2 495</b>	<b>R 2 493</b>	<b>R 2 490</b>	<b>R 2 487</b>	<b>R 2 484</b>
- Purchase/Production Forage Cost (/tDM)	R 1 397	R 1 396	R 1 395	R 1 395	R 1 394
- Homegrown Forage Cost (Per tDM)	R 1 500	R 1 500	R 1 500	R 1 500	R 1 500
- Imported Forage Cost (Per tDM)	R 2 046	R 2 046	R 2 046	R 2 046	R 2 046
- Variable Forage Cost (Per tDM)	R 457	R 453	R 448	R 443	R 438
- Capital Forage Cost (Per tDM)	R 224	R 227	R 231	R 235	R 240
Home Produced Forage as Percent of Total	96,1 %	96,2 %	96,4 %	96,4 %	96,5 %
<b>Concentrate Cost (/tDM Consumed incl.wastage)</b>	<b>R 4 611</b>	<b>R 4 589</b>	<b>R 4 567</b>	<b>R 4 546</b>	<b>R 4 525</b>
- Purchase/Production Concentrate Cost (/tDM)	R 4 338	R 4 315	R 4 292	R 4 269	R 4 247
- Variable Concentrate Cost (Per tDM)	R 114	R 113	R 112	R 111	R 110
- Capital Concentrate Cost (Per tDM)	R 68	R 70	R 73	R 76	R 79



**Operating Profit - Dairy**  
**South Africa Production Systems Analysis**  
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	Base Year 41%	Model #1 45%	Model #2 49%	Model #3 53%	Model #4 57%
<b>REVENUE</b>	<b>R -</b>	<b>R -</b>	<b>R -</b>	<b>R -</b>	<b>R -</b>
Manufacturing Milk Sales	16 920 180	15 965 312	15 142 961	14 446 723	13 792 419
Quota/Contract/Dividends for Milk	0	0	0	0	0
Livestock Sales	1 144 000	1 102 400	1 070 800	1 046 000	1 012 400
- Less Livestock Purchases	(17 500)	(17 500)	(17 500)	(17 500)	(17 500)
Other Revenue	50 000	50 000	50 000	50 000	50 000
<b>Total Operating Revenue</b>	<b>18 096 680</b>	<b>17 100 212</b>	<b>16 246 261</b>	<b>15 525 223</b>	<b>14 837 319</b>
<b>EXPENSES</b>	<b>R -</b>	<b>R -</b>	<b>R -</b>	<b>R -</b>	<b>R -</b>
Administration (incl. professional fees)	187 600	187 600	187 600	187 600	187 600
Animal Health	627 120	576 812	532 393	493 317	456 464
Breeding & Herd Testing	277 380	255 475	236 151	219 176	203 168
Dairy Shed Expenses	159 795	150 838	143 129	136 609	130 481
Electricity	319 590	301 790	286 479	273 538	261 379
Feeds / Supplements (Total)	7 942 470	7 305 372	6 743 113	6 250 874	5 797 264
- Grazing / Support Area	154 970	154 970	154 970	154 970	154 970
- Cropping (green feed)	46 900	46 900	46 900	46 900	46 900
- Grains, Pellets & Concentrates	5 985 000	5 352 480	4 794 000	4 304 740	3 853 920
- Forages (incl. hay, silages, byproducts)	1 755 600	1 751 022	1 747 243	1 744 264	1 741 474
Fertiliser (Total)	777 200	777 200	777 200	777 200	777 200
- Nitrogen	495 800	495 800	495 800	495 800	495 800
- Phosphate & All Other Fertiliser	281 400	281 400	281 400	281 400	281 400
Freight	0	0	0	0	0
Irrigation	710 200	710 200	710 200	710 200	710 200
Pasture Maintenance & Renovation	274 700	274 700	274 700	274 700	274 700
Rates, Licenses, Levies & Insurance	221 100	221 100	221 100	221 100	221 100
Repairs & Maintenance	633 150	597 075	565 980	539 621	514 846
Vehicle Expenses (including fuel & oil)	814 050	763 961	720 519	683 331	648 346
Wages, Salaries & Employment Exp.	1 688 400	1 598 091	1 520 679	1 455 629	1 394 540
<b>Total Operating Expenses</b>	<b>14 632 755</b>	<b>13 720 214</b>	<b>12 919 243</b>	<b>12 222 895</b>	<b>11 577 288</b>
<b>OPERATING SURPLUS</b>	<b>3 463 925</b>	<b>3 379 998</b>	<b>3 327 018</b>	<b>3 302 328</b>	<b>3 260 031</b>
<b>ADJUSTMENTS</b>	<b>R -</b>	<b>R -</b>	<b>R -</b>	<b>R -</b>	<b>R -</b>
+ Change in Livestock Numbers	0	0	0	0	0
+ Change in Feeds/Supplements on Hand	0	144 475	270 100	381 300	486 675
- Imputed Labour & Management	400 720	377 300	355 570	335 830	316 880
- Depreciation	795 960	742 632	696 089	655 855	617 971
+ Other Revenue Adjustments	0	0	0	0	0
- Other Expenses Adjustments	418 100	418 100	418 100	418 100	418 100
<b>Total Adjustments</b>	<b>(1 614 780)</b>	<b>(1 393 557)</b>	<b>(1 199 659)</b>	<b>(1 028 485)</b>	<b>(866 276)</b>
<b>OPERATING PROFIT/(LOSS)</b>	<b>1 849 145</b>	<b>1 986 441</b>	<b>2 127 359</b>	<b>2 273 843</b>	<b>2 393 755</b>



**Operating Profit Per Cow - Dairy**  
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<b>REVENUE</b>	<b>R -</b>	<b>R -</b>	<b>R -</b>	<b>R -</b>	<b>R -</b>
Manufacturing Milk Sales	28 060	27 526	26 993	26 459	25 926
Quota/Contract/Dividends for Milk	0	0	0	0	0
Livestock Revenue	1 868	1 871	1 878	1 884	1 870
Other Revenue	83	86	89	92	94
<b>Gross Revenue</b>	<b>30 011</b>	<b>29 483</b>	<b>28 959</b>	<b>28 434</b>	<b>27 890</b>
<b>EXPENSES</b>	<b>R -</b>	<b>R -</b>	<b>R -</b>	<b>R -</b>	<b>R -</b>
Administration (incl. professional fees)	311	323	334	344	353
Animal Health	1 040	995	949	904	858
Breeding & Herd Testing	460	440	421	401	382
Dairy Shed Expenses	265	260	255	250	245
Electricity	530	520	511	501	491
Feeds / Supplements (Total)	13 865	13 067	12 284	11 516	10 768
- Grazing / Support Area	950	988	1 022	1 050	1 077
- Cropping (green feed)	78	81	84	86	88
- Grains, Pellets & Concentrates	9 925	9 228	8 545	7 884	7 244
- Forages (incl. hay, silages, byproducts)	2 911	2 770	2 633	2 496	2 359
Fertiliser (Total)	1 289	1 340	1 385	1 423	1 461
- Nitrogen	822	855	884	908	932
- Phosphate & All Other Fertiliser	467	485	502	515	529
Freight	0	0	0	0	0
Irrigation	1 178	1 224	1 266	1 301	1 335
Pasture Maintenance & Renovation	456	474	490	503	516
Rates, Licenses, Levies & Insurance	367	381	394	405	416
Repairs & Maintenance	1 050	1 029	1 009	988	968
Vehicle Expenses (including fuel & oil)	1 350	1 317	1 284	1 252	1 219
Management & Staff Expenses	3 465	3 406	3 344	3 281	3 217
- Wages, Salaries & Employment Exp.	2 800	2 755	2 711	2 666	2 621
- Imputed Labour & Management	665	651	634	615	596
Depreciation	1 320	1 280	1 241	1 201	1 162
<b>Gross Expenses</b>	<b>26 945</b>	<b>26 058</b>	<b>25 167</b>	<b>24 270</b>	<b>23 390</b>
Gross Exp excl. Imputed Labour/Mgmt & Dep'n	24 960	24 127	23 293	22 454	21 633
Core per Cow Cost	5 485	5 395	5 299	5 198	5 096
<b>OPERATING PROFIT/(LOSS)</b>	<b>3 067</b>	<b>3 425</b>	<b>3 792</b>	<b>4 165</b>	<b>4 500</b>



**Operating Profit Per Hectare - Dairy**  
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	Base Year 41%	Model #1 45%	Model #2 49%	Model #3 53%	Model #4 57%
<b>REVENUE</b>	<b>R -</b>	<b>R -</b>	<b>R -</b>	<b>R -</b>	<b>R -</b>
Manufacturing Milk Sales	126 270	119 144	113 007	107 811	102 929
Quota/Contract/Dividends for Milk	0	0	0	0	0
Livestock Revenue	8 407	8 096	7 860	7 675	7 425
Other Revenue	373	373	373	373	373
<b>Gross Revenue</b>	<b>135 050</b>	<b>127 614</b>	<b>121 241</b>	<b>115 860</b>	<b>110 726</b>
<b>EXPENSES</b>	<b>R -</b>	<b>R -</b>	<b>R -</b>	<b>R -</b>	<b>R -</b>
Administration (incl. professional fees)	1 400	1 400	1 400	1 400	1 400
Animal Health	4 680	4 305	3 973	3 681	3 406
Breeding & Herd Testing	2 070	1 907	1 762	1 636	1 516
Dairy Shed Expenses	1 193	1 126	1 068	1 019	974
Electricity	2 385	2 252	2 138	2 041	1 951
Feeds / Supplements (Total)	62 392	56 560	51 426	46 923	42 751
- Grazing / Support Area	4 277	4 277	4 277	4 277	4 277
- Cropping (green feed)	350	350	350	350	350
- Grains, Pellets & Concentrates	44 664	39 944	35 776	32 125	28 761
- Forages (incl. hay, silages, byproducts)	13 101	11 989	11 023	10 171	9 364
Fertiliser (Total)	5 800	5 800	5 800	5 800	5 800
- Nitrogen	3 700	3 700	3 700	3 700	3 700
- Phosphate & All Other Fertiliser	2 100	2 100	2 100	2 100	2 100
Freight	0	0	0	0	0
Irrigation	5 300	5 300	5 300	5 300	5 300
Pasture Maintenance & Renovation	2 050	2 050	2 050	2 050	2 050
Rates, Licenses, Levies & Insurance	1 650	1 650	1 650	1 650	1 650
Repairs & Maintenance	4 725	4 456	4 224	4 027	3 842
Vehicle Expenses (including fuel & oil)	6 075	5 701	5 377	5 099	4 838
Management & Staff Expenses	15 590	14 742	14 002	13 369	12 772
- Wages, Salaries & Employment Exp.	12 600	11 926	11 348	10 863	10 407
- Imputed Labour & Management	2 990	2 816	2 654	2 506	2 365
Depreciation	5 940	5 542	5 195	4 894	4 612
<b>Gross Expenses</b>	<b>121 250</b>	<b>112 789</b>	<b>105 365</b>	<b>98 891</b>	<b>92 862</b>
Gross Exp excl. Imputed Labour/Mgmt & Dep'n	112 320	104 432	97 517	91 490	85 886
Core per Hectare Cost	14 210	13 764	13 377	13 046	12 733
<b>OPERATING PROFIT/(LOSS)</b>	<b>13 800</b>	<b>14 824</b>	<b>15 876</b>	<b>16 969</b>	<b>17 864</b>



**Operating Profit Per Litre (c/l ECM)**  
**South Africa Production Systems Analysis**  
**Increasing Pasture Percentage of Diet**



	Base Year 41%	Model #1 45%	Model #2 49%	Model #3 53%	Model #4 57%
<b>REVENUE (cents/litre ECM)</b>					
Manufacturing Milk Sales	454,70	454,70	454,70	454,70	454,70
Quota/Contract/Dividends for Milk	0,00	0,00	0,00	0,00	0,00
Livestock Revenue	30,27	30,90	31,63	32,37	32,80
Other Revenue	1,34	1,42	1,50	1,57	1,65
<b>Gross Revenue</b>	<b>486,32</b>	<b>487,02</b>	<b>487,83</b>	<b>488,64</b>	<b>489,15</b>
<b>EXPENSES (cents/litre ECM)</b>					
Administration (incl. professional fees)	5,04	5,34	5,63	5,90	6,18
Animal Health	16,85	16,43	15,99	15,53	15,05
Breeding & Herd Testing	7,45	7,28	7,09	6,90	6,70
Dairy Shed Expenses	4,29	4,30	4,30	4,30	4,30
Electricity	8,59	8,60	8,60	8,61	8,62
Feeds / Supplements (Total)	224,68	215,85	206,92	197,90	188,86
- Grazing / Support Area	15,40	16,32	17,21	18,04	18,89
- Cropping (green feed)	1,26	1,34	1,41	1,48	1,55
- Grains, Pellets & Concentrates	160,84	152,44	143,95	135,49	127,05
- Forages (incl. hay, silages, byproducts)	47,18	45,76	44,35	42,90	41,37
Fertiliser (Total)	20,89	22,14	23,34	24,46	25,62
- Nitrogen	13,32	14,12	14,89	15,60	16,35
- Phosphate & All Other Fertiliser	7,56	8,01	8,45	8,86	9,28
Freight	0,00	0,00	0,00	0,00	0,00
Irrigation	19,09	20,23	21,33	22,35	23,41
Pasture Maintenance & Renovation	7,38	7,82	8,25	8,65	9,06
Rates, Licenses, Levies & Insurance	5,94	6,30	6,64	6,96	7,29
Repairs & Maintenance	17,01	17,00	16,99	16,98	16,97
Vehicle Expenses (including fuel & oil)	21,88	21,76	21,64	21,51	21,37
Management & Staff Expenses	56,14	56,26	56,34	56,38	56,42
- Wages, Salaries & Employment Exp.	45,37	45,51	45,66	45,81	45,97
- Imputed Labour & Management	10,77	10,75	10,68	10,57	10,45
Depreciation	21,39	21,15	20,90	20,64	20,37
<b>Gross Expenses</b>	<b>436,62</b>	<b>430,45</b>	<b>423,95</b>	<b>417,08</b>	<b>410,23</b>
Gross Exp excl. Imputed Labour/Mgmt & Dep'n	404,46	398,55	392,37	385,86	379,41
Core Cost Structure per Litre (ECM)	196,20	197,90	199,43	200,73	202,05
<b>OPERATING PROFIT/(LOSS)</b>	<b>49,69</b>	<b>56,57</b>	<b>63,88</b>	<b>71,57</b>	<b>78,92</b>



**Operating Profit Per Litre (c/l)**  
**South Africa Production Systems Analysis**  
**Increasing Pasture Percentage of Diet**



	Base Year 41%	Model #1 45%	Model #2 49%	Model #3 53%	Model #4 57%
<b>REVENUE (cents/litre)</b>					
Manufacturing Milk Sales	460,00	460,00	460,00	460,00	460,00
Quota/Contract/Dividends for Milk	0,00	0,00	0,00	0,00	0,00
Livestock Revenue	30,63	31,26	32,00	32,75	33,18
Other Revenue	1,36	1,44	1,52	1,59	1,67
<b>Gross Revenue</b>	<b>491,98</b>	<b>492,70</b>	<b>493,52</b>	<b>494,34</b>	<b>494,85</b>
<b>EXPENSES (cents/litre)</b>					
Administration (incl. professional fees)	5,10	5,41	5,70	5,97	6,26
Animal Health	17,05	16,62	16,17	15,71	15,22
Breeding & Herd Testing	7,54	7,36	7,17	6,98	6,78
Dairy Shed Expenses	4,34	4,35	4,35	4,35	4,35
Electricity	8,69	8,70	8,70	8,71	8,72
Feeds / Supplements (Total)	227,29	218,37	209,33	200,21	191,06
- Grazing / Support Area	15,58	16,51	17,41	18,25	19,11
- Cropping (green feed)	1,28	1,35	1,42	1,49	1,56
- Grains, Pellets & Concentrates	162,71	154,22	145,63	137,07	128,53
- Forages (incl. hay, silages, byproducts)	47,73	46,29	44,87	43,40	41,85
Fertiliser (Total)	21,13	22,39	23,61	24,75	25,92
- Nitrogen	13,48	14,29	15,06	15,79	16,54
- Phosphate & All Other Fertiliser	7,65	8,11	8,55	8,96	9,39
Freight	0,00	0,00	0,00	0,00	0,00
Irrigation	19,31	20,46	21,57	22,61	23,69
Pasture Maintenance & Renovation	7,47	7,91	8,34	8,75	9,16
Rates, Licenses, Levies & Insurance	6,01	6,37	6,72	7,04	7,37
Repairs & Maintenance	17,21	17,20	17,19	17,18	17,17
Vehicle Expenses (including fuel & oil)	22,13	22,01	21,89	21,76	21,62
Management & Staff Expenses	56,80	56,92	57,00	57,04	57,08
- Wages, Salaries & Employment Exp.	45,90	46,04	46,19	46,35	46,51
- Imputed Labour & Management	10,89	10,87	10,80	10,69	10,57
Depreciation	21,64	21,40	21,15	20,88	20,61
<b>Gross Expenses</b>	<b>441,71</b>	<b>435,47</b>	<b>428,89</b>	<b>421,94</b>	<b>415,01</b>
Gross Exp excl. Imputed Labour/Mgmt & Dep'n	409,18	403,20	396,95	390,36	383,83
Core Cost Structure per Litre	198,49	200,21	201,76	203,07	204,41
<b>OPERATING PROFIT/(LOSS)</b>	<b>50,27</b>	<b>57,23</b>	<b>64,62</b>	<b>72,40</b>	<b>79,84</b>

