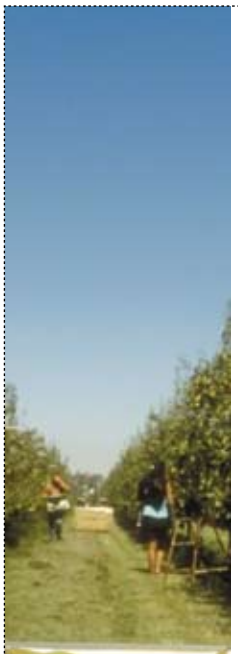

2009 HORTICULTURE AND ARABLE MONITORING

PIPFRUIT

THIS REPORT CONTAINS THE KEY RESULTS FROM THE MINISTRY OF AGRICULTURE AND FORESTRY'S 2009 PIPFRUIT MONITORING PROGRAMME.

KEY POINTS

- Favourable climatic conditions will see growers achieve a significant lift in export volumes in 2009 of 40 percent and 13 percent in the Hawkes Bay and Nelson regions, respectively. Strong return bloom on frost affected crops in Hawkes Bay, and recently planted orchards coming into full production, are also contributing factors.
- Fruit quality is good, assisted by favourable weather conditions and access to an adequate supply of seasonal labour during harvest via the Recognised Seasonal Employer (RSE) scheme.
- Early season sales into Asia experienced good demand with similar prices to last year. However, sales into Europe, our main markets for Royal Gala and Braeburn, are more challenging due to large volumes of competing fruit and weakened consumer demand as a result of the recession. Even so, growers and exporters are only predicting a small reduction in export returns compared to last season, averaging $24 per export carton. The increased proportion of higher paying varieties in the export mix of both models is boosting average export returns along with a more favourable exchange rate.
- Should the anticipated market returns be realised, both orchard models will achieve a significant lift in profit. This run of two consecutive years of improved financial outcome will allow growers to reduce debt levels and bolster investment in orchard redevelopment and capital equipment.

TABLE 1: KEY PARAMETERS, FINANCIAL RESULTS AND BUDGETS FOR THE PIPFRUIT ORCHARD MODELS

YEAR ENDED 31 DECEMBER	2005	2006	2007	2008	2009 BUDGET
HAWKES BAY MODEL					
Total area (ha)	21.3	28	28	28	28
Planted area (ha)	17	22	22	22	22
Total TCE[1]	50 373	57 401	63 279	56 070	68 193
Export TCE	32 804	38 039	43 671	35 485	49 867
Weighted average return ($/export TCE)[2]	15.05	20.72	19.63	24.55	24.20
Net cash income ($)	542 900	849 900	918 100	948 100	1 266 300
Orchard working expenses ($)	593 700	690 400	791 700	771 700	931 200
Orchard profit before tax ($)	–124 700	75 400	32 800	80 900	248 300
Orchard surplus for reinvestment ($)[3]	–143 300	42 000	–5 600	31 600	186 700
NELSON MODEL					
Total area (ha)	28	28	29	29	29
Planted area (ha)	26	26	27	27	27
Total TCE	84 955	82 089	91 494	75 474	82 693
Export TCE	64 413	60 151	64 937	55 499	62 986
Weighted average return ($/export TCE)	13.09	19.62	18.89	24.82	23.72
Net cash income ($)	915 300	1 301 100	1 305 000	1 439 300	1 550 200
Orchard working expenses ($)	1 025 200	1 116 600	1 227 500	1 125 200	1 201 100
Orchard profit before tax ($)	–242 600	3 000	–48 800	177 000	223 000
Orchard surplus for reinvestment ($)	–208 200	17 600	–77 200	104 600	108 000

Notes
Figures may not add to totals due to rounding.
1 Tray carton equivalent is a measure of apple and pear weight. A TCE is defined as 18.6 kg packed weight which equates to 18.0 kg sale weight.
2 Returns per export TCE are expressed at free alongside ship (FAS return). This is the value of the product at the ship's side net of commission, additional packaging costs and controlled atmosphere or SmartFreshTM costs.
3 Orchard surplus for reinvestment represents cash available from the orchard business, after meeting living costs, which is available for investment on the orchard or for principal repayments. It is calculated as discretionary cash less off-orchard income and drawings.

Ministry of Agriculture and Forestry
Te Manatū Ahuwhenua, Ngāherehere

HAWKES BAY PIPFRUIT

FINANCIAL PERFORMANCE OF THE HAWKES BAY PIPFRUIT MODEL IN 2008

The 2007/08 growing season was characterised by two severe frost events that significantly reduced gross and export yields in 2008, particularly in Braeburn. However, the lower crop was offset by higher returns. The model returned an orchard profit before tax of $80 900, more than double the modest profit of $32 800 achieved in the previous year.

The Hawkes Bay pipfruit model remains at 22 planted hectares, with 15 hectares owned and 7 hectares leased.

REVENUE POTENTIAL CURTAILED BY FROST

Two severe frosts during flowering on 4 October and 20 October 2007 reduced gross yield by 11 percent, with the yield for Braeburn (the variety most affected) down by 27 percent. With growers also removing a proportion of Braeburn trees in winter 2007, the combined effect was that the 2008 export Braeburn crop in the orchard model was around half of what is was in 2007.

Jazz™, an early flowering variety, also suffered frost damage but the full extent of the damage was masked by new and frost-protected plantings coming on stream. The Pacific series was also impacted, particularly Pacific Beauty™ where dormancy breakers had been applied to advance flowering. Royal Gala compensated for the damage by setting its crop on later flowers. This led to small fruit size at harvest with a 119 count average. This was down from an average count of 112 achieved over the past few years.

CAREFUL CROP MANAGEMENT DELIVERED GOOD EXPORT QUALITY

Many growers with frost-affected Braeburn crops in 2008 picked this fruit for juice rather than packing it for export. Lighter crops as a result of the frost led to higher bitter pit risk in susceptible varieties such as Braeburn and Jazz™. In response to quality issues experienced in 2007, significant investment was made by growers and packhouses in the risk assessment of crops prior to harvest, and in post-harvest management to limit fruit quality problems in-market later on. As a consequence, the average export recovery rate for Braeburn in 2008 fell to 51 percent, well below its long-term average of 72 percent. Sending fruit straight to processing was also an opportunity to salvage a fixed value for the crop, particularly at a time of high juice prices, rather than harvest for export and risk post-harvest storage disorders, costly repacking and uncertain returns.

Overall export packout of the entire crop was just 63 percent, the lowest for many seasons.

GOOD EXPORT RETURNS COMPENSATE FOR REDUCED CROP

The average return per export carton of $24.55 exceeded expectations (Table 2). Lower stocks of pipfruit worldwide were caused by a low carryover of northern hemisphere fruit and reduced crops from all southern hemisphere suppliers. This led to good market demand and an increase in price of up to 20 percent in some markets. This lift in price, combined with a weakening of the New Zealand dollar towards the end of the selling season provided growers with their best market returns in recent years.

Growers who salvaged a good Braeburn crop for export cashed in as Braeburn prices averaged $25.25 per carton, around $10 per carton higher than 2007.

TABLE 2: HAWKES BAY PIPFRUIT MODEL FAS[1] EXPORT RETURNS

YEAR ENDED 31 DECEMBER VARIETY	2005 ($TCE[2])	2006 ($TCE)	2007 ($TCE)	2008 ($TCE)	2009 BUDGET ($TCE)
Braeburn	10.09	19.38	15.15	25.25	20.50
Fuji	22.39	25.14	26.81	26.90	28.00
Granny Smith	14.13	19.13	17.52	21.40	22.00
Jazz™	30.63	35.15	30.26	30.30	31.00
Pacific Beauty™	19.95	21.53	21.30	24.35	28.60
Pacific Queen™	18.54	23.86	22.89	27.00	40.00
Pacific Rose™	16.33	22.44	21.24	24.10	28.00
Pink Lady™	23.25	28.52	26.31	29.50	29.00
Royal Gala	15.44	20.31	19.71	22.25	21.90
Weighted average	**15.05**	**20.72**	**19.63**	**24.55**	**24.20**

Notes
1 Free alongside ship.
2 Tray carton equivalent.

SIGNIFICANT INCREASE IN UNIT COSTS

Despite a reduction in gross yield of 11 percent, orchard working expenses for the model declined by only 3 percent compared with the previous season. This was influenced by price increases in fuel, labour and post-harvest charges. When orchard working expenses are expressed on a per export carton basis, the impact of these price increases against a reduced crop becomes significant, at $21.75 per export carton in 2008, up from $18.13 in 2006 and 2007.

When total orchard operating expenses are considered, which includes interest expenses, lease, depreciation and wages of management, these climbed to a staggering $25.83 per export carton in 2008. This is up from $21.38 in 2007, demonstrating the huge impact the poor crop of 2008 had on cost of production.

Labour expenses increased, driven by a rise in the minimum wage rate in April 2008, the higher cost of labour under the RSE scheme, inflationary pressure, as well as labour contractors passing on these increased costs to retain their margins. Harvesting costs reached $2.01 per gross carton, up 5 percent on 2007.

Post harvest costs also increased as operators passed on the rising costs of labour, electricity and fuel to growers. In 2008 post harvest costs came to $10.15 per export carton compared with $9.03 per export carton in 2007. Increases in fuel prices pushed cartage rates to 23 cents per gross carton, up from 19 cents in 2007. Post harvest costs represent almost half of all costs involved in producing an export carton of apples.

Operating expenses per hectare increased only slightly as growers tried to manage expenditure in the face of a reduced crop. Expenditure on fertiliser, weed and pest control, and repairs and maintenance was held back against increases in fuel and vehicle expenditure.

NET RESULT BETTER THAN EXPECTED

Despite a lower crop due to frosts, and a significant increase in unit costs, growers in Hawkes Bay achieved a better than expected outcome in 2008, due to good export returns for all varieties, particularly Braeburn and Royal Gala. The model returned a cash operating surplus of $176 400, up 40 percent on 2007. Interest,

lease and depreciation expenses were similar to 2007 resulting in an orchard profit before tax of $80 900. This is more than double the profit of $32 800 achieved in 2007 and similar to that achieved in 2006.

Discretionary cash was used for capital purchases such as wind machines for frost protection, and redevelopment of old blocks into new, higher-paying apple varieties such as Jazz™, Envy™ and high colour sports of Fuji. The debt level for the model remains static with inadequate funds for principal repayments. However, a small reduction in overdraft was achieved.

Expenditure on orchard redevelopment in the Hawkes Bay orchard model has lagged behind that in the Nelson model at $21 500, compared with $83 700, respectively. As a proportion of net cash income, this represents an investment of just 2 percent, compared with 6 percent in Nelson.

Orchard values on the Heretaunga Plains are holding with evidence of an increase in value for those orchards with a higher proportion of non-commodity varieties, and infrastructure improvements. As such the model reflects this trend with a 10 percent increase in the value of land and buildings on 2007 levels.

BUDGET FINANCIAL PERFORMANCE OF THE HAWKES BAY PIPFRUIT MODEL IN 2009

In 2009, Hawkes Bay growers are expected to enjoy one of the best production years of the last two decades. An absence of damaging spring frosts, strong and plentiful fruit buds, along with favourable fruit set and fruit finish conditions, are expected to result in an excellent export crop. The model anticipates an increase in export production of 40 percent compared with the frost affected crop of 2008.

Net cash income for the model is budgeted to increase to $1 266 300, 34 percent higher than in 2008. This is driven by the larger crop and cautious optimism that average returns will not be much lower than last season. However, growers and industry representatives are aware that the selling season has another few months to run with potential for price changes in the interim.

REVENUE UP SIGNIFICANTLY DUE TO HIGH YIELDS AND PROMISING RETURNS

A significant lift in gross yield to 68 193 cartons, up 22 percent on 2008 is expected for the Hawkes Bay orchard model in 2009. This increase in yield is the result of:

- strong return bloom in those varieties damaged by frost last season, in particular Braeburn;
- favourable growing conditions throughout spring and summer; and
- new plantings of Jazz™ and Pacific Queen™ coming into production.

The average export recovery rate across all varieties in 2009 is expected to be 73 percent, considerably higher than the 63 percent achieved in 2008. Cool night temperatures in March and April combined with clear sunny days, resulted in good fruit colour development. Fruit finish across all varieties was also good due to a relatively dry and warm spring. An adequate supply of seasonal labour to harvest the crop meant that fruit could be picked at optimum maturity, helping to deliver better export recovery rates.

Despite very warm conditions in December through to February and maximum temperatures in the mid-thirties, very little sunburn damage was reported. The calcium disorders of skin blotch and bitter pit have caused significant problems in Hawkes Bay Jazz™ crops this season. High summer temperatures and a dry season are thought to have contributed to this problem and consequently the model expects the export recovery rate for Jazz™ to drop to 77 percent in 2009, down from 81 percent in 2008.

The warm summer temperatures favoured insect pest build up with woolly apple aphid giving major problems again this season. Incidence of scale insects also continues to creep up, and integrated control of European red mite continues to be more difficult than it was a few years ago when the organo-phosphate pesticides dominated the insect control programmes.

GROWERS CAUTIOUSLY OPTIMISTIC ABOUT MARKET RETURNS

Despite very good prices being achieved for early season sales, particularly in Asian markets, at the time of writing, the large European markets were showing signs of difficulty. This is due to large volumes of competing fruit and weakened consumer demand as a result of the recession. Volatility in the exchange rate is also of concern to growers and exporters. Even so, growers and industry leaders are predicting the average Hawkes Bay export return to reach $24.20, which is only 35 cents lower than the great result of 2008.

Although the model is predicting a considerable drop in the export return for Braeburn compared with last season, the overall average return is boosted by the ever-increasing proportion of high paying varieties now in the model. These include the Pacific series, Fuji, Jazz™ and Pink Lady™. These higher paying varieties account for around one-third of the model's export volume and 42 percent of income. This is a significant increase over four years ago (2005) when these varieties accounted for 24 percent and 34 percent of the model's export volume and income, respectively.

LARGE CROP GENERATES EFFICIENCIES

Orchard working expenses for the model are expected to increase by 21 percent overall in 2009. This increase is largely driven by a higher volume crop, but includes increases in the price of some inputs.

Wage expenses are expected to increase by 7 percent overall, predominately due to the larger crop. The unit costs of labour per hour, per tree or per bin are expected to be similar to 2008. Labour expenses per export carton however are significantly lower than in 2008, down from $6.97 to $5.33 per export carton, reflecting the efficiencies that a larger crop facilitates.

Packing charges were lifted by many packing sheds in 2009 reflected by the average expense per gross carton lifting to $3.02 per carton or $66.44 per bin. Packaging prices also increased slightly. Post harvest costs per export carton are similar to last season, at just under $10.00 per export carton. All other expenses are expected to remain relatively stable.

With the efficiencies afforded by the large crop, total orchard working expenses are predicted to drop back to $18.67 per export carton in 2009, compared with $21.75 per export carton in 2008. The total orchard operating expense, which also adds average interest expenses, lease, depreciation and wages of management, is predicted to drop from $25.83 in 2008 down to $21.40 per export carton in 2009.

CAUTIOUS OPTIMISM AROUND NET RESULT

The Hawkes Bay model is expected to achieve a cash operating surplus in 2009 of $335 100, almost double that achieved in 2008. The profit before tax budgeted for the model is also unprecedented at $248 300. Consequently, there is a level of cautious optimism infiltrating the pipfruit industry in the region at present. The next four month's marketing results will dictate the final result.

Many growers are likely to use the improvement in cash position to lower debt levels and undertake further orchard redevelopment. Interest expenses are expected to be 25 percent lower at $39 000 as debt levels are reduced a little and growers re-fix term debt at lower interest rates.

Planned expenditure on debt reduction, capital and orchard development is modest given the significant improvement in cash position anticipated in the 2009 budget. At this stage there is an indication that development and capital expenditure will remain similar to 2008 levels. This indicates that growers are reluctant to commit additional expenditure until they know the money is in the bank. By September 2009, growers will know whether actual returns match up to these early estimates. If they do, growers are likely to change patterns of expenditure on capital and debt reduction in the current 2009 financial year. Development decisions have already been made and are difficult to change.

TABLE 3: HAWKES BAY PIPFRUIT MODEL PRODUCTION AND INCOME DETAILS FOR 2008

YEAR ENDED 31 DECEMBER	AREA (HA)	GROSS YIELD (TCE[1])	EXPORT RECOVERY (%)	TOTAL EXPORT CARTONS	EXPORT RETURN ($/TCE)	NON-EXPORT RETURN ($/TCE)	REVENUE ($)
Braeburn	5.1	15 291	51	7 799	25.25	1.85	210 800
Fuji	3.1	7 986	71	5 670	26.90	1.65	156 400
Granny Smith	0.9	3 001	44	1 320	21.40	3.00	33 300
Jazz™	2.0	1 645	81	1 333	30.30	0.90	40 700
Pacific Beauty™	0.7	855	64	547	24.35	2.30	14 000
Pacific Queen™	0.9	1 954	69	1 348	27.00	7.50	40 900
Pacific Rose™	1.5	3 696	36	1 331	24.10	8.60	52 400
Pink Lady™	1.1	2 347	71	1 667	29.50	1.00	49 800
Royal Gala	6.8	19 294	75	14 470	22.25	1.80	330 600
Total/average	**22.0**	**56 070**	**63**	**35 485**	**24.55**	**2.82**	**928 900**

Notes
Figures may not add to totals due to rounding.
1 Tray carton equivalent.

TABLE 4: HAWKES BAY PIPFRUIT MODEL BUDGET PRODUCTION AND INCOME DETAILS FOR 2009

YEAR ENDED 31 DECEMBER	AREA (HA)	GROSS YIELD (TCE[1])	EXPORT RECOVERY (%)	TOTAL EXPORT CARTONS	EXPORT RETURN ($/TCE)	NON-EXPORT RETURN ($/TCE)	REVENUE ($)
Braeburn	4.8	20 788	70	14 551	20.50	1.25	306 100
Fuji	3.1	9 385	76	7 132	28.00	1.05	202 100
Granny Smith	0.9	3 174	66	2 095	22.00	1.35	47 500
Jazz™	2.2	2 508	77	1 931	31.00	0.30	60 000
Pacific Beauty™	0.7	1 671	70	1 170	28.60	1.00	34 000
Pacific Queen™	0.9	2 549	80	2 039	40.00	0.25	81 700
Pacific Rose™	1.5	4 426	44	1 947	28.00	8.65	76 000
Pink Lady™	1.3	3 165	75	2 374	29.00	2.30	70 700
Royal Gala	6.6	20 526	81	16 626	21.90	1.05	368 200
Total/average	**22.0**	**68 193**	**73**	**49 867**	**24.20**	**2.17**	**1 246 300**

Notes
Figures may not add to totals due to rounding.
1 Tray carton equivalent.

TABLE 5: HAWKES BAY PIPFRUIT MODEL BUDGET

	2008				2009 BUDGET				CHANGE
	WHOLE ORCHARD ($)	PER PLANTED HA ($)	PER TCE[1] GROSS ($)	PER TCE EXPORT ($)	WHOLE ORCHARD ($)	PER PLANTED HA ($)	PER TCE GROSS ($)	PER TCE EXPORT ($)	BETWEEN 2008 AND 2009 (%)
REVENUE									
Pipfruit income	928 900	42 223	16.57	26.18	1 246 300	56 650	18.28	24.99	34
Other orchard income	19 200	873	0.34	0.54	20 000	909	0.29	0.40	4
Net cash income	**948 100**	**43 095**	**16.91**	**26.72**	**1 266 300**	**57 559**	**18.57**	**25.39**	**34**
Orchard working expenses	**771 700**	**35 077**	**13.76**	**21.75**	**931 200**	**42 327**	**13.66**	**18.67**	**21**
Cash operating surplus	**176 400**	**8 018**	**3.15**	**4.97**	**335 100**	**15 232**	**4.91**	**6.72**	**90**
Interest	52 000	2 364	0.93	1.47	39 000	1 773	0.57	0.78	–25
Rent and/or leases	20 400	927	0.36	0.57	21 000	955	0.31	0.42	3
Depreciation	23 100	1 050	0.41	0.65	26 800	1 218	0.39	0.54	16
Net non-fruit cash income	0	0	0.00	0.00	0	0	0.00	0.00	..
Orchard profit before tax	**80 900**	**3 677**	**1.44**	**2.28**	**248 300**	**11 286**	**3.64**	**4.98**	**207**
Tax	13 000	591	0.23	0.37	27 000	1 227	0.40	0.54	108
Orchard profit after tax	**67 900**	**3 086**	**1.21**	**1.91**	**221 300**	**10 059**	**3.25**	**4.44**	**226**
Add back depreciation	23 100	1 050	0.41	0.65	26 800	1 218	0.39	0.54	16
Off-orchard cash income	22 700	1 032	0.40	0.64	23 100	1 050	0.34	0.46	2
Discretionary cash	**113 700**	**5 168**	**2.03**	**3.20**	**271 200**	**12 327**	**3.98**	**5.44**	**139**
APPLIED TO:									
Net capital purchases	25 300	1 150	0.45	0.71	31 200	1 418	0.46	0.63	23
Development	21 500	977	0.38	0.61	24 800	1 127	0.36	0.50	15
Drawings	59 400	2 700	1.06	1.67	61 400	2 791	0.90	1.23	3
Principal repayments	0	0	0.00	0.00	6 500	295	0.10	0.13	..
New borrowings	0	0	0.00	0.00	0	0	0.00	0.00	..
Introduced funds	0	0	0.00	0.00	0	0	0.00	0.00	..
Cash surplus/deficit	**7 500**	**341**	**0.13**	**0.21**	**147 300**	**6 695**	**2.16**	**2.95**	**1864**
Orchard surplus for reinvestment[2]	**31 600**	**1 436**	**0.56**	**0.89**	**186 700**	**8 486**	**2.74**	**3.74**	**491**
ASSETS AND LIABILITIES									
Land and building (opening)	1 750 000	79 545	31.21	49.32	1 750 000	79 545	25.66	35.09	0
Plant and machinery (opening)	96 800	4 400	1.73	2.73	100 000	4 545	1.47	2.01	3
Orchard related investments (opening)	0	0	0.00	0.00	0	0	0.00	0.00	..
Total orchard assets (opening)	**1 846 800**	**83 945**	**32.94**	**52.04**	**1 850 000**	**84 091**	**27.13**	**37.10**	**0**
Total liabilities (opening)	**545 000**	**24 773**	**9.72**	**15.36**	**535 000**	**24 318**	**7.85**	**10.73**	**–2**
Total equity	**1 301 800**	**59 173**	**23.22**	**36.69**	**1 315 000**	**59 773**	**19.28**	**26.37**	**1**

Notes
Figures may not add to totals due to rounding.
1 Tray carton equivalent.
2 Orchard surplus for reinvestment is calculated as follows: discretionary cash less off-orchard income and drawings.

Symbol
.. Not applicable.

TABLE 6: HAWKES BAY PIPFRUIT MODEL EXPENDITURE

	2008				2009 BUDGET				CHANGE
	WHOLE ORCHARD ($)	PER PLANTED HA ($)	PER TCE[1] GROSS ($)	PER TCE EXPORT ($)	WHOLE ORCHARD ($)	PER PLANTED HA ($)	PER TCE GROSS ($)	PER TCE EXPORT ($)	BETWEEN 2008 AND 2009 (%)
ORCHARD WORKING EXPENSES									
Hand harvesting	112 700	5 123	2.01	3.18	140 500	6 386	2.06	2.82	25
Pruning	38 500	1 750	0.69	1.08	35 300	1 605	0.52	0.71	–8
Thinning	52 200	2 373	0.93	1.47	51 100	2 323	0.75	1.02	–2
Other wages	40 900	1 859	0.73	1.15	35 500	1 614	0.52	0.71	–13
ACC – employees	2 900	132	0.05	0.08	3 200	145	0.05	0.06	10
Total labour expenses	**247 200**	**11 236**	**4.41**	**6.97**	**265 600**	**12 073**	**3.89**	**5.33**	**7**
Packing	152 900	6 950	2.73	4.31	206 000	9 364	3.02	4.13	35
Packaging	132 400	6 018	2.36	3.73	187 000	8 500	2.74	3.75	41
Cool storage	62 100	2 823	1.11	1.75	87 300	3 968	1.28	1.75	41
Freight	12 900	586	0.23	0.36	14 300	650	0.21	0.29	11
Total post harvest expenses	**360 300**	**16 377**	**6.43**	**10.15**	**494 600**	**22 482**	**7.25**	**9.92**	**37**
Weed and pest control	53 300	2 423	0.95	1.50	57 000	2 591	0.84	1.14	7
Pollination	1 100	50	0.02	0.03	1 200	55	0.02	0.02	9
Fertiliser and lime	2 300	105	0.04	0.06	3 000	136	0.04	0.06	30
Electricity	4 400	200	0.08	0.12	5 200	236	0.08	0.10	18
Vehicle	12 200	555	0.22	0.34	11 400	518	0.17	0.23	–7
Fuel	15 900	723	0.28	0.45	16 700	759	0.24	0.33	5
Repairs and maintenance	18 200	827	0.32	0.51	16 400	745	0.24	0.33	–10
General	8 600	391	0.15	0.24	8 000	364	0.12	0.16	–7
Frost protection	900	41	0.02	0.03	900	41	0.01	0.02	0
Contract machine work	1 900	86	0.03	0.05	1 300	59	0.02	0.03	–32
Total other working expenses	**118 800**	**5 400**	**2.12**	**3.35**	**121 100**	**5 505**	**1.78**	**2.43**	**2**
Rates	5 200	236	0.09	0.15	5 500	250	0.08	0.11	6
Water rates	0	0	0.00	0.00	0	0	0.00	0.00	..
General insurance	3 900	177	0.07	0.11	4 300	195	0.06	0.09	10
Crop insurance	10 300	468	0.18	0.29	12 000	545	0.18	0.24	17
ACC owners	1 700	77	0.03	0.05	1 900	86	0.03	0.04	12
Communication	3 100	141	0.06	0.09	3 200	145	0.05	0.06	3
Accounting	4 800	218	0.09	0.14	4 000	182	0.06	0.08	–17
Legal and consultancy	3 200	145	0.06	0.09	2 500	114	0.04	0.05	–22
Levies and subscriptions	9 900	450	0.18	0.28	12 500	568	0.18	0.25	26
Other administration	3 300	150	0.06	0.09	4 000	182	0.06	0.08	21
Total overhead expenses	**45 400**	**2 064**	**0.81**	**1.28**	**49 900**	**2 268**	**0.73**	**1.00**	**10**
Total orchard working expenses	**771 700**	**35 077**	**13.76**	**21.75**	**931 200**	**42 327**	**13.66**	**18.67**	**21**
Wages of management	49 500	2 250	0.88	1.39	49 500	2 250	0.73	0.99	0
Depreciation	23 100	1 050	0.41	0.65	26 800	1 218	0.39	0.54	16
Total orchard operating expenses	**844 300**	**38 377**	**15.06**	**23.79**	**1 007 500**	**45 795**	**14.77**	**20.20**	**19**
CALCULATED RATIOS									
Economic orchard surplus (EOS)[2]	103 800	4 718	1.85	2.93	258 800	11 764	3.80	5.19	149
Orchard working expenses/NCI[3]	81%				74%				
EOS/total orchard assets	5.6%				14.0%				
EOS less interest and lease/equity	2.4%				15.1%				
Interest+rent+lease/NCI	7.6%				4.7%				
EOS/NCI	10.9%				20.4%				

Notes
Figures may not add to totals due to rounding.
1 Tray carton equivalent.
2 EOS (or earnings before interest and tax) is calculated as follows: net cash income less orchard working expenses less depreciation less wages of management (WOM). WOM is calculated as follows: $31 000 allowance for labour input plus 1 percent of opening total orchard assets to a maximum of $75 000.
3 Net cash income.

Symbol
.. Not applicable.

NELSON PIPFRUIT

FINANCIAL PERFORMANCE OF THE NELSON PIPFRUIT MODEL IN 2008

The Nelson model achieved an impressive profit before tax of $177 000 in 2008, driven by the excellent market returns achieved for Braeburn and Royal Gala. This financial outcome was a significant improvement on the trading loss of $48 800 experienced in 2007, and a welcome boost to industry confidence in the region.

The planted area for the Nelson orchard model remains stable at 27 hectares in 2008 following a period of expansion and redevelopment over recent years.

GOOD MARKET PRICES DELIVER A SIGNIFICANT LIFT IN REVENUE

Yield for the orchard model was down 17 percent on the previous year to about 75 500 gross cartons, due in part to a spring frost event. Gross yield of Braeburn was also reduced as a result of its biennial bearing nature following an "on" crop in 2007.

Another contributing factor to the yield decrease in 2008 was a change in the group of monitored growers contributing to the pipfruit monitoring programme in Nelson. This occurs occasionally as growers' circumstances change. As a result, the proportion of the model orchard in Braeburn and Royal Gala, both high yielding varieties, is less than in previous years. There is good alignment between the model's revised mix of varieties and the latest statistics from Pipfruit New Zealand for the Nelson region.

Despite a smaller crop, packouts were up on 2007, reaching an average export recovery of 74 percent. Braeburn did suffer some problems with colour and oversized fruit, but achieved an overall packout similar to last season at 72 percent.

Royal Gala achieved its highest export recovery rate in recent years at 81 percent due to good fruit finish and a large average size of count 108. This was despite a shorter than desirable harvest period for this variety as many blocks reached maturity at much the same time. An adequate supply of seasonal labour, facilitated by the RSE scheme ensured that fruit could be picked at optimum maturity. JazzTM also packed out very well at an average of 86 percent.

DRAMATIC IMPROVEMENT IN PRICE TO GROWERS

Returns in 2008 were the best that many growers had seen in several years. This was influenced by a reduced export crop from New Zealand and other southern hemisphere suppliers and favourable movements in the exchange rate.

A shortage of New Zealand Braeburn, due to severe frosts affecting orchards in Hawkes Bay helped Nelson growers achieve an average return of $24.00 per export carton for this variety, up from $16.90 achieved in 2007. However, the average return was $1.25 per carton less than that achieved by the monitored growers in Hawkes Bay due to the larger average fruit size for Braeburn in the Nelson region. The main export markets for Braeburn favour a smaller fruit size.

EXPENDITURE DOWN DUE TO SMALLER CROP

Total orchard working expenses were down by 8 percent on 2007 mainly due to a smaller crop. However, the unit costs of many inputs increased.

Labour expenses per gross carton climbed to $4.55 from $4.06 in 2007 due to increases in the minimum wage rate from April 2008 and the higher costs of sourcing labour via the RSE scheme.

TABLE 7: NELSON PIPFRUIT MODEL FAS[1] EXPORT RETURNS

YEAR ENDED 31 DECEMBER VARIETY	2005 ($TCE[2])	2006 ($TCE)	2007 ($TCE)	2008 ($TCE)	2009 BUDGET ($TCE)
Braeburn	10.30	18.06	16.90	24.00	21.00
Royal Gala	14.42	19.49	18.65	22.60	20.95
Cox Orange	17.28	20.00	23.33	21.60	24.50
Jazz™	31.85	33.25	27.44	30.30	30.90
Other apples	17.09	19.22	23.60	27.30	27.30
Pears	29.58	33.44	29.58	29.60	29.60
Weighted average	**13.09**	**19.62**	**18.89**	**24.82**	**23.72**

Notes
1 Free alongside ship.
2 Tray carton equivalent.

Post-harvest costs per export carton rose to $9.36 in 2008, an increase of 3 percent on the previous year. Several large packing operators in the region have made significant investment in new plant and equipment such as optical graders. Combined with higher wage rates, this resulted in increased packing charges.

NET RESULT HEALTHY REFLECTING STEADY MOVE TO REDEVELOP ORCHARDS

The Nelson model returned a healthy orchard profit before tax of $177 000. Owner's equity in the Nelson model is holding at 66 percent. The orchard model shows that property values in the region are holding, likely reflecting the more robust mix of marketable apple varieties.

Orchard restructuring continues apace with 14 of the 18 monitored growers undertaking some orchard development in 2008. This activity is being funded from profits and some new borrowing. As a consequence of this ongoing redevelopment, interest payments for the model are up when compared with 2007.

BUDGET FINANCIAL PERFORMANCE OF THE NELSON PIPFRUIT MODEL IN 2009

Nelson growers are pleased with the quality of fruit following a growing season without any serious adverse events. However, both growers and exporters are reserved on final market out-turn given the large volumes of competing fruit in main European markets and a volatile exchange rate. Growers in May 2009 expected net cash income for 2009 to rise by 8 percent compared with last season to just over $1.5 million, although in the end the market will dictate final outcomes.

REVENUE LIFTED BY INCREASE IN EXPORT YIELDS AND PROMISING MARKET RETURNS

In 2009, the model predicts a larger crop and better export recovery rates compared with 2008. Young plantings of Jazz™ and other new varieties coming into production will boost gross yields. Braeburn and Royal Gala are expected to account for only 65 percent of export volume as the planted area in these

varieties reduces to less than half of the total orchard area. Four years ago these varieties accounted for 80 percent of the model's export volume and 67 percent of the planted area.

Lower than average temperatures in November impacted on fruit size for some varieties, including Royal Gala. A cooler summer aided colour development across all varieties, helping to lift average export recovery rates to an expected 76 percent.

EXPORT PRICES UNCERTAIN

Most growers are apprehensive as to how the selling season in major markets like Europe and North America will finish up. At the time of writing, the New Zealand dollar was continuing to strengthen against our major trading partners and the state of some offshore markets was comparatively weak and unstable.

Growers are expecting that export returns for Braeburn and Royal Gala will be about two to three dollars per carton less than in 2008. The average export return for the Nelson model is predicted to be $23.72 per carton, just over a dollar per carton less than in 2008. Such an outcome should be viewed favourably given the current economic environment and it reflects the increasing proportion of premium varieties in the model's export mix. Growers are expecting to receive prices similar to last year for premium varieties which would mean export returns per carton within a price band of $27.00 to $30.00. Growers also predict a lift in market return for Cox's Orange, as UK retailers recognise the need to provide growers with a profitable return in order to secure future supplies of this popular variety.

EXPENDITURE TO HOLD STEADY

Growers are expecting that total orchard working expenses will increase by 7 percent compared with 2008 to $1 201 100, mainly due to the larger crop. Total wage expenses should plateau as young blocks come into full production, and wage rates remain stable given economic pressures. Some growers have reappraised their labour expenses, particularly bin rates and adjusted their rates downwards in line with the market. This readjustment is reflected in reduced hand harvesting costs, dropping from $1.99 per gross carton in 2008 to $1.93 per gross carton this season.

All other costs are expected to remain relatively stable. A reduction of $1.20 in total orchard working expenditure per export carton from $20.27 last year compared with $19.07 in 2009 will also reflect improved productivity. The total orchard operating expenses, which also adds average interest costs, lease, depreciation and wages of management, is predicted to drop from $23.80 in 2008 down to $22.03 per export carton in 2009.

ANOTHER GOOD NET RESULT

In 2009, the model is anticipating a cash operating surplus of $349 100, an increase of 11 percent on the good financial outcome achieved in 2008. With some easing in interest costs expected as banks reduce interest rates, a lift in profit before tax to $223 000 is budgeted, up 26 percent on last season's result. With a rise in tax payments, discretionary cash levels are expected to be similar to last season at $163 000.

Another consecutive year of good financial performance will bolster confidence in the Nelson region pipfruit industry. Following poor financial outcomes in 2004 and 2005, Nelson growers have steadily progressed with an orchard restructuring programme. The model is also in a better position to fund new development from within the business rather than with new borrowing. Over $100 000 worth of new development is planned in 2009 as growers push ahead with replacing commodity varieties in favour of higher paying varieties. Those orchards that are coming to the end of their redevelopment programmes are likely to use expected improvements in discretionary cash to reduce debt.

TABLE 8: NELSON PIPFRUIT MODEL PRODUCTION AND INCOME DETAILS FOR 2008

YEAR ENDED 31 DECEMBER	AREA (HA)	GROSS YIELD (TCE[1])	EXPORT RECOVERY (%)	TOTAL EXPORT CARTONS	EXPORT RETURN ($/TCE)	NON-EXPORT RETURN ($/TCE)	REVENUE ($)
Braeburn	8.1	33 963	72	24 454	24.00	2.00	605 900
Royal Gala	5.9	17 588	81	14 247	22.60	1.10	325 600
Jazz™	4.3	6 286	86	5 406	30.30	0.90	164 600
Other apples	4.1	9 019	69	6 223	27.30	0.90	172 400
Cox Orange	1.6	3 791	60	2 274	21.60	1.00	50 600
Pears	3.0	4 826	60	2 896	29.60	5.20	95 800
Total/average	**27.0**	**75 474**	**74**	**55 499**	**24.82**	**1.88**	**1 414 900**

Notes
Figures may not add to totals due to rounding.
1 Tray carton equivalent.

TABLE 9: NELSON PIPFRUIT MODEL BUDGET PRODUCTION AND INCOME DETAILS FOR 2009

YEAR ENDED 31 DECEMBER	AREA (HA)	GROSS YIELD (TCE[1])	EXPORT RECOVERY (%)	TOTAL EXPORT CARTONS	EXPORT RETURN ($/TCE)	NON-EXPORT RETURN ($/TCE)	REVENUE ($)
Braeburn	7.3	32 820	77	25 271	21.00	1.30	540 500
Royal Gala	5.9	18 717	83	15 535	20.95	0.70	327 700
Jazz™	4.9	9 842	85	8 365	30.90	0.70	259 500
Other apples	4.3	11 301	69	7 798	27.30	0.90	216 000
Cox Orange	1.6	3 477	64	2 225	24.50	0.95	55 700
Pears	3.0	6 537	58	3 791	29.60	5.00	126 000
Total/average	**27.0**	**82 693**	**76**	**62 986**	**23.72**	**1.58**	**1 525 400**

Notes
Figures may not add to totals due to rounding.
1 Tray carton equivalent.

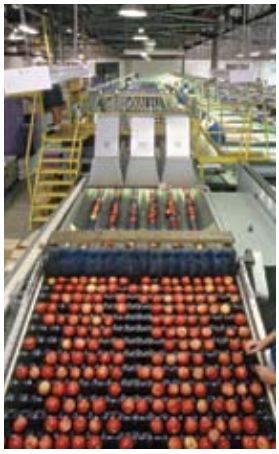

TABLE 10: NELSON PIPFRUIT MODEL BUDGET

	2008				2009 BUDGET				CHANGE
	WHOLE ORCHARD ($)	PER PLANTED HA ($)	PER TCE[1] GROSS ($)	PER TCE EXPORT ($)	WHOLE ORCHARD ($)	PER PLANTED HA ($)	PER TCE GROSS ($)	PER TCE EXPORT ($)	BETWEEN 2008 AND 2009 (%)
REVENUE									
Pipfruit income	1 414 900	52 404	18.75	25.49	1 525 400	56 496	18.45	24.22	8
Other orchard income	24 400	904	0.32	0.44	24 800	919	0.30	0.39	2
Net cash income	**1 439 300**	**53 307**	**19.07**	**25.93**	**1 550 200**	**57 415**	**18.75**	**24.61**	**8**
Orchard working expenses	**1 125 200**	**41 674**	**14.91**	**20.27**	**1 201 100**	**44 485**	**14.52**	**19.07**	**7**
Cash operating surplus	**314 100**	**11 633**	**4.16**	**5.66**	**349 100**	**12 930**	**4.22**	**5.54**	**11**
Interest	84 000	3 111	1.11	1.51	70 000	2 593	0.85	1.11	–17
Rent and/or leases	28 500	1 056	0.38	0.51	30 100	1 115	0.36	0.48	6
Depreciation	24 600	911	0.33	0.44	26 000	963	0.31	0.41	6
Net non-fruit cash income	0	0	0.00	0.00	0	0	0.00	0.00	..
Orchard profit before tax	**177 000**	**6 556**	**2.35**	**3.19**	**223 000**	**8 259**	**2.70**	**3.54**	**26**
Tax	42 000	1 556	0.56	0.76	86 000	3 185	1.04	1.37	105
Orchard profit after tax	**135 000**	**5 000**	**1.79**	**2.43**	**137 000**	**5 074**	**1.66**	**2.18**	**1**
Add back depreciation	24 600	911	0.33	0.44	26 000	963	0.31	0.41	6
Off-orchard cash income	0	0	0.00	0.00	0	0	0.00	0.00	..
Discretionary cash	**159 600**	**5 911**	**2.11**	**2.88**	**163 000**	**6 037**	**1.97**	**2.59**	**2**
APPLIED TO:									
Net capital purchases	29 900	1 107	0.40	0.54	29 600	1 096	0.36	0.47	–1
Development	83 700	3 100	1.11	1.51	113 700	4 211	1.37	1.81	36
Drawings	55 000	2 037	0.73	0.99	55 000	2 037	0.67	0.87	0
Principal repayments	27 000	1 000	0.36	0.49	30 000	1 111	0.36	0.48	11
New borrowings	22 000	815	0.29	0.40	0	0	0.00	0.00	..
Introduced funds	0	0	0.00	0.00	0	0	0.00	0.00	..
Cash surplus/deficit	**–14 000**	**–519**	**–0.19**	**–0.25**	**–65 300**	**–2 419**	**–0.79**	**–1.04**	**366**
Orchard surplus for reinvestment[2]	**104 600**	**3 874**	**1.39**	**1.88**	**108 000**	**4 000**	**1.31**	**1.71**	**3**
ASSETS AND LIABILITIES									
Land and building (opening)	2 511 000	93 000	33.27	45.24	2 619 000	97 000	31.67	41.58	4
Plant and machinery (opening)	216 000	8 000	2.86	3.89	216 000	8 000	2.61	3.43	0
Orchard related investments (opening)	108 000	4 000	1.43	1.95	108 000	4 000	1.31	1.71	0
Total orchard assets (opening)	**2 835 000**	**105 000**	**37.56**	**51.08**	**2 943 000**	**109 000**	**35.59**	**46.72**	**4**
Total liabilities (opening)	**955 000**	**35 370**	**12.65**	**17.21**	**950 000**	**35 185**	**11.49**	**15.08**	**–1**
Total equity	**1 880 000**	**69 630**	**24.91**	**33.87**	**1 993 000**	**73 815**	**24.10**	**31.64**	**6**

Notes
Figures may not add to totals due to rounding.
1 Tray carton equivalent.
2 Orchard surplus for reinvestment is calculated as follows: discretionary cash less off-orchard income and drawings.

Symbol
.. Not applicable.

TABLE 11: NELSON PIPFRUIT MODEL EXPENDITURE

	2008				2009 BUDGET				CHANGE
	WHOLE ORCHARD ($)	PER PLANTED HA ($)	PER TCE[1] GROSS ($)	PER TCE EXPORT ($)	WHOLE ORCHARD ($)	PER PLANTED HA ($)	PER TCE GROSS ($)	PER TCE EXPORT ($)	BETWEEN 2008 AND 2009 (%)
ORCHARD WORKING EXPENSES									
Hand harvesting	150 200	5 563	1.99	2.71	159 600	5 911	1.93	2.53	6
Pruning	55 000	2 037	0.73	0.99	54 900	2 033	0.66	0.87	0
Thinning	53 700	1 989	0.71	0.97	54 300	2 011	0.66	0.86	1
Other wages	79 200	2 933	1.05	1.43	71 200	2 637	0.86	1.13	–10
ACC – employees	5 600	207	0.07	0.10	4 200	156	0.05	0.07	–25
Total labour expenses	**343 700**	**12 730**	**4.55**	**6.19**	**344 200**	**12 748**	**4.16**	**5.46**	**0**
Packing	210 300	7 789	2.79	3.79	238 100	8 819	2.88	3.78	13
Packaging	202 000	7 481	2.68	3.64	232 400	8 607	2.81	3.69	15
Cool storage	93 800	3 474	1.24	1.69	105 800	3 919	1.28	1.68	13
Freight	13 600	504	0.18	0.25	15 700	581	0.19	0.25	15
Total post harvest expenses	**519 700**	**19 248**	**6.89**	**9.36**	**592 000**	**21 926**	**7.16**	**9.40**	**14**
Weed and pest control	77 300	2 863	1.02	1.39	80 800	2 993	0.98	1.28	5
Pollination	4 000	148	0.05	0.07	4 400	163	0.05	0.07	10
Fertiliser and lime	12 200	452	0.16	0.22	13 600	504	0.16	0.22	11
Electricity	8 900	330	0.12	0.16	9 200	341	0.11	0.15	3
Vehicle	21 900	811	0.29	0.39	20 400	756	0.25	0.32	–7
Fuel	17 300	641	0.23	0.31	16 400	607	0.20	0.26	–5
Repairs and maintenance	34 700	1 285	0.46	0.63	29 000	1 074	0.35	0.46	–16
General	13 800	511	0.18	0.25	14 000	519	0.17	0.22	1
Frost protection	0	0	0.00	0.00	0	0	0.00	0.00	..
Contract machine work	3 300	122	0.04	0.06	4 000	148	0.05	0.06	21
Total other working expenses	**193 400**	**7 163**	**2.56**	**3.48**	**191 800**	**7 104**	**2.32**	**3.05**	**–1**
Rates	11 700	433	0.16	0.21	12 100	448	0.15	0.19	3
Water rates	0	0	0.00	0.00	0	0	0.00	0.00	..
General insurance	10 000	370	0.13	0.18	11 000	407	0.13	0.17	10
Crop insurance	11 000	407	0.15	0.20	11 500	426	0.14	0.18	5
ACC owners	700	26	0.01	0.01	800	30	0.01	0.01	14
Communication	6 600	244	0.09	0.12	6 400	237	0.08	0.10	–3
Accounting	4 600	170	0.06	0.08	4 500	167	0.05	0.07	–2
Legal and consultancy	6 900	256	0.09	0.12	7 300	270	0.09	0.12	6
Levies and subscriptions	6 100	226	0.08	0.11	8 200	304	0.10	0.13	34
Other administration	10 800	400	0.14	0.19	11 300	419	0.14	0.18	5
Total overhead expenses	**68 400**	**2 533**	**0.91**	**1.23**	**73 100**	**2 707**	**0.88**	**1.16**	**7**
Total orchard working expenses	**1 125 200**	**41 674**	**14.91**	**20.27**	**1 201 100**	**44 485**	**14.52**	**19.07**	**7**
Wages of management	59 400	2 200	0.78	1.07	60 400	2 238	0.73	0.96	2
Depreciation	24 600	911	0.33	0.44	26 000	963	0.31	0.41	6
Total orchard operating expenses	**1 209 200**	**44 785**	**16.02**	**21.78**	**1 287 500**	**47 685**	**15.57**	**20.44**	**6**
CALCULATED RATIOS									
Economic orchard surplus (EOS)[2]	230 100	8 522	3.05	4.15	262 700	9 730	3.18	4.17	14
Orchard working expenses/NCI[3]	78%				77%				
EOS/total orchard assets	8.1%				9.0%				
EOS less interest and lease/equity	6.3%				8.2%				
Interest+rent+lease/NCI	7.8%				6.5%				
EOS/NCI	16.0%				17.0%				

Notes
Figures may not add to totals due to rounding.
1 Tray carton equivalent.
2 EOS (or earnings before interest and tax) is calculated as follows: net cash income less orchard working expenses less depreciation less wages of management (WOM). WOM is calculated as follows: $31 000 allowance for labour input plus 1 percent of opening total orchard assets to a maximum of $75 000.
3 Net cash income.

Symbol
.. Not applicable.

PROFITABILITY TRENDS

For the first time since the market difficulties experienced in 2004 and 2005, the Hawkes Bay and Nelson pipfruit orchard models demonstrate a trend of improving financial outcomes (Figures 1 and 2). Improvements in orchard productivity and an increasing proportion of higher-paying varieties are helping to enhance profitability. Recent favourable exchange rate movements and growers' and exporters' ability to meet customer criteria within a diverse range of export markets are also assisting.

FIGURE 1: HAWKES BAY PIPFRUIT ORCHARD MODEL PROFITABILITY TRENDS

FIGURE 2: NELSON PIPFRUIT ORCHARD MODEL PROFITABILITY TRENDS

Changes to the models' variety mix since 2004 reflect grower's efforts to reduce their reliance on the poorer-performing commodity varieties of Braeburn and Royal Gala (Table 12). Until recently, growers in the Nelson region have been more exposed to the vagaries of Braeburn and Royal Gala than their counterparts in Hawkes Bay. Hence, the impetus for orchard redevelopment has been greater in Nelson, with expenditure in the Nelson pipfruit model averaging $80 000 per year over the past five years.

TABLE 12: CONTRIBUTION OF ROYAL GALA AND BRAEBURN TO EXPORT VOLUME AND INCOME FOR HAWKES BAY AND NELSON PIPFRUIT MODELS, 2004, 2007 AND 2009

	HAWKES BAY			NELSON		
	2004	2007	2009 BUDGET	2004	2007	2009 BUDGET
Export volume (%)	75	71	63	84	81	65
Export revenue (%)	72	64	55	81	75	57

Source
MAF Monitoring Reports; 2004 to 2009.

This rapid transition into new higher paying varieties has become evident with Royal Gala and Braeburn accounting for 65 percent of the Nelson model's projected exports in 2009 compared with over 80 percent only five years ago. Despite exchange rate fluctuations, club varieties such as Jazz™, Pink Lady™ and Tentation™, have consistently returned between $25.00 and $30.00 per export carton over the past five years (Tables 2 and 7), an average price premium of 30 to 60 percent above that of Royal Gala and Braeburn.

Development expenditure in the Hawkes Bay model has lagged behind that of Nelson with an average annual spend of $20 000. The slower transition to new club varieties in the Hawkes Bay region is likely to be a result of several factors including:

- the region's ability to produce existing varieties such as Fuji and the Pacific series that perform well in Asian markets;
- the region produces a significant proportion of fruit for the domestic market;
- a greater number of owner-operators compared with the Nelson region.

It is more challenging for owner-operators with a lower asset and cash flow base compared with vertically integrated businesses, to fund the high cost of orchard redevelopment (at up to $60 000 per hectare). Low and fluctuating incomes over the past few years have not helped. Given the high level of perceived risk, growers are also uncertain about which varieties to invest in.

If the anticipated market returns for 2009 are realised, this run of two consecutive years of improved profit levels will enable growers to reduce debt, and fund orchard redevelopment and capital purchases from orchard income rather than new borrowings.

The recent upturn in orchard profitability is helping to maintain orchard values in Hawkes Bay and Nelson, with increases being reflected where significant improvements have been made in infrastructure and varietal mix. Leased orchards are also in demand with lease costs expected to increase by up to 5 percent for the 2009/10 season in the Hawkes Bay region for the better performing blocks.

After a period of rapid restructuring and rationalisation between 2004 and 2007, the pipfruit industry is showing signs of stabilisation. Statistics from Pipfruit New Zealand show that the national planted area has stabilised at around 9000 hectares as removals of old non-profitable blocks are being replaced by new plantings of higher paying varieties.

INDUSTRY ISSUES AND DEVELOPMENTS

GROWER MORALE AND BUSINESS VIABILITY PLANS

Grower morale in the pipfruit industry could be described as "cautiously optimistic" following the conclusion of the 2009 harvest.

The 2008/09 season was a good production year, free from major frost and climatic disasters. Combined with a lower New Zealand dollar compared with the same time last year, as well as good early returns, growers are generally feeling confident. However, they are also aware that there is still a significant volume of fruit to be sold offshore and the latest market price signals are not so optimistic.

Growers are interested in how they can better manage exchange rate fluctuations and identified scope for training and skill development in this area.

Many growers have made an investment in orchard redevelopment and continue to do so, despite several years of accumulated cash deficits and the need to take on new debt. Investments have been made primarily in club varieties such as Jazz™, Tentation™, Envy™, and Lady in Red™ and in high-coloured Fuji sports. Growers in Hawkes Bay are also planting existing varieties such as Pacific Queen™ in intensive production systems. The focus has generally been on varieties that will consistently achieve good returns in the market and can be grown well in the orchard.

Investment has also been made in frost protection, particularly wind machines in the Hawkes Bay region. They are being used to try and prevent a repeat of the significant crop losses of 2008.

GROWER RESPONSE TO INPUT PRICE CHANGES AND SHORTAGES

The decision to "shop around" for alternative electricity suppliers and post harvest facilities has been one response to the increasing costs of doing business. Other growers have reduced their reliance on permanent labour, instead using more of their own labour where possible, sharing permanent staff with other businesses, or reducing staff numbers and using contractors for specialist jobs when required. Some growers are reviewing their business structure and looking at on-farm innovation such as working platforms to improve the efficiency of labour inputs.

The RSE scheme has been a great success within the pipfruit industry. Greater security of seasonal labour supply has eased pressure on growers, who have in the past struggled to retain seasonal labour on a day-to-day basis. Growers using RSE labour directly report high reliability of workers, and improved quality. Growers not using the RSE scheme have also benefited indirectly as use of the RSE scheme by large growers has freed up the alternative labour pool. A good supply of seasonal labour, facilitated by the RSE scheme ensured that harvesting of the large apple crop in 2009 went smoothly. Good weather conditions during harvest also helped.

Growers are, however, concerned that government may impose restrictions on the RSE scheme sometime in the future because of increased unemployment levels in New Zealand as a result of the recession.

The pipfruit industry hopes that investing in training, and being able to access a consistent pool of seasonal labour via the RSE scheme will continue to improve productivity and offset the rising costs of labour. Timely, high-quality labour inputs are critical to lift packout rates and produce fruit of optimal size and quality.

ENVIRONMENTAL AND NATURAL RESOURCE MANAGEMENT

Growers are taking steps to manage natural resources in a sustainable manner. This includes undertaking appropriate chemical disposal, recording water meter readings, and planting or managing conservation areas. The accreditation of all pipfruit growers to GlobalGap, and many growers being involved in more demanding retailer programmes such as Tesco's Natures Choice, demonstrates such commitment.

Growers have also embraced the Apple Futures pest and disease control programme that aims for minimal or low detectable pesticide residues. However, growers are becoming increasingly concerned at the difficulties they face trying to produce ultra low residue fruit for European markets, and pest free fruit for other, mainly Asian, markets. These two markets usually require very different pest control programmes which is difficult to achieve on mixed variety blocks.

Maintaining access to existing markets and gaining access to new markets is critical to the future success and growth of the pipfruit industry. Pipfruit New Zealand, as the industry representative body, invests considerable resources in the on-going development of regulated market access programmes. Industry funds are being invested in developing further biological control options for the main pest species. In addition, chemical companies are being encouraged to introduce new integrated pest management compatible active products for the control of woolly apple aphid in particular.

UNDERSTANDING THE CARBON FOOTPRINT OF APPLES

Pipfruit New Zealand recently completed a greenhouse gas (GHG) emission study for New Zealand apples using PAS 2050 and ISO 14040 methodologies. This study was undertaken under the New Zealand Greenhouse Gas Footprinting Strategy, in association with MAF, Landcare Research, Plant and Food Research, AgriLink and Massey University.

The study measured GHG emissions across the entire supply chain through to key export markets, including Europe, the USA and Asia. The study found that only 9 to 14 percent of emissions come from growing and packing the fruit. The balance is from shipping, retailer repacking, distribution and consumer use and disposal. Based on PAS 2050 measurements, total emissions were 0.9kg of CO_2 equivalents per 1.0kg of apples delivered to store in the UK.

Pipfruit New Zealand and the wider pipfruit industry intend to use the project outputs to guide investments and technologies to reduce the greenhouse gas footprint of New Zealand grown apples. The industry is also keen to release the model and its workings to other pipfruit-producing countries so that there is consistency in the international approach for measuring emissions across the lifecycle of apples.

INFORMATION ABOUT THE MODELS

The two pipfruit models represent the main pipfruit growing areas of New Zealand. Hawkes Bay is the largest pipfruit-producing district, exporting over half the national crop, with Nelson the second largest apple-growing region. The orchards are a mixture of old and new apple varieties, typically run by owner-operators. Although there is a trend towards corporate ownership, this has not been captured in the models, which are based on an owner-operator business structure.

The aim of each model is to typify an average orchard for the region. Budget figures are averaged from the contributing properties and adjusted to represent real orchards. Income figures include income from pipfruit, off-orchard income, new borrowing, and other cash income. Expenditure figures include orchard production costs, debt, leasing, drawings, development, and capital purchases.

The value of land and buildings in each model is attributed to the owned title area, including a dwelling.

The pipfruit model budgets are prepared using a 31 December balance date to allow year to year financial comparisons.

HAWKES BAY PIPFRUIT MODEL

The Hawkes Bay model includes leased land that accounts for about one-third (7 hectares) of the orchard size (22 hectares). The owned title area is 18 hectares, with 15 hectares planted in pipfruit. Royal Gala is the predominant apple variety in the model, accounting for 30 percent of the planted area. The model is based on data from 20 orchards located in the Heretaunga Plains.

NELSON PIPFRUIT MODEL

The Nelson model is 27 hectares, with about 10 percent (2 to 3 hectares) of the area leased. Braeburn is the predominant apple variety in the model, accounting for 27 percent of the planted area. The proportion of planted area in Jazz™ has increased from 8 to 18 percent over the past three years. The model is based on data from 18 orchards.

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