

## **Cherry – summary of indicators for base budget**

Crop	Cherry			
PFR mapping type <sup>1</sup>	Continuous			
	Central Otago			
Location				
	Whole farm			
Analysis type				
Average Well Suited Yield (TCE/ha) <sup>2</sup>	15,000			
Revenue (\$/ha)	\$231,000			
Variable expenses (\$/ha)	\$137,000			
Fixed Expenses )\$/ha)	\$34,000			
Operating profit (\$/ha)	\$60,000			
Capital employed in the land use (\$/ha)	\$200000 - \$500000 (top is covered orchard)			
On farm labour (FTE/10ha)	23.8			
Total GDP (\$/ha)	\$281,000			
Total Household Income (HHI)	\$176,000			
Total employment (FTE/10ha)	31.3			
Time to commercial yield (years)	6 to 8			
Specific skills required	Horticultural management			
Critical infrastructure requirements	Packhouse and chiller			
Market (Export/Domestic)	Export			
Volatility of returns	High			
Marketing structures	Undeveloped – individual marketers			
Reliability of data	Low – limited data sources			
Entrepreneurship required	Moderate – High			
Source	Agribusiness Group			

## Notes:

- Data from Agribusiness Group Ltd, 2022<sup>3</sup>. These have not been updated for inflation.
- Production was adjusted to 15t/ha based on Tupu information<sup>4</sup>.
- Production system Upright Fruiting Offshoots.
- Total GDP, HHI and employment reported for the Otago region.
- Uncovered cherry orchard likely to have greater variability in price and yield.

<sup>&</sup>lt;sup>1</sup> Refers to the Plant and Food estimates of suitability and yield. Fruit crops generally vary continuously from 0

<sup>− 1</sup> suitability, while the arable crops are categorical in 4 classes.

<sup>&</sup>lt;sup>2</sup> Export adjusted for additional revenue from domestic sales

<sup>&</sup>lt;sup>3</sup> Agribusiness Group Ltd, 2022. Pers.com.

<sup>&</sup>lt;sup>4</sup> Tupu NZ. <u>Commercial cherry growing NZ: statistics and guidance (tupu.nz)</u>. Accessed September 2022.

## **Cherry Base Operating Budget**

Vield (kg/ha)         15000           Price/kg         \$15.1           Revenue         \$15.1           Gross orchard income         \$226,500           Other orchard income         \$4,563           Gross Farm Revenue         \$231,063           Orchard Working Expenses         Orchard working expenses (Labour)           Pruning         \$4,746           Thinning         \$17           Harvesting         \$53,612           Management         \$10,317           Post-harvest costs         \$200           Packing         \$55,780           Packaging         \$16,760           Freight         \$10,694           Operating costs         \$2,262           Spray and chemicals         \$2,262           Pollination         \$1,270           Fertiliser         \$3,794           Electricity         \$1,190           Sundry expenses         \$672           Vehicles         \$2,024           Repairs and maintenance         \$1,333           Administration and property expenses           Communication         \$675           Rates         \$825           Accountancy, consultancy, legal         \$1,225	<u>Item</u>	Per ha
Revenue         \$226,500           Other orchard income         \$4,563           Gross Farm Revenue         \$231,063           Orchard Working Expenses         Orchard working expenses (Labour)           Pruning         \$4,746           Thinning         \$17           Harvesting         \$53,612           Management         \$10,317           Post-harvest costs         \$2,262           Packing         \$55,780           Packaging         \$16,760           Freight         \$10,694           Operating costs         \$2,262           Spray and chemicals         \$2,262           Pollination         \$1,270           Fertiliser         \$3,794           Electricity         \$1,190           Sundry expenses         \$672           Vehicles         \$2,024           Repairs and maintenance         \$1,333           Administration and property expenses         \$675           Communication         \$675           Rates         \$825           Accountancy, consultancy, legal         \$1,225           General insurance         \$675           Levies and compliance         \$1,960           Other         \$1,151	Yield (kg/ha)	15000
Gross orchard income         \$226,500           Other orchard income         \$4,563           Gross Farm Revenue         \$231,063           Orchard Working Expenses         Orchard working expenses (Labour)           Pruning         \$4,746           Thinning         \$17           Harvesting         \$53,612           Management         \$10,317           Post-harvest costs         \$10,317           Packing         \$55,780           Packaging         \$16,760           Freight         \$10,694           Operating costs         \$5           Spray and chemicals         \$2,262           Pollination         \$1,270           Fertiliser         \$3,794           Electricity         \$1,190           Sundry expenses         \$672           Vehicles         \$2,024           Repairs and maintenance         \$1,333           Administration and property expenses           Communication         \$675           Rates         \$825           Accountancy, consultancy, legal         \$1,225           General insurance         \$675           Levies and compliance         \$1,960           Other         \$1,962	Price/kg	\$15.1
Other orchard income \$4,563 Gross Farm Revenue \$231,063  Orchard Working Expenses Orchard working expenses (Labour)  Pruning \$4,746 Thinning \$17 Harvesting \$53,612 Management \$10,317  Post-harvest costs Packing \$55,780 Packaging \$16,760 Freight \$10,694  Operating costs Spray and chemicals \$2,262 Pollination \$1,270 Fertiliser \$3,794 Electricity \$1,190 Sundry expenses \$672 Vehicles \$2,024 Repairs and maintenance \$1,333  Administration and property expenses Communication \$675 Rates \$825 Accountancy, consultancy, legal \$1,225 General insurance \$675 Levies and compliance \$1,960 Other \$1,151	Revenue	
Gross Farm Revenue         \$231,063           Orchard Working Expenses         Orchard working expenses (Labour)           Pruning         \$4,746           Thinning         \$53,612           Management         \$10,317           Post-harvest costs           Packing         \$55,780           Packaging         \$16,760           Freight         \$10,694           Operating costs           Spray and chemicals         \$2,262           Pollination         \$1,270           Fertiliser         \$3,794           Electricity         \$1,190           Sundry expenses         \$672           Vehicles         \$2,024           Repairs and maintenance         \$1,333           Administration and property expenses           Communication         \$675           Rates         \$825           Accountancy, consultancy, legal         \$1,225           General insurance         \$675           Levies and compliance         \$1,960           Other         \$1,151           Total Farm Operating Expenses	Gross orchard income	\$226,500
Orchard Working Expenses           Orchard working expenses (Labour)           Pruning         \$4,746           Thinning         \$53,612           Management         \$10,317           Post-harvest costs           Packing         \$55,780           Packaging         \$16,760           Freight         \$10,694           Operating costs           Spray and chemicals         \$2,262           Pollination         \$1,270           Fertiliser         \$3,794           Electricity         \$1,190           Sundry expenses         \$672           Vehicles         \$2,024           Repairs and maintenance         \$1,333           Administration and property expenses           Communication         \$675           Rates         \$825           Accountancy, consultancy, legal         \$1,225           General insurance         \$675           Levies and compliance         \$1,960           Other         \$1,151           Total Farm Operating Expenses         \$170,982	Other orchard income	
Orchard working expenses (Labour)         \$4,746           Pruning         \$4,746           Thinning         \$17           Harvesting         \$53,612           Management         \$10,317           Post-harvest costs           Packing         \$55,780           Packaging         \$16,760           Freight         \$10,694           Operating costs           Spray and chemicals         \$2,262           Pollination         \$1,270           Fertiliser         \$3,794           Electricity         \$1,190           Sundry expenses         \$672           Vehicles         \$2,024           Repairs and maintenance         \$1,333           Administration and property expenses           Communication         \$675           Rates         \$825           Accountancy, consultancy, legal         \$1,225           General insurance         \$675           Levies and compliance         \$1,960           Other         \$1,151           Total Farm Operating Expenses         \$170,982	Gross Farm Revenue	\$231,063
Orchard working expenses (Labour)         \$4,746           Pruning         \$4,746           Thinning         \$17           Harvesting         \$53,612           Management         \$10,317           Post-harvest costs           Packing         \$55,780           Packaging         \$16,760           Freight         \$10,694           Operating costs           Spray and chemicals         \$2,262           Pollination         \$1,270           Fertiliser         \$3,794           Electricity         \$1,190           Sundry expenses         \$672           Vehicles         \$2,024           Repairs and maintenance         \$1,333           Administration and property expenses         Communication           Rates         \$825           Accountancy, consultancy, legal         \$1,225           General insurance         \$675           Levies and compliance         \$1,960           Other         \$1,151           Total Farm Operating Expenses         \$170,982		
Pruning         \$4,746           Thinning         \$17           Harvesting         \$53,612           Management         \$10,317           Post-harvest costs           Packing         \$55,780           Packaging         \$16,760           Freight         \$10,694           Operating costs           Spray and chemicals         \$2,262           Pollination         \$1,270           Fertiliser         \$3,794           Electricity         \$1,190           Sundry expenses         \$672           Vehicles         \$2,024           Repairs and maintenance         \$1,333           Administration and property expenses         \$675           Communication         \$675           Rates         \$825           Accountancy, consultancy, legal         \$1,225           General insurance         \$675           Levies and compliance         \$1,960           Other         \$1,151           Total Farm Operating Expenses	Orchard Working Expenses	
Thinning         \$17           Harvesting         \$53,612           Management         \$10,317           Post-harvest costs           Packing         \$55,780           Packaging         \$16,760           Freight         \$10,694           Operating costs           Spray and chemicals         \$2,262           Pollination         \$1,270           Fertiliser         \$3,794           Electricity         \$1,190           Sundry expenses         \$672           Vehicles         \$2,024           Repairs and maintenance         \$1,333           Administration and property expenses           Communication         \$675           Rates         \$825           Accountancy, consultancy, legal         \$1,225           General insurance         \$675           Levies and compliance         \$1,960           Other         \$1,151           Total Farm Operating Expenses         \$170,982	Orchard working expenses (Labour)	
State	Pruning	\$4,746
Management         \$10,317           Post-harvest costs         \$55,780           Packing         \$55,780           Packaging         \$16,760           Freight         \$10,694           Operating costs         \$10,694           Operating costs         \$2,262           Spray and chemicals         \$2,262           Pollination         \$1,270           Fertiliser         \$3,794           Electricity         \$1,190           Sundry expenses         \$672           Vehicles         \$2,024           Repairs and maintenance         \$1,333           Administration and property expenses           Communication         \$675           Rates         \$825           Accountancy, consultancy, legal         \$1,225           General insurance         \$675           Levies and compliance         \$1,960           Other         \$1,151           Total Farm Operating Expenses         \$170,982	Thinning	\$17
Post-harvest costs Packing \$55,780 Packaging \$16,760 Freight \$10,694  Operating costs Spray and chemicals \$2,262 Pollination \$1,270 Fertiliser \$3,794 Electricity \$1,190 Sundry expenses \$672 Vehicles \$2,024 Repairs and maintenance \$1,333  Administration and property expenses Communication \$675 Rates \$825 Accountancy, consultancy, legal \$1,225 General insurance \$675 Levies and compliance \$1,960 Other \$1,151	Harvesting	\$53,612
Packing         \$55,780           Packaging         \$16,760           Freight         \$10,694           Operating costs         \$2,262           Spray and chemicals         \$2,262           Pollination         \$1,270           Fertiliser         \$3,794           Electricity         \$1,190           Sundry expenses         \$672           Vehicles         \$2,024           Repairs and maintenance         \$1,333           Administration and property expenses           Communication         \$675           Rates         \$825           Accountancy, consultancy, legal         \$1,225           General insurance         \$675           Levies and compliance         \$1,960           Other         \$1,151           Total Farm Operating Expenses         \$170,982	Management	\$10,317
Packing         \$55,780           Packaging         \$16,760           Freight         \$10,694           Operating costs         \$2,262           Spray and chemicals         \$2,262           Pollination         \$1,270           Fertiliser         \$3,794           Electricity         \$1,190           Sundry expenses         \$672           Vehicles         \$2,024           Repairs and maintenance         \$1,333           Administration and property expenses           Communication         \$675           Rates         \$825           Accountancy, consultancy, legal         \$1,225           General insurance         \$675           Levies and compliance         \$1,960           Other         \$1,151           Total Farm Operating Expenses         \$170,982		
Packaging \$16,760 Freight \$10,694  Operating costs  Spray and chemicals \$2,262 Pollination \$1,270 Fertiliser \$3,794 Electricity \$1,190 Sundry expenses \$672 Vehicles \$2,024 Repairs and maintenance \$1,333  Administration and property expenses  Communication \$675 Rates \$825 Accountancy, consultancy, legal \$1,225 General insurance \$1,960 Other \$1,151  Total Farm Operating Expenses \$170,982	Post-harvest costs	
Freight\$10,694Operating costsSpray and chemicals\$2,262Pollination\$1,270Fertiliser\$3,794Electricity\$1,190Sundry expenses\$672Vehicles\$2,024Repairs and maintenance\$1,333Administration and property expensesCommunication\$675Rates\$825Accountancy, consultancy, legal\$1,225General insurance\$675Levies and compliance\$1,960Other\$1,151Total Farm Operating Expenses\$170,982	Packing	\$55,780
Operating costs  Spray and chemicals \$2,262  Pollination \$1,270  Fertiliser \$3,794  Electricity \$1,190  Sundry expenses \$672  Vehicles \$2,024  Repairs and maintenance \$1,333  Administration and property expenses  Communication \$675  Rates \$825  Accountancy, consultancy, legal \$1,225  General insurance \$675  Levies and compliance \$1,960  Other \$1,151  Total Farm Operating Expenses \$170,982	Packaging	\$16,760
Spray and chemicals \$2,262  Pollination \$1,270  Fertiliser \$3,794  Electricity \$1,190  Sundry expenses \$672  Vehicles \$2,024  Repairs and maintenance \$1,333   Administration and property expenses  Communication \$675  Rates \$825  Accountancy, consultancy, legal \$1,225  General insurance \$675  Levies and compliance \$1,960  Other \$1,151  Total Farm Operating Expenses \$170,982	Freight	\$10,694
Spray and chemicals \$2,262  Pollination \$1,270  Fertiliser \$3,794  Electricity \$1,190  Sundry expenses \$672  Vehicles \$2,024  Repairs and maintenance \$1,333   Administration and property expenses  Communication \$675  Rates \$825  Accountancy, consultancy, legal \$1,225  General insurance \$675  Levies and compliance \$1,960  Other \$1,151  Total Farm Operating Expenses \$170,982		
Pollination \$1,270 Fertiliser \$3,794 Electricity \$1,190 Sundry expenses \$672 Vehicles \$2,024 Repairs and maintenance \$1,333  Administration and property expenses Communication \$675 Rates \$825 Accountancy, consultancy, legal \$1,225 General insurance \$675 Levies and compliance \$1,960 Other \$1,151	Operating costs	
Fertiliser \$3,794  Electricity \$1,190  Sundry expenses \$672  Vehicles \$2,024  Repairs and maintenance \$1,333  Administration and property expenses  Communication \$675  Rates \$825  Accountancy, consultancy, legal \$1,225  General insurance \$675  Levies and compliance \$1,960  Other \$1,151  Total Farm Operating Expenses \$170,982	Spray and chemicals	\$2,262
Electricity \$1,190 Sundry expenses \$672 Vehicles \$2,024 Repairs and maintenance \$1,333  Administration and property expenses Communication \$675 Rates \$825 Accountancy, consultancy, legal \$1,225 General insurance \$675 Levies and compliance \$1,960 Other \$1,151  Total Farm Operating Expenses \$170,982	Pollination	\$1,270
Sundry expenses\$672Vehicles\$2,024Repairs and maintenance\$1,333Administration and property expensesCommunication\$675Rates\$825Accountancy, consultancy, legal\$1,225General insurance\$675Levies and compliance\$1,960Other\$1,151Total Farm Operating Expenses\$170,982	Fertiliser	\$3,794
Vehicles\$2,024Repairs and maintenance\$1,333Administration and property expensesCommunication\$675Rates\$825Accountancy, consultancy, legal\$1,225General insurance\$675Levies and compliance\$1,960Other\$1,151Total Farm Operating Expenses\$170,982	Electricity	\$1,190
Repairs and maintenance \$1,333  Administration and property expenses  Communication \$675  Rates \$825  Accountancy, consultancy, legal \$1,225  General insurance \$675  Levies and compliance \$1,960  Other \$1,151  Total Farm Operating Expenses \$170,982	Sundry expenses	\$672
Administration and property expenses  Communication \$675  Rates \$825  Accountancy, consultancy, legal \$1,225  General insurance \$675  Levies and compliance \$1,960  Other \$1,151  Total Farm Operating Expenses \$170,982	Vehicles	\$2,024
Communication \$675  Rates \$825  Accountancy, consultancy, legal \$1,225  General insurance \$675  Levies and compliance \$1,960  Other \$1,151  Total Farm Operating Expenses \$170,982	Repairs and maintenance	\$1,333
Communication \$675  Rates \$825  Accountancy, consultancy, legal \$1,225  General insurance \$675  Levies and compliance \$1,960  Other \$1,151  Total Farm Operating Expenses \$170,982		
Rates \$825 Accountancy, consultancy, legal \$1,225 General insurance \$675 Levies and compliance \$1,960 Other \$1,151  Total Farm Operating Expenses \$170,982	Administration and property expenses	
Accountancy, consultancy, legal \$1,225 General insurance \$675 Levies and compliance \$1,960 Other \$1,151  Total Farm Operating Expenses \$170,982	Communication	\$675
General insurance \$675  Levies and compliance \$1,960  Other \$1,151  Total Farm Operating Expenses \$170,982	Rates	\$825
Levies and compliance \$1,960 Other \$1,151  Total Farm Operating Expenses \$170,982	Accountancy, consultancy, legal	\$1,225
Other \$1,151  Total Farm Operating Expenses \$170,982	General insurance	\$675
Total Farm Operating Expenses \$170,982	Levies and compliance	\$1,960
	Other	\$1,151
Cash Operating Surplus \$60,082	<b>Total Farm Operating Expenses</b>	\$170,982
Cash Operating Surplus \$60,082		
	Cash Operating Surplus	\$60,082

**Source**: Agribusiness Group Ltd. 2022.

## **Cherry Sensitivity test of Operating Profit (\$/ha)**

Operating Profit (\$/ha/year)		Production (kg/ha)				
		14,000	15,000	16,000	17,000	18,000
Price/kg	\$13.00	\$15,582	\$28,582	\$41,582	\$54,582	\$67,582
	\$14.00	\$29,582	\$43,582	\$57,582	\$71,582	\$85,582
	\$15.10	\$44,982	\$60,082	\$75,182	\$90,282	\$105,382
	\$16.00	\$57,582	\$73,582	\$89,582	\$105,582	\$121,582
	\$17.00	\$71,582	\$88,582	\$105,582	\$122,582	\$139,582