

# Farming Financials

Indicative farm financial information for assessing returns in Hawke's Bay from conversion of part-irrigated mixed livestock and arable farms to a vineyard

## Livestock and Arable Conversion to Vineyard

Indicative annual farm budget for mixed livestock and arable farm and vineyard

	Part-irrigated livestock & arable (\$/ha/year)	Irrigated vineyard (\$/ha/year)
<b>Income - stock</b>		
Sheep sales	1,999	-
Cattle sales	911	-
Wool sales	107	-
<b>Income - produce</b>		
White grape varieties	-	19,000
Pinot Noir grape	-	3,683
Barley	222	-
Peas	225	-
Miscellaneous	324	-
<b>Total income</b>	<b>3,787</b>	<b>22,683</b>
<b>Less stock purchases:</b>		
Sheep	1,205	-
Cattle	545	-
<b>Total stock purchases</b>	<b>1,750</b>	<b>-</b>
<b>Gross farm income</b>	<b>2,037</b>	<b>22,683</b>
<b>Less farm expenses:</b>		
Wages (incl. management)	425	3,242
Fertiliser and lime	250	167
Weed and pest control	-	733
Contracting	-	4,633
Other expenses	784	2,268
<b>Total farm expenses</b>	<b>1,459</b>	<b>11,043</b>
Water charge (@ 27.5c/m <sup>3</sup> )	-	602
Depreciation	165	1,600
<b>Annual farm surplus</b>	<b>413</b>	<b>9,439</b>

### Indicative financing costs assuming investment 100% funded through bank loan

Finance costs represent interest payments if the conversion was funded entirely through a bank loan. However, taking out a loan for conversions will depend on individual farmer circumstances and farmers are advised to seek advice from their bank.

	(\$/ha/year)	(\$/ha/year)
<b>Less conversion financing costs</b> (Interest @ 7%)	-	4,368
<b>Annual farm surplus</b> (post finance)	<b>413</b>	<b>5,071</b>

### Farm model assumptions

Mixed livestock & arable farming systems are based on a 300 ha farm, modelled using FARMAX. The farming system is comprised of dryland lamb breeding, lamb and bull finishing, dairy cow wintering, and 50 ha of irrigated crops and pasture. Crops grown include spring barley (7 tonne/ha yield, \$380/tonne sale price) and peas (7 tonne/ha, \$385/tonne), and rape winter feed, on a 12 year rotation. Dryland pasture production is 8 tonne/ha gross, while irrigated pasture is 12.9 tonne/ha gross.

Vineyards are based on a fully irrigated 30 ha farming system. Grape varieties grown include 25 ha of white varieties yielding 10.3t/ha, and 5 ha of Pinot Noir yielding 7.5 tonne/ha.

#### Other assumptions include:

- White grape varieties - \$1,900/tonne
- Pinot Noir grapes - \$2,600/tonne
- Weaner bull - \$4.20/kg
- Manufacturing beef - \$4.50/kg
- Store bull beef - \$2.00/kg
- Store lamb - \$2.70/kg
- Lamb - \$6.00/kg
- Wool - \$4.00/kg
- Water price of 27.5c per m<sup>3</sup>
- Annual irrigation requirement of 2,188 m<sup>3</sup> per ha

### Indicative irrigation conversion costs for farm intensification

	(\$/ha)
<b>Conversion investment</b>	
On farm irrigation	8,744
Vineyard specific costs	39,034
Plant and equipment	5,667
Working capital	7,394
Other costs (savings)	1,558
<b>Total conversion investment</b>	<b>62,397</b>

### Financial summary for investment in farm conversion

The financial summary details annual return on conversion investment, which will be equal to return on equity if the conversion investment is 100% equity funded.

	(\$/ha)
Conversion investment required	62,397
Annual increase in farm surplus	9,025
<b>Annual return on conversion investment</b>	<b>14%</b>

Farm budgets based on information from Macfarlane Rural Business Limited (budget reference 5a and 9b)

Detailed budgets can be found in appendices to 16-01-27 RWSS Farm Profitability Report FINAL v2, 27 January 2016, Macfarlane Rural Business. Available at [www.hbrc.govt.nz](http://www.hbrc.govt.nz)



HAWKE'S BAY REGIONAL INVESTMENT COMPANY LTD



Hawke's Bay Regional Investment Company Ltd is a Council Controlled Trading Organisation of Hawke's Bay Regional Council

With support from

