

Sheep and Beef Intensification

Indicative annual farm budget for a sheep and beef farm with and without irrigation

	Unirrigated (\$/ha/year)	Part-irrigated (\$/ha/year)
Income		
Sheep sales	684	1,452
Cattle sales	688	719
Wool sales	162	172
Total income	1,534	2,343
Less stock purchases:		
Sheep	12	304
Cattle	420	420
Total stock purchases	432	724
Gross farm income	1,102	1,619
Less farm expenses:		
Wages (incl. management)	233	249
Fertiliser and lime	115	160
Animal health	48	48
Other expenses	196	212
Total farm expenses	592	669
Water charge (@ 27.5c/m ³)	-	250
Depreciation	56	72
Annual farm surplus	454	628

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.

	Unirrigated (\$/ha/year)	Part-Irrigated (\$/ha/year)
Less conversion financing costs (Interest @ 7%):	-	91
Annual farm surplus	454	537

Farm model assumptions

Sheep and beef farming systems are based on a 900 ha farm, modelled using FARMAX. The farming system comprises sheep and beef breeding and finishing (with part-irrigated farm model including extra lamb trading account). The farms are estimated to have 10 stock units/ha and 7.6 tonne of dry matter/ha gross pasture production.

Commodity price assumptions:

- Weaner bull - \$3.90/kg • Manufacturing beef - \$4.25/kg
- Store bull beef - \$1.90/kg • Store lamb - \$2.70/kg
- Lamb - \$6.00/kg • Wool - \$4.00/kg

Assumptions specific to the part-irrigated farm model include:

- 200 ha of land irrigated producing 12.9 tonne of pasture dry matter per ha
- Water price of 27.5c per m³
- Annual irrigation requirement of 4,031 m³ per ha

Indicative irrigation conversion costs for farm intensification

	(\$/ha)
Marginal capital investment	
On farm irrigation	4,788
On farm pumping	162
Associated costs	1,436
Other costs (savings)	(540)
Total marginal investment	5,846

Financial summary for investment in farm intensification

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	*1,299
Annual increase in farm surplus	174
Annual return on conversion investment	13%

*Equivalent cost per ha for 900 ha farm with 200 ha of irrigation

Sheep & beef farm budgets based on information from Macfarlane Rural Business Limited (budget reference 1a and 1b)

Detailed budgets can 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



HAWKE'S BAY REGIONAL INVESTMENT COMPANY LTD



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