

# Why renovate? A sheep farm example

## Summary

- Pasture renovation of paddocks with poor growth or high weed content can give high financial returns.
- In this example, renovating costs \$628/ha, but returns \$2122/ha in extra income. Few other investments can match this benefit.

## Typical pasture production

Farm type	Unproductive pasture	Productive pasture
Dryland	6-10 t DM/ha/yr	10-14 t DM/ha/yr
Irrigated	10-14 t DM/ha/yr	14-18 t DM/ha/yr

## Cost benefit example

This example considers a case where new pasture increases growth by 4 t DM/ha, which is **conservative**. It ignores the higher feed quality (ME) of new pasture, better seasonal growth and advantages of a new endophyte such as *Plus AR1*.

In this example after a crop, Roundup® is sprayed to kill weeds prior to cultivation. Full costs are presented, but these should be partly attributed to the cost of growing the crop.

Costs/ha (GST incl)	\$	Return/ha	\$
Roundup Transorb (3 litres/ha)	50	First year increase*	286
Application cost	40	2.8 ewes/ha @ \$102/ewe	
Cultivation	120	Second year increase**	459
<i>Bronsyn Plus AR1</i> seed (20 kg/ha)	180	4.5 ewes/ha @ \$102/ewe	
<i>Apex</i> seed (2 kg/ha)	30	Third year increase**	459
<i>Weka</i> seed (2 kg/ha)	30	4.5 ewes/ha @ \$102/ewe	
<i>Ella</i> seed (2 kg/ha)	18	Fourth year increase**	459
Roller drilling	80	4.5 ewes/ha @ \$102/ewe	
Broadleaf herbicide*** (4 litres/ha)	40	Fifth year increase**	459
Herbicide Application cost	40	4.5 ewes/ha @ \$102/ewe	
<b>Total cost/ha</b>	<b>\$628</b>	<b>Total benefit/ha</b>	<b>\$2122</b>

*Assumptions:* Contractor prices are used. Farmers may be able to do this work at less cost.

\*Loss of growth of 1500 kg DM/ha with renovation. This is subtracted from 4000 kg DM/ha benefit first year, to give a net gain of 2500 kg DM/ha with 75% utilisation. A ewe intake requirement of 660 kg DM/year intake allows an extra 2.8 ewes/ha, each returning 1.2 lambs (@ \$75/lamb) plus 4.5 kg wool (\$12) = \$102/ewe.

\*\*4000 kg DM/ha/year increased pasture with 75% utilisation. A ewe requiring 660 kg DM/year intake allows an extra 4.5 ewes/ha, each returning 1.2 lambs (@ \$75/lamb) plus 4.5 kg wool (\$12) = \$102/ewe.

\*\*\* Pricing for MCPB. Cheaper alternatives are available.

Without attributing part of the costs to growing a crop, eliminating soil compaction or levelling a paddock, sowing 10 ha would cost \$6280 but return \$21,220 in income.