# Is fencing worth it for your business?

## Leading Sheep Predator Control Field Day. August 6, Charleville

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This is a critical question for any business considering an exclusion fence. For some businesses it will be a good investment; considerably increasing future profits and cashflows. For other businesses it will be a poor investment, and will not return enough to justify the investment. Therefore it is important to do some sums on it beforehand, based on expected costs and benefits, to determine if it will be a good investment for your business.

<u>What information do you need?</u>

- What is the current scenario?
  - Current livestock numbers and performance?
  - What is the problem you are addressing?
  - What is your Long Term Carrying Capacity* (with & without fence)?
  - What is your Land Condition*?
- What is the scenario being evaluated?
- What is the investment?
  - Cost of fence?
  - Cost of livestock?
  - Timing of costs?
  - Ongoing maintenance?
  - Sunk vs. residual costs.
- What is the difference between the two scenarios (benefits)?
  - Will you get increased operating profits from existing livestock? If so how much?
  - Will you be able to run additional livestock? If so how many and what will the incremental operating profits be?
  - Other benefits?
  - Timing of benefits?
  - Land value increase?
- What return do you require on your capital?
  - Cost of capital?
- What investment alternatives do you have?

> **Note:** **Knowing your carrying capacity and land condition is important, especially if you are considering a significant investment to increase them.* ***Col Paton*** *from EcoRich Grazing can provide an independent and objective assessment of your current, and potential, carrying capacity and land condition. www.ecorichgrazing.com.au 0427 006 235*

<u>Cost Benefit Analysis</u>

A cost-benefit analysis is used to analyse investment options to determine if they are worthwhile investments in their own right, and also to help prioritise worthwhile investments.

Key Measures;

- **Net Present Value (NPV).** *All cashflows (in and out) from investment expressed in today's dollars.*
- **Internal Rate of Return (IRR).** *Discount rate that gives a Net Present Value of zero.*
- **Years Break Even (YBE).** *Years until initial investment is recouped, in today's dollars.*
- **Benefit Cost Ratio (BCR).** *For every dollar invested, how many are returned, in today's dollars.*

Example Scenarios

To demonstrate the process of undertaking a cost benefit analysis, two fictional scenarios have been developed. The costs and benefits will be business specific, do not rely on those used below.

| | **Scenario One** | **Scenario Two** |
|---|---|---|
| Property Size | 9,000Ha | 32,400Ha |
| Current capacity | 13,000 DSE | 10,000 DSE |
| Boundary Length | 42km | 81km |
| Fence Cost (erected) | $5,000/km | $5,000/km |
| | $23.33/Ha | $12.50/Ha |
| Increase in carrying capacity (gradual to yr3) | 25% | 30% |
| Incremental profit (existing DSE) | $2 | $2 |
| Incremental profit (additional DSE) | $10 | $10 |

The above information is sufficient to perform a preliminary cost benefit analysis. This is done over 30years (life of fence) and uses a discount rate of 8%.

| | **Scenario One** | **Scenario Two** |
|---|---|---|
| Net Present Value (NPV) | $262,473 | ($10,198) |
| Internal Rate of Return (IRR) | 14.6% | 7.8% |
| Years Break Even (YBE) | 11 | - |
| Benefit Cost Ratio (BCR) | 2.25:1 | 0.97:1 |

As can be seen there is a very big difference between the two scenarios. Scenario one is an investment that warrants serious consideration, whereas scenario two does not. This is despite scenario two providing a slightly bigger increase in carrying capacity (30% vs. 25%) and being considerably cheaper per hectare ($12.50 vs. $23.33). Some key assumptions have been left constant for the point of the exercise, the key difference comes down to the fence cost per DSE. Looking at the total fence cost divided by increased carrying capacity, scenario one, on a DSE basis, costs 40% of scenario two at $12.92/DSE ($210,000 over 16,250 DSE) compared to $31.15/DSE ($405,000 over 13,000 DSE).

Whether fencing is going to be worth it for your business will come down to what it costs you per animal unit (new &/or existing, depending on whether benefit is from new &/or existing capacity) and what the benefit is per animal unit.

Summary

You don't have a crystal ball so you should also do a sensitivity analysis by adjusting some of the key estimates (e.g best-case, worst-case & most likely) to see how changes affect the results. this is a critical step. You should also talk to producers who have completed a fence and endeavour to get hard factual data on their actual costs and benefits for you to apply to your situation. It is cheaper to determine if something is going to stack up by doing a few sums beforehand, than investing hundreds of thousands of dollars to do so.