

## CALCULATING COST OF PRODUCTION FOR YOUR LAMB AND WOOL ENTERPRISES

For sheep producers wanting to improve the performance of their enterprises, a good understanding of the current operating efficiency of the business is essential. Cost of production is a key factor affecting the profitability of sheep enterprises. Calculating your cost of production is one of the important steps in assessing flock performance and a first step to making improvements.

### COST OF PRODUCTION

Cost of production (CoP), measured in dollars per kilogram, is an indication of the outlay required to produce each kg of lamb or wool. However, as there is more than one way to calculate CoP, and people can confuse it with other indicators, CoP may not always provide a meaningful comparison between businesses.

The *Making More From Sheep* cost of production calculator has been developed to standardise this very common performance indicator, so you can easily compare the performance of your enterprise with others in the sheep industry. A quick comparison of your CoP will indicate whether you have great scope for improvement, or are already performing well. This is the first calculator that can be used for calculating CoP for either wool or lamb.

CoP is simple to calculate. It is not complicated by how you have financed the business, how much of it you own, or how you acquire your land, and it only deals with one enterprise at a time. CoP does not automatically reveal what aspects of production you are in a position to improve, but it will provide a very useful start. You can use it to compare the operating efficiency of your business year on year, and then compare it against other sheep producers with similar resources to your own.

Knowing your CoP is just the first step. Involvement in a benchmarking group, run by State Primary Industries Departments or private farm management consultants will enable you to understand the areas of opportunity for improvement in your business.

### HOW TO USE THE *Making More From Sheep* COST OF PRODUCTION CALCULATOR

The calculator is available as a hardcopy or on the Making More From Sheep website. It is intended to be used for only one enterprise at a time, for example a specialist prime lamb flock or a Merino wool flock. If you have a Merino wool flock and you join a percentage of the ewes to a terminal sire and the rest to Merino sires, break that flock into two enterprises:

- 1) a dual purpose lamb flock that includes the ewes joined to a terminal sire, and
- 2) a wool flock that includes those ewes joined to Merino sires and all Merino wethers.

The income and costs should be apportioned accordingly throughout the calculator. Use the most appropriate 12-month period for your situation and keep the same period for each enterprise, if you have more than one.

The CoP calculator is split into the following seven sections:

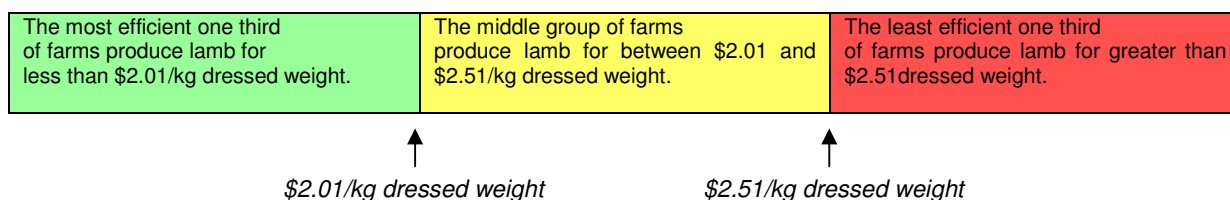
1. Adult sheep trading account
2. Lamb trading account
3. Wool trading account
4. Direct expenses for whole farm business
5. Labour expenses for whole farm business
6. Overhead expenses for whole farm business
7. Summaries and CoP calculations

Each section has a number of questions to be answered from your own records, with a number next to the question referring to a comment in the explanatory notes box where required. Once you have calculated your CoP, you can compare your business to industry averages or get involved in a group benchmarking program.

## HOW DOES YOUR CoP COMPARE WITH OTHERS?

### Prime Lamb Enterprise

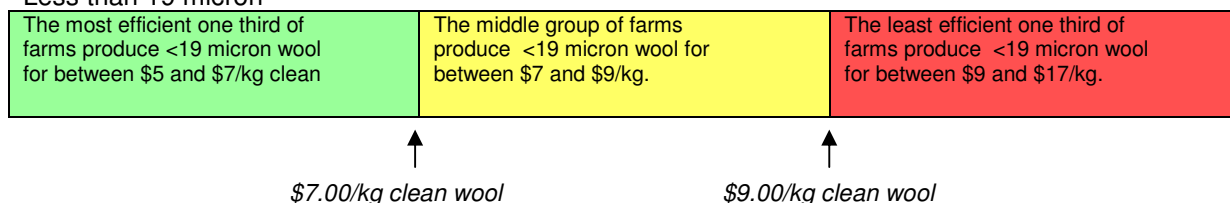
By current industry standards, if you have a cost of production of less than \$2.01/kg dressed weight (DW), you are performing better than the average prime lamb producer. As shown in the following diagram, the most efficient third of prime lamb producers have a regular cost of production less than \$2.01 per kg DW – a good goal for any prime lamb producer interested in wealth creation. A cost of production of between \$2.01 and \$2.51 per kg DW would suggest significant room for improvement. If your cost of production is greater than \$2.51/kgDW, the future of your business may be at risk. Based on lamb prices less than \$3.00/kg DW, you will generally not be earning sufficient income to service debt. If you own all your assets your return on equity will be poor in comparison with other investment opportunities unless your land value is appreciating considerably.



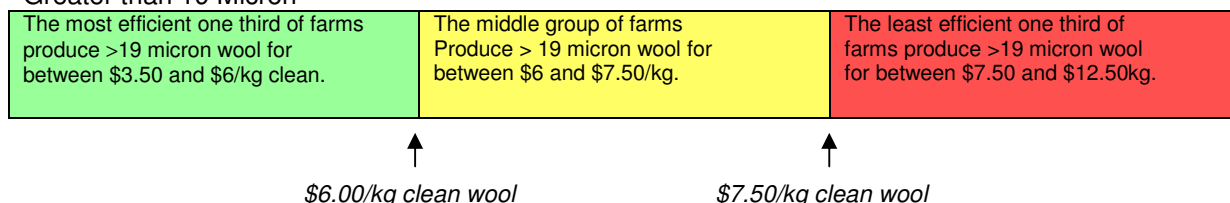
### Wool enterprise

Fine wool (less than 19 micron) tends to have a higher cost of production than medium and strong wool. The reasons are a combination of intensity of production systems (fine wool production in higher rainfall areas) and lower fleece weights of sheep. Choose which category you fit into by comparing your average adult micron for your clip. On current figures, the most efficient one third of fine wool enterprises produce wool for between \$5 and \$7/kg clean. The middle group produce wool for between \$7 and \$9/kg clean, and the least efficient one third of farms produce wool for between \$9 and \$17/kg clean. The most efficient one third of medium to strong wool enterprises produce wool for between \$3.50 and \$6/kg clean. The middle group produce wool for between \$6 and \$7.50/kg clean, and the least efficient one third of farms produced wool for between \$7.50 and \$12.50/kg clean. If your cost of production for your fine wool (less than 19 micron) enterprise is greater than \$9/ kg clean, or greater than \$7.50/kg clean for your medium-strong wool (19 micron or stronger) enterprise, the future of your business may be at risk. You will generally not be earning sufficient income to service debt. If you own all your assets your return on equity will be poor in comparison with other investment opportunities unless your land value is appreciating considerably.

#### Less than 19 micron



#### Greater than 19 Micron



### Other useful indicators.

Using the figures you have drawn on to measure CoP, there are a couple of extra indicators you can calculate. In many cases their accuracy may be limited because they require you to estimate the figures. However, should you choose to fill these extras out, the results will be a useful starting point for further discussion with your farm management adviser.

- **Kilograms of lamb produced per hectare (kg DW/ha)**

You can calculate kg DW/ha by simply dividing the number of kilograms of lamb produced by the number of winter grazing hectares used for lamb production. If lamb is your only enterprise, this is easy to determine accurately. However, where you have a number of different enterprises, deciding on the number of hectares you allocate to the lamb enterprise as opposed to the others may be difficult, so don't rely too much on the result.

- **Kilograms of wool produced per hectare (kg clean/ha)**

You can calculate kg clean/ha by simply dividing the number of kilograms of wool produced by the number of winter grazing hectares used for wool production. If wool is your only enterprise, this is easy to determine accurately. However, where you have a number of different enterprises, deciding on the number of hectares you allocate to the wool enterprise, as opposed to the others, may be difficult, so don't rely too much on the result.

- **Average sale price**

For prime lamb production, you should be able to get an idea of your average sale price per kg DW from your sales records, especially if you sell over the hooks.

For wool production, you should be able to get an idea of your average sale price per kg clean from your historical sales records. Alternatively, you can use the AWI Woolcheque program ([www.woolcheque.com.au](http://www.woolcheque.com.au)) as an indicator of your current clip value.

- **Margin**

Subtracting your CoP from your average sale price (\$/kg DW for prime lamb or \$/kg clean for wool) will give you an idea of the margin you are making from your lamb and wool enterprises. If these figures are less than or close to 0, your business may be at risk.

### Where to from here?

Benchmarking your CoP gives you an idea of the scope you have for improving the profitability of your sheep enterprise. The next step is to very clearly decide the lifestyle and financial goals your business has to support, and then determine the enterprise strategy, flock structure and markets that will best achieve these goals.

Access to capital, attitude to risk, land class and rainfall are some of the factors that make your situation different to others and will govern the enterprise choices available to you. However, all options you might take will influence either of two things – your feed supply or your feed demand.

The options you may choose from to change feed demand include: classes of stock, breed, time of lambing, age at weaning, target growth rates and turn-off weights. All of these factors influence the feed demand in terms of quality and quantity required at different times of the year.

On the other side of the equation, options for providing the feed required include: the pasture species grown on different land classes; the grazing rotation, which includes fencing, grazing and rest times; the use of irrigation, supplementary feeding, fertilizer and fodder conservation. The Making More From Sheep manual and supporting events can help producers understand the technical and practical issues associated with making management changes.

While the CoP calculator has been designed to be used by producers individually, a series of "Managing Your Profit Drivers" workshops featuring use of the CoP calculator are being run by agricultural consultants Holmes and Sackett in eastern Australia and J R Hall & Co in Western Australia.

To register interest in attending one of the workshops, or for more information, call:

- Holmes Sackett on (02) 69317110 if you live in eastern Australia
- R. Hall & Co on (08) 9736 10565 if you live in Western Australia
- Mike Wagg, National Coordinator, *Making More From Sheep*, on (03) 55682945