

Factors affecting beef enterprise profitability – experiences from a grazing group in North-West New South Wales

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Abstract. A group of farmers, the 'Narrabri Grazing Group' is addressing how to identify the profit drivers for beef cattle operations in North-West New South Wales. Based on a consideration of enterprise 'strengths, weaknesses, opportunities and threats' together with benchmarking gross margins, the group has short-listed five key profit drivers: early decisions, triggers for actions, resolving management issues, mitigating the feed-gaps, restricted joining and early weaning. The paper also shows the costs and returns structure for farms in the group, and highlights the adverse long-term impacts of drought on subsequent financial performance.

The 'Narrabri Grazing Group'

The 'Narrabri Grazing Group' was formed in 2001, following participation in a Prograze™ course facilitated by NSW Department of Primary Industries (DPI). The group is currently made up of 16 farming families operating grazing and mixed farming enterprises on a total of some 18,500 ha in the Narrabri district in North-West New South Wales (NSW).

Within the group there is wide diversity in the size of the properties, their stage of development and the goals of the landholders. The group uses farm visits and discussions to find common ground between their different enterprises. Workshop activities revolve around 'SWOT' analyses (enterprise strengths, weaknesses, opportunities and threats) and analyses of gross margins – all in the context of each landholder's goals. Over the years, some of the original members of the group have left, and others have joined the group. Some of the newcomers were already known to the group, while others have been introduced through subsequent Prograze™ courses.

Involvement of NSW DPI staff provides the group with access to technical expertise in cattle markets, pasture agronomy and grazing management. While the meetings are facilitated by NSW DPI staff, a social element has also evolved among the group members, accentuating the openness with which information is shared. Shared information includes i) the short- and long-term goals for enterprises; ii) succession planning; iii) costs (such as replacement stock and pasture inputs); iv) market intelligence (including target markets, selling prices and time of sale); and v) how operations on the farm are undertaken and how decisions to change are made. Not all group members participate in the financial benchmarking. Of the enterprises that do, two are exclusively trading enterprises, six are exclusively

breeding enterprises and three have a combination of the two enterprise types. The members that do not contribute their records to analysis, still make a significant contribution to discussions.

Profit drivers derived from benchmarking

At the time the group formed in 2001, the Narrabri district was experiencing below average rainfall after a decade of above average conditions. Properties were fully stocked, the available feed in pastures was running low and reactionary decisions were required. Six years on, benchmarking gross returns (Figure 1) shows the impact of 'forced selling' and utilisation of stored feed reserves during 2001/02 on enterprise profitability in the subsequent years. Decisions driven by drought created problems with herd structure, pasture health and cash flow that have had lasting impacts on profitability. The group have developed and adopted five key management principles to assist 'smoothing-out' the impacts of dry seasons on their profitability.

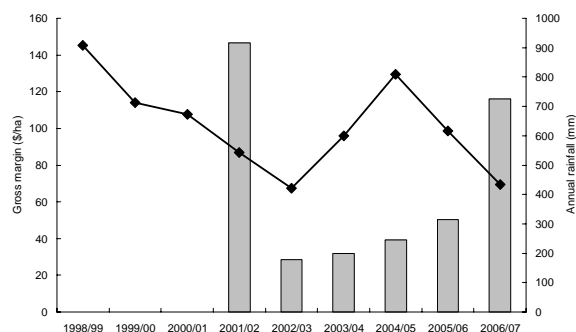


Figure 1: 'Narrabri Grazing Group' average annual gross margin (\$/ha) in association with average annual rainfall (mm). Data for 2001/02–2006/07 are means across farms (from group member's records), data prior to 2001/02 are for the town of Narrabri.

1. Early decisions are good decisions

Two fundamental principles accepted by the group are: 'No decision is still a decision' and 'avoid stalling a decision in the hope that seasonal conditions will change'. For example, it can be better to sell early rather than feed growing stock a maintenance ration and miss a key marketing window. While an early decision (such as selling a group of steers into the Meat Standards Australia market at 420 kg rather than into the European Union market at 580 kg) may be a deviation from a medium or long-term goal, the benefits can be a major reduction in short-term costs. This decision can also improve the prospects for pastures to recover, and for resources to become available to assist with other decisions.

2. Triggering actions

To assist in identifying the opportunities for early decisions, the group uses a process of 'triggers' and 'actions'. Decision plans are developed for a six month period and revisited regularly. The plan outlines 'trigger' points for the enterprise that identifies when a decision needs to be made. For example, if there has been no summer rain by Christmas, the herd should be profiled for 'saleability' versus retaining animals for their 'strategic value' to the business. Where the season remains and dry animals are saleable but of lower strategic value, an early sale (at the opening of the new season market) can prevent difficult feeding decisions.

3. Work on the business as well as in the business

Group meetings require members to regularly talk through their progress in resolving management issues. By discussing issues within the group, a broader range of information is considered in the decision-

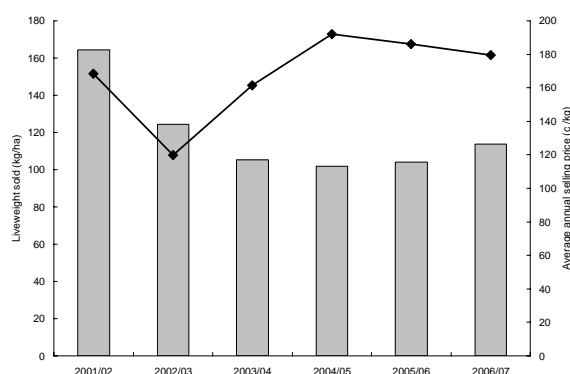


Figure 2: 'Narrabri Grazing Group' average annual production/ha compared to average annual selling prices cents /kg.

making process, and feedback helps to accelerate the implementation of management changes. Farm visits also provide opportunities to see the achievements, over time, of fellow members – this has proven to be a valued source of inspiration and motivation.

In recent years, quite a few members of the group have been fine-tuning the marketing (eg. group marketing, product targeting) of their enterprise's turn-off in order to maximise income per kilogram (c/kg) of beef produced, while stock numbers are low. As can be seen in the summary of production in Figure 2, a near-stable income per kilogram has been achieved, cushioning the impact of lower production. Through selling at 'peaks' in the market and selling animals that meet the market specifications income is being maximised. The group has also come to appreciate the importance of maintaining expenditure on pastures even through dry years to protect productivity (Figure 3).

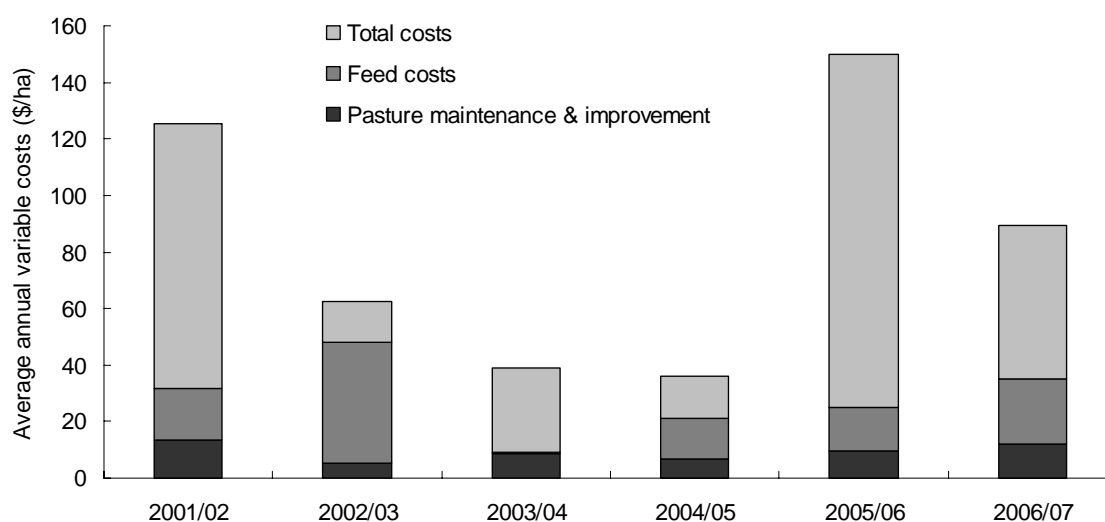


Figure 3. 'Narrabri Grazing Group' average cost structure for beef production.

4. Filling the autumn feed-gap

Autumn is traditionally the driest time of year in the Narrabri region. The availability of feed at this time is essential to keep production timelines on target. The benefits of the combination of pasture improvement, forage crops and supplementary feeding have been determined by members of the group to be essential practices to fill this feed-gap.

While costs such as fertiliser and seed for pastures are considered 'expenses' from an accounting perspective, they have come to be viewed by the group as an investment from a management perspective. From trials (hosted by group members) and confirmed by subsequent experience, some 300-fold increases in dry matter production have been achieved from native grass pastures in the region through the addition of phosphorus and sulphur fertilisers. While the establishment of tropical pastures has proved challenging, the rewards warrant the effort required – in particular, tropical grasses respond to early spring rains and their growing season continues well into autumn. Moreover, the ground-cover achieved with tropical pastures increases the infiltration of storm rainfall into the soil, driving a cycle of higher productivity.

On the basis of the group's experience, key elements of 'best practice' that mitigate the feed-gap include:

- Correcting nutritional differences, despite the expense, are more likely to pay for themselves in dry years than in wet – in dry years, it is even more critical that pastures are able to maximise the dry matter production per millimetre of rainfall
- Soil tests are undertaken before fertiliser programs are commenced – to determine where fertiliser responses are most likely
- The rate at which pastures recover from grazing and from dry seasons impact on the efficiency with which rainfall is used – rotational grazing is effective in enhancing recovery, however, paddock size and location of watering points can interact with the effectiveness of rotational grazing
- In an above average rainfall year, excess feed produced by tropical grasses can produce opportunities for hay-making and seed-harvesting as well as multiple grazing
- Supplementary feeding with white cottonseed enables productivity to be maintained when excess grass feed is produced. The self-limiting nature of this feed type suits the limited availability of labour in most of the enterprises. Co-operative purchasing also assists in acquiring the seed at a competitive price

- Forage crops (oats, forage sorghum, lablab) can be used to meet specific market targets on time.

5. Restricted joining and early weaning

The benefits of setting short joining periods can be realised in the following ways:

- Tighter joining periods mean narrower calving windows – for the smaller enterprises in the group, a narrower calving period leads to improved marketing opportunities as the product to be sold is more uniform
- In dry seasons, shortening the joining period allows for earlier pregnancy testing and prospective culls can be identified earlier
- When conditions remain dry, there is also the option of better management of early weaning because calves are of similar age.

Early weaning of calves at approximately 200–250 kg (rather than 300–350 kg) has been adopted by many in the group to maintain cow condition for the next joining. Managing cows and calves separately reduces energy requirements of the cow by up to 60 per cent. Dry standing feed, that is unsuitable for lactating cows, can be efficiently utilised (with protein supplementation) by dry cows. This limits the need for expensive feeding (fodder crops, grain) to calves with smaller feed requirements. It also ensures that cows are able to produce a calf every 12 months, rather than every 14–16 months.

Conclusions and future directions

Gross margin analyses have provided an insight into how management decisions translate into profitability. However, they only show part of the picture. In 2006/07, some of the group members commenced analysis of total costs of production using the template provide by Meat and Livestock Australia. Over time, availability of these data will provide further insight into the influence of enterprise structure on profitability and provide further fuel for discussion of management direction.