Setting directions

Key actions

- ✓ Set clear business goals and monitor and review progress.
- ✓ Use specialist advisers to decide on business, herd structure and market options to maximise profit.
- ✓ Plan, cost and test beef enterprise options.
- ✓ Determine the sequence of investments (capital and time) that will best meet enterprise goals.
- ✓ Maintain accurate records for comparison of performance with expected targets.

Introduction

Why is setting the strategic direction of the beef enterprise important?

Every business has a plan, whether it is in your head, written down in a formal document or scribbled on the fridge door. A written plan is often more detailed, which helps to clarify goals and objectives for you and others involved in the business.

Many businesses fail within five years of set-up because there is no vision or business plan. They are often under-capitalised with a poor business structure and lack of market understanding. When a business does not have a clear objective, its chances of success are considerably reduced. Well established businesses can fail for similar reasons.

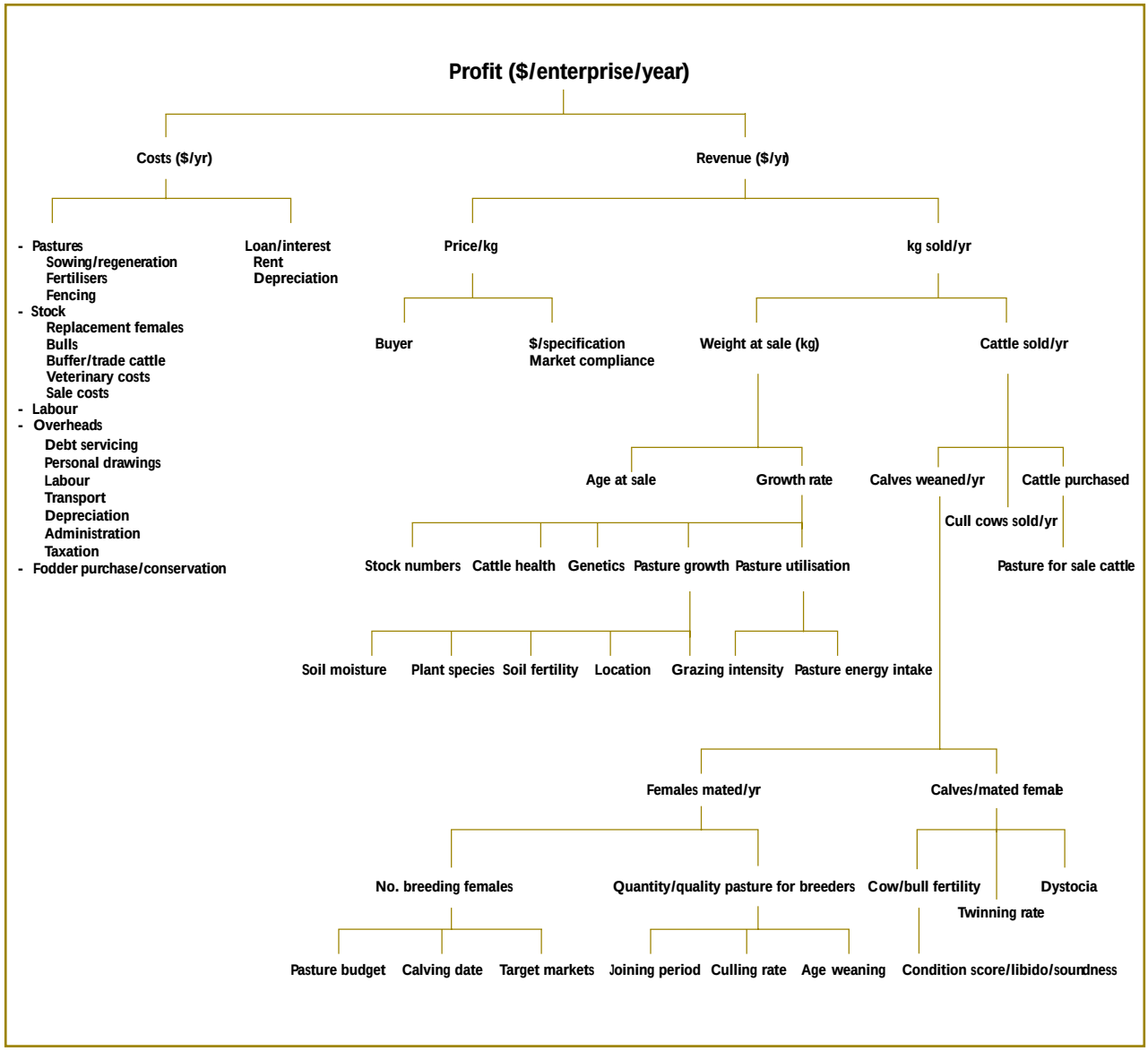
In a beef enterprise, a sound strategic direction and business analysis:

- Develops clear goals and objectives and the directions to achieve them;
- Reveals whether it is possible to meet your future needs and goals as well as those of your family;
- Assists in borrowing money at competitive rates;
- Provides a plan that sets you up to improve profitability by, for example, increasing stocking rate and pasture utilisation (key drivers of profitability) while managing climatic variability;
- Supplies the flexibility to take advantage of better than expected seasonal conditions and market opportunities;

- Builds the confidence to consider new options and predict and plan for more difficult periods;
- Helps to clearly communicate the nature of the business when more than one person is involved in its ownership and/or management.

Enterprise profitability tree

The enterprise profitability tree below provides an outline of the key areas of the production system and shows where there are opportunities to have a major impact on the productivity and profitability of your beef enterprise. Some of these opportunities are greater than others. By identifying each production factor that either incurs cost or generates revenue, the tree can help you to assess those components of your enterprise that can be manipulated to have the most impact on overall profitability.



In this manual, profit is the return on capital invested (also known as return on assets managed). This is a base measure of the efficiency of a business without consideration of the method of financing (interest and loan repayments), taxation and drawings, or profit distributions.

How does this module assist you?

Consider the economic merit of options for increasing feed supply, changing feed demand or targeting particular markets

This module looks at setting the strategic direction for your beef enterprise as part of the whole farm business. It is the logical starting point for the MLA More Beef from Pastures manual as it considers the economic merit of options for increasing feed supply, changing feed demand, or targeting particular markets. The options you choose also determine your scope to adapt to unexpected monthly or seasonal fluctuations in feed supply and market prices. This is the foundation of risk management.

The procedures provide guides for determining the structure of your herd, and marketing opportunities that will provide the most profit given your physical and financial resources, your preferred lifestyle, and your ability and confidence to take on risks.

Linkages to other modules

This module sets the initial strategic directions of the beef enterprise including targets for stocking rate for a set of pasture growth patterns, market prices and other constraints.

The matching of animal demand to feed supply is an essential part of management that needs to be undertaken more frequently. The process of manipulating stock numbers is described in *Module 2: Tactical stock control* and this is strongly linked to *Module 4: Pasture utilisation*. Detail on the selection of markets is outlined in *Module 8: Meeting market specifications* and *Module 5: Cattle genetics* also affects producers' capacity to supply target markets.

The same economic principles apply to all enterprises in the farming business

The pasture-based beef enterprise is rarely the sole enterprise of an Australian farm business. Most farm businesses consist of several inter-related enterprises such as sheep, cropping and fodder conservation for use on the farm or for sale. These enterprises compete for shared resources such as land (pasture), labour, and capital, but may also complement each other in the way they are structured. They use common assets, shared labour and forage supply.

The focus of this manual is the pasture beef enterprise. The principles of economic analysis need to be applied across all enterprises within the farm business to ensure that the competition and supporting links between enterprises are accounted for and managed. This ensures that significant changes planned within the pasture-based beef enterprise are evaluated for their impact on the whole farm business. When the whole-of-business economic analysis has been completed the most appropriate herd structure, timing of important management practices and target markets for the pasture beef enterprise can be determined to maximise profit for a multi-enterprise business.

Principles

Principles of setting the strategic direction of the beef enterprise

Set clear beef business goals first.

Determine the enterprise strategy, herd structure and markets that will achieve the beef business goals in the most appropriate and efficient way.

Establish a system to monitor and review progress towards business goals and objectives.

Procedures for setting the strategic direction of the beef enterprise

Procedure 1

Determine the enterprise strategy and herd structure most likely to maximise profit while operating at acceptable risk, taking into account business and personal goals and constraints.

Procedure 2

Develop a transition plan from the current enterprise to the preferred position, to achieve beef enterprise targets.

Procedure 3

Measure and analyse current performance and compare with expected physical and financial targets to ensure business and financial stability are not compromised during the transition phase.
Periodically review the strategic direction in relation to changes in technology, pasture resource and your goals.

Procedure 1

Determine the enterprise strategy and herd structure most likely to maximise profit

Setting the strategic direction of a beef enterprise needs to be carried out as part of planning the whole farm business.

Enterprise strategy refers to the allocation of resources such as labour, pastures and finance that will support the chosen herd structure and markets.

Herd structure refers to the:

- Stocking rate
- Numbers of each stock class (such as weaner steers, weaner heifers and cows with calves)
- Age and sex
- Breed
- Calving date
- Weaning date
- Target market and time of sale
- Buffers you require to manage risk.

Guidelines to establishing the best enterprise strategy and herd structure

There are five components to establishing the most profitable herd structure and markets:

1. Know how well your feed supply matches the requirements of your herd for maintenance, growth and reproductive performance. You can build a picture of the normal feed supply and demand for your enterprise by regular feed budgeting. Through regular feed budgeting you are able to predict the likely seasonal fluctuations in feed supply and from this better judge the 'buffers' (feed reserves) you need to manage that risk. Regardless of how you go about the next steps towards building your enterprise strategy, you will need to know your feed supply and demand. Feed budgeting is explained further in *Module 2: Tactical stock control* and *Module 4: Pasture utilisation*.

Use feed budgeting to predict your feed supply and demand

2. Develop a range of options for changing feed supply, changing feed demand (herd structure), or targeting new markets that you would like to consider further. The basis for these options will best come from consultation with a range of people including private sector consultants, state department staff, other successful producers and family members and staff.

Develop options for the future development of the beef business

3. Compare the predicted performance of alternative strategies with the current performance of your beef business. There are several methods available for analysing current performance and alternative strategies. Although these use tools and services of varying complexity, they all require:
   - Good property, production performance, and financial records;
   - A way of quickly narrowing down the options; and
   - A full bioeconomic analysis that ensures all aspects of any major change are included.
4. Decide on the preferred herd structure and market options taking into account your goals and financial constraints.
5. Develop a transition plan from the current enterprise structure to the preferred option (examined in Procedure 2).

Farm record keeping

The key to sound decisions is having accurate information readily available. There are a number of computer software programs available to assist in record keeping. Some packages include both paddock and animal records, as well as financial accounts. A number of these programs have the capacity to help calculate feed budgets. Increasingly, with widespread electronic identification of animals, data capture and storage can be automated.

Even without computer programs, the information you need is readily available from a variety of sources. A sound economic and performance evaluation of the current and/or alternative enterprise strategies can be conducted using your accountant's report, the knowledge you have about your property's physical characteristics, livestock business and trading records, and information you record in your diary such as animal performance and rainfall. Tool 1.3 describes the types of information required to conduct an analysis of your business.

Choosing the best options

Consult specialists to help identify your best options

Analysing the most profitable herd structure and markets is a complex task involving many constantly changing factors that will be particular to your resource base and personal circumstances. Making these important business decisions often requires specialist skills and expertise, in which case you may wish to employ the services of a farm management consultant with appropriate knowledge and tools. This type of service is explained in the section on Enterprise modelling.

If you believe the scale of your enterprise or the significance of the change being considered does not warrant this expenditure you need to analyse the impact of changes to your enterprise using partial budgeting (see Tool 1.2). Benchmarking your performance against similar enterprises, but using alternative enterprise strategies, is another way of considering the merit of other enterprise options. Also, private consultants and the staff of state departments of agriculture regularly conduct analyses of various enterprise options that may be relevant to your situation.

Enterprise modelling

Understand the process being undertaken in business analysis and planning

Generally two types of computer programs exist: specialist programs for use by consultants and researchers, and those intended for use by producers. For either of these types of programs the time and expense involved in purchasing the required software and acquiring the detailed knowledge and skills required to use it may not be justified. A full analysis of the enterprise direction and potential large-scale business changes will rarely be carried out.

Consult a farm management consultant when significant business changes are being considered

Farm management consultants use a range of computer tools from simple self-generated spreadsheets to elaborate farm enterprise simulation models. These models enable changes to be made to all of the animal, pasture and market data inputs to test any combination and provide a comparison of changes in profitability. The best examples of these models automate most of the process, reducing the chances of human error and removing the scope for subjective analyses by the operator. It is important that you prepare yourself with the information described in Tool 1.3 to make the best use of a consultant's time. Tool 1.1 describes the inputs and outputs typical of farm enterprise simulation models and provides a basis for talking to prospective consultants.

Farm business simulation model

Some farm management consultants can develop and maintain a computer simulation model of your entire farm enterprise. This will incur an initial establishment cost, but once built, the model can be used to test an unlimited number of alternative enterprise strategies whenever your business circumstances warrant it. To gain the full benefit of your consultant, you should look for a service that is compatible with the tactical decision-making tools you use, such as for feed budgeting and financial management. Some consultant services provide a suite of tactical tools that tie in with the simulation model.

Managing the risks

Set business goals first

Determine clear business goals and then continually monitor and review your progress towards them. Undertaking the analysis and planning sets a firm foundation for achieving enterprise goals.

Understand the benefits of thorough planning

It is possible that the structure of your herd, stock numbers, target markets and selling times do not allow the best use of the pasture grown. This means that you are not achieving the maximum potential profit within your identified personal goals and financial constraints. This can occur if the planning and analysis are not undertaken, or the results are not implemented. At the very least you need to know the consequences of not implementing the 'best' plan and the cost of putting any restrictions on the enterprise (see the Constraints box on the next page).

Constraints

The analysis of marginal returns does not directly take into account the costs or benefits to quality of life, but these factors are important enough to be considered in the trade-off between personal goals and maximising profit. Such unquantifiable benefits include the ability to take a holiday, the total number of hours worked each day, the timeframe in which the work needs to be undertaken, attitude to borrowing money and taking risks.

Similarly, you may want to put constraints on some forms of development because of concerns about potential environmental impacts.

In these instances it will be useful to get an assessment of the cost of these constraints, in terms of any decrease in profitability. Then you are in a better position to weigh the pros and cons and to make a more informed decision.

What to measure and when

Regularly monitor the profitability of your business

While there are many inputs required for a strategic analysis, the primary aim is to predict profitability (return on capital). This must be assessed initially to explore the options of a range of future scenarios, such as: an unconstrained future; the current situation; and more controlled situations. Re-analyse the situation when technology, pasture species, personal or financial constraints change, or monitoring and benchmarking indicate that current enterprise strategic and tactical policies are not achieving their objectives. You may find that better information is needed about the enterprise's physical capacity and economic performance to make more accurate predictions. This is a useful outcome as it means you will be better placed to manage and track progress if this data is collected in future.

Procedure 2

Develop a transition plan to achieve beef enterprise targets

Guidelines to implementing the transition plan

A successful transition plan maintains cash flow without exposing the enterprise to financial risk

Aim to achieve the change from current practice to new enterprise targets in as short a time as possible. At the same time ensure that cash flow, business equity and liquidity stay within set limits. A process is required that tests, prioritises and sequences the project options to maximise return on investment of time and capital and annual business profit.

Use partial budgets to cost and test investment projects and changes to management procedures

Initially, a wide range of scenarios can be reviewed for feasibility in a typical year. These are compared on a gross margin per hectare basis (additional returns minus additional costs). Then a partial budget analysis should be conducted for the options of most interest. This takes account of all the variations in returns and costs, including additional capital associated with the proposed change. It mirrors the whole farm budget but only accounts for those items that vary if this investment or option is adopted and implemented. The returns on the additional capital required are as important as the overall return on total capital. Tool 1.2 provides a template for a partial budget analysis to plan, cost and test investment in changes to management procedures.

Use of discounted net cash flow analysis is recommended for major changes

When this initial screening is completed, it may be appropriate to consider a more detailed analysis, particularly where high capital outlay or longer timeframes are involved. Consider methods such as discounted net cash flow analyses, as the value placed on money changes over time – a dollar in the future is regarded as being worth less than current value (see the *Comparing analysis approaches* box on the next page, which presents the differences in outputs from a partial budget and discounted net cash inflow analyses). The discount rate chosen for 'devaluing' future returns is normally the assumed rate for borrowing, say 8%, plus an addition for risk, say 4%, giving in this example a rate of 12%. This is often referred to as a nominal discount rate because inflation is included.

If the changes involved in your transition plan are complex, with expenditure spread over several years, it becomes necessary to consider the whole farm budget over a number of years using different inputs of key variables. Predict future scenarios by considering how variables such as costs, returns, seasonal changes and family goals could impact on your plans, then use these scenarios to determine your risk management strategy. Select the most likely scenarios and analyse them for impact on the whole business cash flow, liquidity and ability to finance.

Comparing analysis approaches

The differences in outputs from partial budget analyses and discounted net cash inflow analyses are as follows:

Partial budget analysis outputs

- Net gain (returns minus costs)
- Percentage return on extra capital invested (such as in livestock)

Discounted net cash flow analysis outputs

- Net present value of the investment over the period of time (discounting the value of returns and costs in the future)
- Internal rate of return (that can be used to compare projected returns with the opportunity cost of investing the money elsewhere)
- Nominal net cash flow (inflation included)
- Cumulative net cash flow

Managing the risks

Ensure management has the ability to manage change

The main risks of transition are failing to gain the highest possible enterprise profit and taking longer than necessary to achieve enterprise profit goals, when:

- Management needs to have the knowledge and skills to manage change;
- Investments are not scheduled in order of highest rate of return on investment; and
- Enterprise changes are not planned to minimise cost and maximise returns.

A worst-case scenario is when the farm business is destabilised during the transition by declining beef enterprise cash flow. This may contribute to reduced equity and liquidity so that business commitments may not be met. Options available for addressing this include:

- Completing or re-calculating partial budgets, beef business and other enterprise budgets and cash flows to establish discounted rates of return. When implementing options, review all analyses and take the main constraints for business into account.
- Stopping or limiting progress on those changes with relatively low discounted rates of return and re-directing investment to business areas with the highest rate of return.
- Delaying or advancing implementation of the rate of change as cash flow and time constraints vary over time.

In other instances, the business equity can increase while having a decreased cash flow. This happens when the stocking rate is increased because sales are foregone and assets (herd numbers) are increasing.

Calculate the enterprise scenarios using a range of sale prices

Key variables, such as sales prices, that influence the outcomes should initially be based on long-term average values. Use a range of expected sale prices (eg expected average, best possible price, lowest likely price) to get an idea of the impact of possible fluctuations in your assumptions. Use this information to forecast sale price variability and potential risk.

What to measure and when

The following areas should be measured:

- Marginal return on investment for each project and option;
- Annual enterprise profit (return on capital);
- Yearly cash flow, business equity and liquidity.

The frequency of these reviews should be:

- Initially – before any major investment is made;
- Annually – as part of normal business and enterprise planning and cash flow budgeting cycles; and
- Periodically – before new projects are initiated to minimise costs and maximise returns.

Further information

Makeham JP, Malcolm LR (1993) *The farming game now*, Cambridge University Press: Cambridge, UK

Procedure 3

Measure and analyse current performance, compare with expected physical and financial targets and periodically review the strategic direction

Guidelines to monitoring and evaluation

Check the accuracy of inputs and predictions

Monitoring and evaluation provide an extremely important check on the accuracy of the inputs and predictions from the analyses used to set the enterprise strategic directions. Monitoring and evaluation ensure that:

- The enterprise plan is being implemented as intended; and
- Changes in enterprise productivity and profitability align with the predetermined targets (after accounting for variations in pasture growth, market prices and variable costs).

Monitor physical resources, animal performance and financial outcomes to check enterprise strategies are on-track

There is generally a strong association between ongoing monitoring and feedback and the successful implementation of the plan. Continual monitoring of physical resources, animal performance and financial outcomes provides you with confidence that the strategies are either on-track or need revision. The system must alert you to weaknesses in the enterprise operation and allow you to take the necessary corrective changes based on accurate information. This helps to reduce the risk and uncertainty about whether changes made to herd and management structure of an enterprise are actually working.

Finally, it makes sense to review the strategic direction periodically in relation to changes that have occurred in technology advances, genetic progress, pasture species and your own business and family goals.

Managing the risks

The main risks include one or a combination of the following:

Manage risks and take the appropriate corrective actions

- Not knowing the accuracy of the analysis or models used;
- Not having an accurate way of knowing whether planned actions or tactics are meeting targets;
- Lack of objective feedback to build confidence in change;
- Implementation of the planned changes is not successful;
- Over time, changes in the overall business environment, or in your own business or family goals, mean that the initial directions set are no longer the most appropriate.

When tracking progress, potential corrective actions include:

- Identifying the reason for being off-track and taking the appropriate action when outside the limits you set;
- Rigorous checking that implementation is not at fault;
- Revising the analysis using updated values when change is implemented correctly;
- Re-examining the original analyses when the original projections are not on-track. Using your own information can add confidence to the review; and
- Re-examining the strategy every five years or so, or in the event of a new opportunity (repeat Procedure 1).

What to measure and when

Monitor key performance indicators

Measurements need to include all physical and financial key performance indicators for the beef enterprise to allow a thorough comparison with targets. Tool 1.3 provides an example of the basic information required for an enterprise audit and strategic analysis.

Monitor all physical and financial key performance indicators that impact on your beef enterprise, remembering that:

- Lag indicators can only be seen after the event and are more closely related to the ultimate measure of performance and return on assets (RoA). Examples of these include return on assets, cost of production and equity change.
- Lead indicators can be used in real time or before the event, with the aim being to track progress and reduce the impact of unforeseen events. These will be related, to varying degrees, to return on assets. Examples include stocking rate, pasture utilisation, weaning rate, percentage of carcases meeting market specifications and actual versus budget monthly cash flow.

Cash flow and climate variability may be major constraints to achieving the expected physical and financial goals. This makes the periodic review of the strategic direction of the beef enterprise vital to conducting a successful business. Refer to Procedure 1 for the appropriate methods for re-examining the overall strategy.

Toolkit 1

Tool 1.1 Specifications for a typical enterprise simulation model

Based on information from FARMAX™ and other sources

The following checklist describes the inputs, outputs and functionality required for a typical enterprise simulation model as a basis for discussions with a prospective farm management consultant to determine the level of analysis they can provide you. The trade-offs between technical accuracy, speed/ease of use and cost of service are always a challenge, but it is important you know what is required and what your consultant can provide.

Contact your farm management consultant for a list of suitable products to help you develop a beef enterprise model.

Input functions

Animal feed demand:

- Stock numbers x feed requirements (MJ ME) per head for each class of stock
- Animal intakes capped at biological maximum. Accounts for liveweight, liveweight gain (monthly), physiological state, eg pregnancy
- Affected by breed/mature size
- User specifics:
  - mating date commencement
  - mating duration
  - monthly body weight change
  - start weight
  - weaning age

Ideally stock will include all farmed animals, as well as beef cattle to reflect the whole farm impacts.

Potential pasture growth

The pasture growth potential in an average year depends on the maintenance of pasture cover within optimum levels for growth. Information can be obtained from property pasture growth cages that exclude grazing livestock, or derived from working backwards from animal demands based on stocking rates and animal performance of the specific farm. Some models use historical databases for this information.

A function to vary pasture growth based on soil moisture/forecast rainfall levels is useful.

Cost/benefit impact of nitrogen/phosphorus fertiliser needs to be identified.

Supplements conserved and fed

- Taking into account animal requirements supplied by supplements, plus impacts on minimum pasture cover requirements
- For supplements made (including forage crops), account for impact on effective land area

Effective land area

Area in pasture – allows for changes through:

- cash or forage
- hay/silage conservation
- re-sowing

Capacity to adjust effective land area on at least a monthly basis throughout year.

Market prices

- Animal values (c/kg) for breeding, store and finished stock
- Price varied by market, grade, and time of year
- Ideally, the model should be updated by entering the 'main indicator prices' and 'default correlations' to produce a pricing forecast

Variable costs

Including:

- Opportunity cost of capital invested in livestock that can be derived from liveweights and pricing inputs; able to be calculated frequently
- Animal health – default cost per head or per DSE
- Supplementary feeds – to make, to buy/sell
- Re-sowing
- Fertiliser
- Commission and levies (or adjust in pricing module)

Outputs

Biological feasibility:

- Assessment of whether metabolisable energy (ME) availability is sufficient to achieve animal requirements

Forecast pasture cover:

- Quantity kg DM/ha
- Quality – MJME/kg of dry matter, forecast plant growth stage reported monthly as a whole farm average

Gross margin:

- $/ha
- c/kg of DM consumed

Partial budget function to include:

- Returns – $/head* – sales and purchases
- Marginal costs – including opportunity cost of capital invested in livestock
- Closing stock numbers, weights and pasture covers equivalent to opening, ie static state
- Pasture utilisation %
- Annual feed demands (met by pasture) divided by potential pasture growth
- kg meat/ha/100mm effective rainfall

* Driven from sale/purchase weight (x cents/kg)

- cents/kg accounts for:
  - grade: weight and fat
  - time of year: monthly typical seasonality

Tool 1.2 Template of partial budget calculations for comparing change scenarios

This template provides an example of a partial budget to plan, cost and test modest investment projects and changes to operating procedures that will impact on enterprise budget if implemented. All in current dollar terms and annual cost where applicable.

Template of partial budget calculations

Current situation	Example $$ for current situation	Change scenario 1	Example $$ for change 1	Change scenario 2, etc.
From details of your current financial information pull out the summary information into the categories below		Assemble details of what the proposed change will involve and then summarise these into the categories below		Repeat for additional changes in scenarios
A Gross income	285,500	**A1** Extra gross income	137,500	
B Variable costs	165,500	**B1** Extra variable costs	105,500	
C Total gross margin (A minus B)	120,000	**C1** Extra total gross margin (A1 minus B1)	32,000	
D Total overhead costs	105,000	**D1** Extra overhead costs	24,000	
E Operating profit before tax (C minus D)	15,000	**E1** Extra operating profit before tax (C1 minus D1)	8,000	
		F Extra tax	1,200	
		G Extra operating profit after tax (E1 minus F)	6,800	
H Total capital invested	994,000	**H1** Extra capital invested	165,000	
		I % Return on extra capital invested after tax (G ÷ H1) x 100*	4.1%*	
		J Whole enterprise total capital (H + H1)	1,159,000	
		K Changed whole enterprise operating profit before tax (E + E1)	23,000	
% return on capital before tax (E÷H) x 100	**1.5%**	**New enterprise return on total capital before tax (K ÷ J) x 100**	**2.0%**	

* Interpret this figure carefully as it is based on the marginal change in capital. This is used for **comparing among the change scenarios only,** not with the 'current situation'.

The three critical goals of any change decision are that:

- It makes a good marginal return to capital over and above alternative less risky uses of capital, such as off-farm investment;
- Any additional investments in the farm go into the area of next highest return on marginal capital invested; and
- Investments must increase the current rate of return, or significantly reduce risk. It won't do this unless its marginal rate of return is higher than current return on total funds invested.

Examples of items in the returns and costs categories:

Gross income:

Income from sale of cattle will be the main source; but there may be others like sale of excess hay and agistment.

Variable costs:

Costs associated with cattle health, feed, pasture production, casual labour, repairs and maintenance, vehicles and lease costs.

Overhead costs:

Operator's labour and management; permanent and part time paid labour; depreciation of plant and improvements; and administration costs, including office equipment and training.

Capital investment:

Land value, improvements, cattle value, plant and equipment, and shares in the meat cooperative.

Tool 1.3 Enterprise audit sample form

An example of the information required for strategic analysis adapted from FARMAX™, Agresearch NZ

The following information is based on the current year and will generally be sufficient to develop a whole farm enterprise model with your consultant. To develop the base information about your enterprise you need to know current stock numbers and the proposed land use and livestock plan for the current year specifically. See also Tool 1.1 for the inputs and outputs required for discussions with a prospective farm management consultant.

The following format can be used to compile the information, however in many cases you will know the information 'off the top of your head' so will only need to use the form as a checklist.

1. FEEDBASE INFORMATION

1.1 Firstly decide whether you have any distinctly different areas of pasture that have significantly different growth patterns, eg steep gullies, high hills or very fertile river flats. If there are significant areas of different land types they should be listed separately. *Module 3: Pasture growth* describes how to map land classes. If your whole farm is the same soil type/contour/climate, etc. just fill in the whole farm in BLOCK 1.

Land type

BLOCK	AREA (hectares)		BLOCK NAME	AVERAGE RAINFALL	AVERAGE DSE/HA	PASTURE GROWTH RATE High/Med/Low
	Total	Effective grazing area				
1						
2						
3						
4						
5						

1.2. USE OF FERTILISER (nitrogen)

In which block?

Over what area?

At what rate?

When was it applied?

1.3. LOCATION

Describe the location of the property

The location can be used to find pasture growth information for your locality. However, if you have any detailed information about pasture growth on your property, this is most useful.

What month has the greatest 'feed pinch' on your farm?

When does pasture growth accelerate from winter?

What are summer growth rates like compared to spring?

1.4. FEED CONSERVATION

What type(s) of feed do you make: hay, silage, baled hay, lucerne hay, none (est ME value of this fodder).

Dates when you would normally be expecting to close up pasture paddocks for hay or silage and be cutting the crop.

Feed type	Shut date	Area	Cut date	Amount eg numbers of bales or wet tonnes	Kgs per bale – balage – hay	Block name (from 1)

If you have a good idea of your normal yields it is a useful cross check to that estimated from pasture growth rate predictions.

1.5. CROPPING

List the crops grown (greenfeed, brassicas, cereals, etc.) and the area. If you know what yields you expect to get (feed crops in tonnes dry matter per hectare), then please supply that information, otherwise typical yields can be estimated.

It is also necessary to know how long the paddock is out of pasture and when it is re-sown.

Crop	Area	Approx yield kg DM/ha	Block name (from 2)	Out of pasture? If no, then what?	Date paddock taken out of pasture	Date resown in young grass	Start date for grazing crops	Finish date for grazing crops

1.6. FEEDING OUT

When do you feed out your hay and silage and at what rate?

A) Hay: Describe how many bales you would expect to feed out most years and when (use half months, eg 500 bales early July, 800 late July)

	May		June		July		August		September		October	
Bales fed per 1/2 month												

B) Silage: When do you expect to feed it out and how much (eg 30t early August, 50t late August)

	May		June		July		August		September		October	
Wet tonnes of silage fed per 1/2 month												

C) Other feeds, eg lucerne hay, sheepnuts, cereal grain: Describe when and how much of any of these feeds is normally used, when it is fed and what you expect it to cost.

2. STOCK

2.1 CATTLE

1) Breeding cows

Age heifers mated
Date heifers are mated
Date cows are mated
Age at weaning

Numbers of each class of stock
Heifers, cows, steers, bulls, breeding bulls
In age groups and whether mated or not mated

2) Breeding performance

% cows pregnant .....

% heifers pregnant .....

3) Finishing cattle/grazing cattle

Describe your cattle system for all cattle other than breeding cows. Include: purchase dates (and price), breeds normally purchased, sex of cattle purchased, selling strategy (usual dates and weights, plus expected price), the numbers of each group, whether own calves retained or sold. Sales and purchases can be recorded in tables using the following format.

SALES

Stock class	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
eg 1 yr Heifers – number – weight												
eg Cows MA (mature animals) – number – weight												

PURCHASES

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
eg 1 yr Heifers – number – weight												
eg Cows MA – number – weight												
eg Bulls MA – number – weight												