

# **RISK MANAGEMENT IN THE MURRAY DAIRY REGION**

***Cameron Smith, Farmanco Pty Ltd***

29<sup>th</sup> September 2010

FARMANCO PTY LTD

# Risk Management

- Risk management strategies that have been implemented on farm over the past couple of years may not have delivered the beneficial results desired

# Risk Management

- Production Risk
- Marketing Risk
- Financial Risk
- Legal Risk
- Human Resource Risk

# Production Risk

- Weather
- Pests
- Disease
- Interaction with technology
- Efficiency
- Cost and quality of inputs

# Marketing Risk

- Cash Sale
- Marketing Co-operatives
- Contracted Production

# Financial Risk

- Farm Records & Financial Risk
- Interest Rate Risk
- Liquidity & Meeting Cash Flow Requirements
- Insurance
- Family Living Costs
- Legal Issues & Security

# Financial Risk

- Financial Risk has three basic components
  - The cost and availability of debt capital
  - The ability to meet cash flow needs in a timely manner
  - The ability to maintain and grow equity

# Legal Risk

- Structural Issues
- Contract Arrangements
- Statutory Obligations
- Tort Liability
- Environmental Liability

# Human Resource Risk

- Business Planning
- Human Resource Management
  - Job Analysis and Job Description
  - Hiring
  - Orientation and Training
  - Communication
  - Performance Appraisal
  - Compensation
  - Discipline
- Estate Planning

# Murray Dairy Business Tool

- Provides a suite of simple analytical tools that allows dairy farmers to test the impact of likely changes in water allocation, milk price, grain and fodder prices on their budget and the decisions that they need to make.

# Murray Dairy Business Tool

- Two parts of the Tool

Part 1. A seasonal impact tool

Part 2. Partial budget tool

# Seasonal Impact Tool

- The seasonal impact tool which demonstrates the impact of the current water allocation, milk price and grain and fodder prices on the dairy farm business

# Seasonal Impact Tool

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1																
2				GO TO Buttons			Seasonal Impact Tool			Last Year Farm Data		This Year Farm Data		\$ impact		
3		white cells	enter data													
4		green cells	cannot change						Seasonal Impact		Last Year Feed		This Year Feed			
5		yellow cells	only change if you need to													
6																
7																
8				<b>FINANCIAL PERFORMANCE - CASH &amp; PROFIT</b>												
9																
10					LAST YEAR		THIS YEAR						LAST YEAR		THIS YEAR	
11					Total	per cow	Total	per cow					Total	Total		
12																
13																
14																
15																
16																
17																
18																
19																
20					<b>VARIABLE COSTS</b>											
21																
22																
23																
24																
25																
26																
27																
28																
29																
30																
31																
32																
33																
34																
35																
36																
37																
38																
39																
40																
41																
42																

29<sup>th</sup> September 2010

FARMANCO PTY LTD

# Seasonal Impact Tool

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		
25																		
26																		
27																		
28																		
29																		
30																		
31																		
32																		
33																		
34																		

To clear contents of Case study farm data  
 GO TO Buttons & Break-Even button  
 white cells enter data  
 green cells cannot change  
 yellow cells only change if you need to

Seasonal Impact Tool    Last Year Farm Data    This Year Farm Data    \$ Impact  
 Seasonal Impact    Last Year Feed    This Year Feed

SCENARIOS OR "SENSITIVITY ANALYSIS"

INSTRUCTIONS  
 1. You can enter your own KEY SETTINGS  
 2. This will recalculate the CURRENT SEASON  
 3. You may also change the RANGE

Clear Case Study Farm Data

KEY SETTINGS

	CURRENT SEASON	RANGE
Water Allocation (% of HRWS)	90%	10%
Milk Price (\$/kg MS NET)	\$5.30	\$0.20
Grain Price (\$/t delivered)	\$300	\$40
Hay Price (\$/t delivered)	\$180	\$20

INCOME LESS CASH COSTS

Sensitivity to Milk Price & Water Allocation    Sensitivity to Grain Price & Water Allocation    Sensitivity to Hay Price & Water Allocation

		Milk Price (\$/kg MS)			Grain Price (\$/t)			Hay Price (\$/t)				
		\$5.10	\$5.30	\$5.50	\$260	\$300	\$340	\$160	\$180	\$200		
Water Allocation	80%	(\$35,213)	(\$1,708)	\$31,797	80%	\$25,226	(\$1,708)	(\$28,642)	80%	\$12,896	(\$1,708)	(\$16,312)
	90%	(\$15,997)	\$17,508	\$51,013	90%	\$42,890	\$17,508	(\$7,874)	90%	\$31,270	\$17,508	\$3,746
	100%	\$3,220	\$36,724	\$70,229	100%	\$60,554	\$36,724	\$12,895	100%	\$49,645	\$36,724	\$23,804

WHOLE FARM BREAK-EVEN MILK PRICE (\$/kg MS)

	Cash	Profit
Break-even price based on key settings	\$3.74	\$4.70

Click on the red button each time you input some new data to allow the tool to recalculate the break-evens

# Partial Budget Tool

- A series of partial budgets which address specific strategies the farmer may employ to improve their farm business profitability.
  - More or Less Cows
  - Nitrogen
  - TWE in spring or on a summer fodder crop
  - Agist Young Stock
  - Process own Grain

# Partial Budget Tool

- More Cows
- Less Cows
- Nitrogen
- TWE in Spring
- TWE on a Summer Fodder Crop
- Agist Young Stock
- Process own Grain

# Partial Budget Tool

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1																		
2				GO TO Buttons				Partial Budgets		Less Cows		Nitrogen		TWE - Summer		Process Own Grain		
3		white cells	enter data															
4		blue cells	cannot change															
5		yellow cells	only change if you need to					More Cows					TWE - Spring		Agist Young Stock			
6																		
7																		
8				<b>SHOULD I MILK MORE COWS?</b>														
9																		
10				<b>EXTRA INCOME</b>				<b>EXTRA COSTS</b>				<b>KEY SETTINGS</b>						
11															Current			
12				<b>Extra Milk Income</b>				<b>Extra Feed Costs</b>						Season	Range			
13				Number of extra cows		100	Feed required (t DM/cow)		5.8	Milk price (\$/kg MS)		\$5.30	Feed price (\$/t delivered)		\$240	\$0.20		
14				Production/cow (kg/MS)		517	Wastage		15%									
15				Milk price (\$/kg MS)		\$5.30	Percentage DM		85%									
16				<b>Extra Milk Income</b>		<b>\$274,010</b>	Feed purchased (t/cow)		8.1									
17							Feed price (\$/t delivered)		\$240									
18				<b>Other Extra Income</b>				<b>Extra Feed Cost</b>										
19				Extra stock trading		\$0			<b>\$193,247</b>									
20				Other		\$0	<b>Other Operating Costs</b>											
21				Other		\$0	Extra herd costs		\$15,900									
22							Extra shed costs		\$2,964									
23							Extra labour		\$40,000									
24							Extra interest		\$16,000									
25							Other		\$0									
26																		
27				<b>TOTAL EXTRA INCOME</b>		<b>\$274,010</b>	<b>TOTAL EXTRA COSTS</b>		<b>\$268,111</b>									
28																		
29				<b>COSTS SAVED</b>				<b>INCOME LOST</b>										
30				None		\$0	None		\$0									
31																		
32																		
33																		
34				<b>TOTAL BENEFITS</b>		<b>\$274,010</b>	<b>TOTAL LOSSES</b>		<b>\$268,111</b>									
35																		
36				<b>EXTRA CASH SURPLUS / (DEFICIT)</b>														
37																		
38																		

  

		Milk price (\$/kg MS)		
		\$5.10	\$5.30	\$5.50
Feed price (\$/t delivered)	\$220	\$11,663	\$22,003	\$32,343
	\$240	(\$4,441)	\$5,899	\$16,239
	\$260	(\$20,545)	(\$10,205)	\$135