LIVING WITH CHANGE

DAIRY FARMERS CO-OPERATIVE
Annual Convention
South Australia
November 2011

John Mulvany, ONFARM Consulting Pty Ltd

"... On what principle is it that when we see nothing but improvement behind us we are to expect nothing but deterioration before us..."

Thomas Macaulay 1830

Some changes we are in control of……

Some we're not....

Consider the changes that some dairy farmers have chosen to make over the past 15 years…

"Michael and Mandy Motivated"

1996

- Aged in late 30s with 2 children, Mitch 12 and Maud 9.
- No paid labour
- 100 ha and 200 cows (2c/ha)
- 5,700 litres and 430 kg MS/cow
- 8T DM/ha pasture consumption (90 kg N/ha/yr)
- 1 T concentrate/cow (14% imported energy)
- 16 unit dairy
- All replacements at home
- 40% equity
- 50% of income on farm working expenses (FWE)

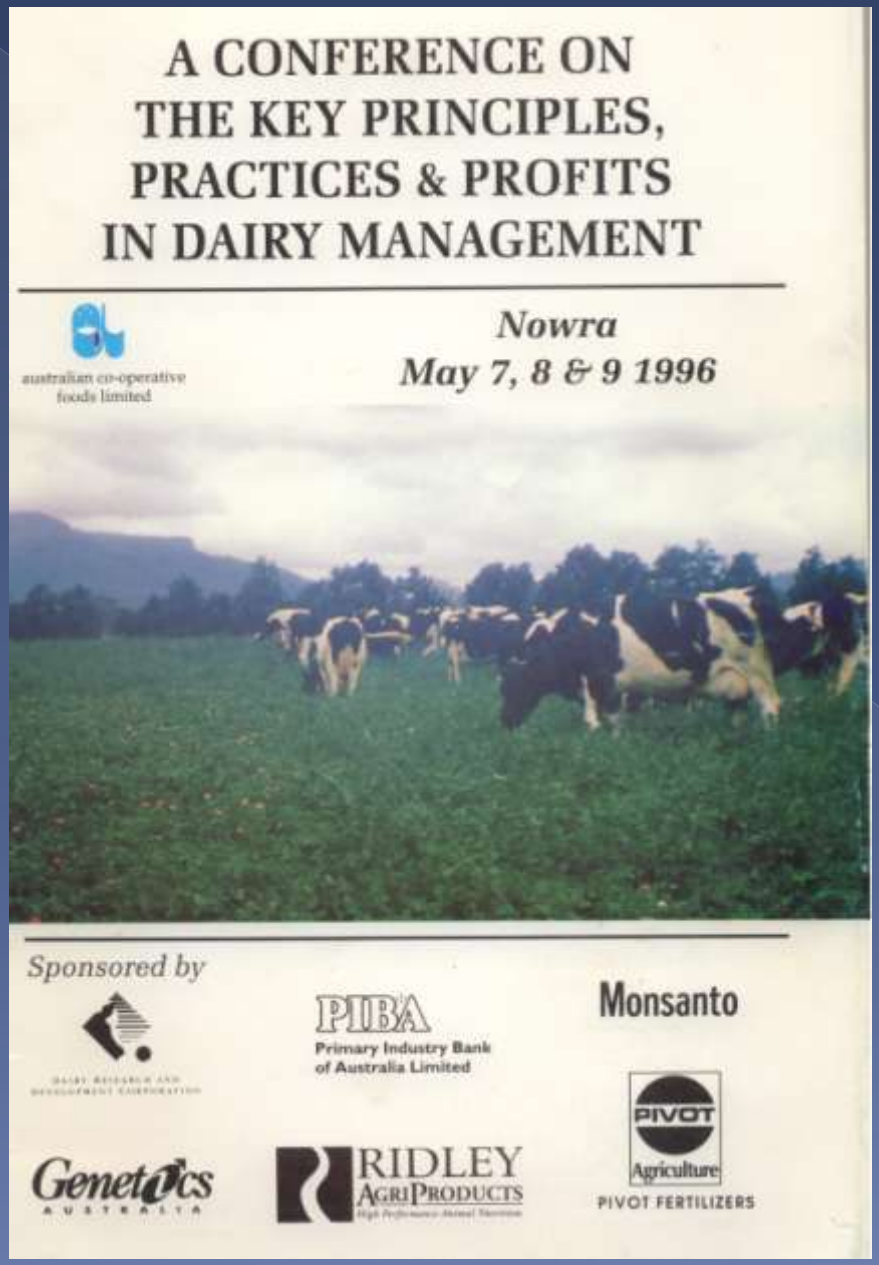
2011

- Late 40s with Mitch 27 and DDL and Maud 24 at uni and off farm.
- 40% paid labour
- 200 ha owned, 150 ha turnout block rented
- 7690 L and 580 kg MS/cow
- 600 cows (3c/ha)
- 2T concentrate/cow, 0. 25T purchased fodder,
- 0.2T silage off T/O (40% imported energy)
- 10.6 T DM pasture consumption (280 kg N/ha/yr)
- 50 unit rotary
- All replacements off
- 60% equity
- 65% of income on FWE

Other real life examples of "chosen change"

	Farm 1 (HR) Internal Change		Farm 2 (HR) Internal and external Change		Farm 3 Internal and external change	
	1996	2011	1996	2011	1996	2011
Cows	210	280	245	430	120	224
Hectares	92	92	160	175	110	180
Milk Solids/cow	340	541	404	509	432	600
Litres/cow	4,594	7,310	5,460	6,900	5,838	8,108
Pasture T DM/ha	6.8	12.1	7.4	8.9	3.6	5.9
Concentrates/cow	0.75	1.85	0.8	1.91	0.8	1.88
% feed imported	17	30	13	29	29	29
Operating Surplus	102,567	377,822	159,093	618,983	114,364	268,972
OS/cow $	488	1349	649	1,218	953	1,200
OS/ha $	1,114	4,106	994	2,994	1,039	1,494
EBIT $	-1,771	273,95	119,101	524,014	57256	165,253
ROA%	-0.02	7.3	7.0	10.6	7.5	8.3
$ invested/cow	6,510	13,320	6,943	11,458	6,355	8,873

The chosen changes have worked!



Have we got these "chosen changes" nailed??

“SOMETIMES SURPRISES COME WITH YOUR CHOSEN CHANGE”

Surprises regarding "chosen changes"

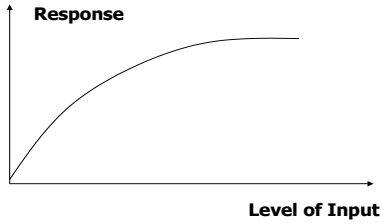
- 600 + kg MS (8,400 litres) is achievable on
  - 2 T concentrate ($320/T DM)
  - 1.0 T DM home grown silage $150/T DM
  - 3.5 T DM pasture ($75/T DM)
- This average feed cost of $162/T DM or 1.5 c/MJ will be profitable when stocking rate is appropriate for the district.
- The top 3% in terms of production are at 700 kg MS (10,000 L) and 3.2 T, without nutritional complexity

Surprises cont'

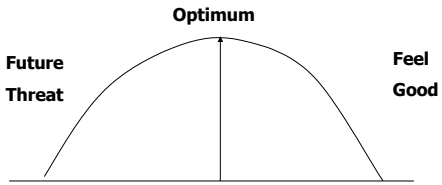
- The stocking rate/pasture utilisation curve falls over earlier than I thought i.e. The point at which more cows equals more pasture grown and utilised is earlier than I thought
- Economies of scale are extremely hard to achieve once paid labour exceeds 50% of total labour provided. In fact, the opposite occurs – excessive inputs, overhead leakage and duality! This has COP implications. Every farm has their own "POOP" position.
- Growth and chosen changes to business just seem to happen. They are not analysed or discussed enough!

Profit Pyramid – We have a much better handle on these interactions

Marginal Response Curve



Optimum Daily Position



EBIT, ROA, ROE, Change in Nett Worth

Gross margin, Operating Surplus

Margin over purchased feed, Nett Production

COWS	LAND	CONSERVED & IMPORTED FEED	PEOPLE
Efficiency 60/40	Pasture Consumed	Proportion	Cows/LU 150
1 kg MS/kg LW	/ha /cow	Cost	$/cow ($300)
Reproduction	1 T/100mm	ratio	Solids/ LU
Cull% Replacements	$40–80 /TDM		(70,000 kg)

THE BIG SETTINGS: **Stocking Rate and Calving Date**

Daily correct, frequent, marginal decisions that acknowledge risk and return

TOOLS TO MONITOR – Cover, growth rate, leaf stage, residuals, rotation length, farm area, FPFP, rotation right tool, body of evidence

I'm not convinced that we have "change" decisions analysed well enough before we act on them

We cannot assume:

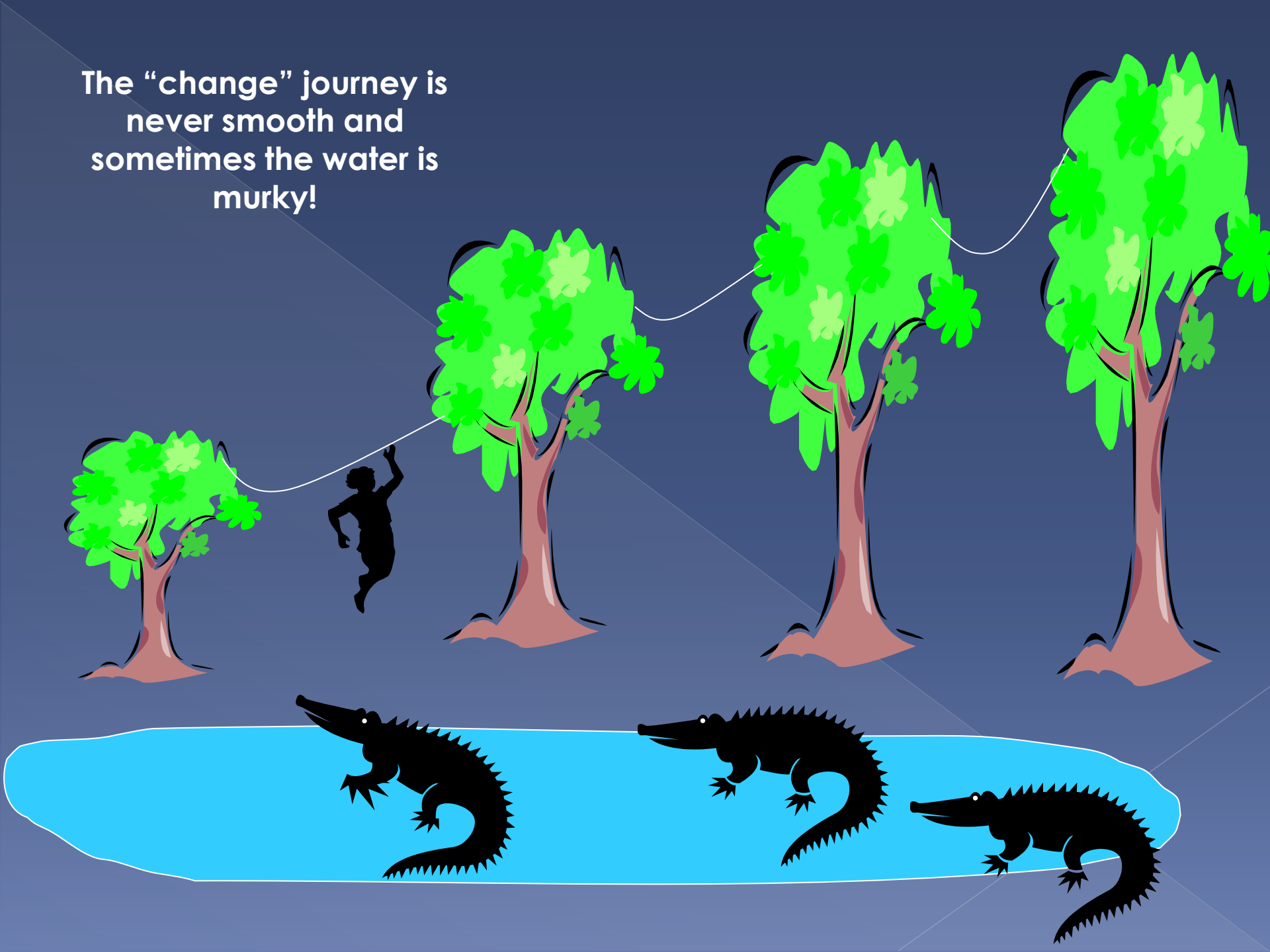
- Bigger is better!
- More milk or more cows = more profit
- More investment = more assets

The marginal change decision must always be challenged (both big and small)

- If we feed an extra tonne of feed (concentrate) at $350/T and at a milk price of $6.84/kg MS (51c/L), we need an extra 64 kg MS or 880L (0.88L/kg fed) to receive a 25% return from that marginal decision.
- At $5.00 / kg MS (37c/L) it requires 87 kg extra or 1,200 litres to generate that 25% return.
- Both responses are achievable.

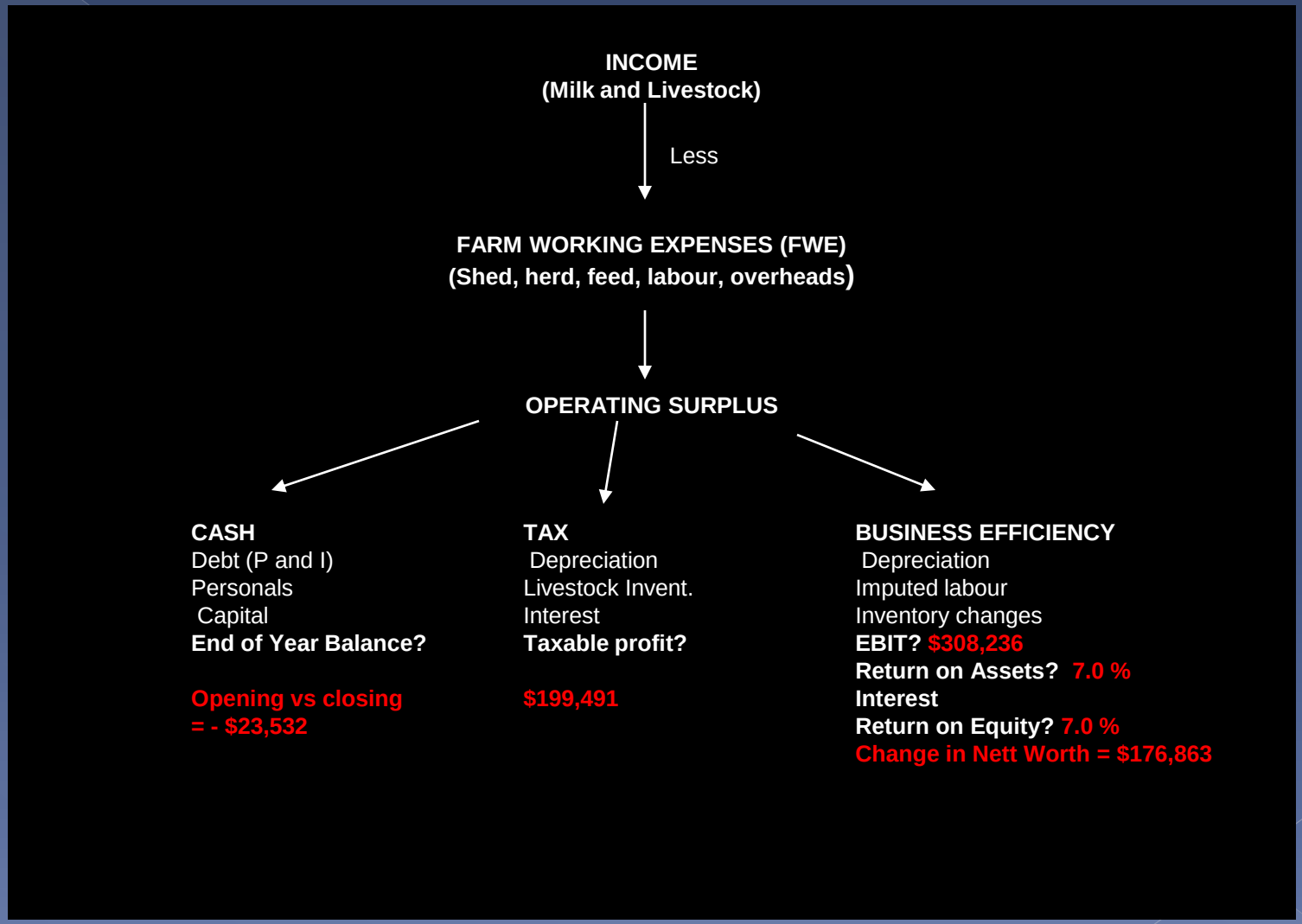
Additional Land (36 ha) and Extra Cows (60)

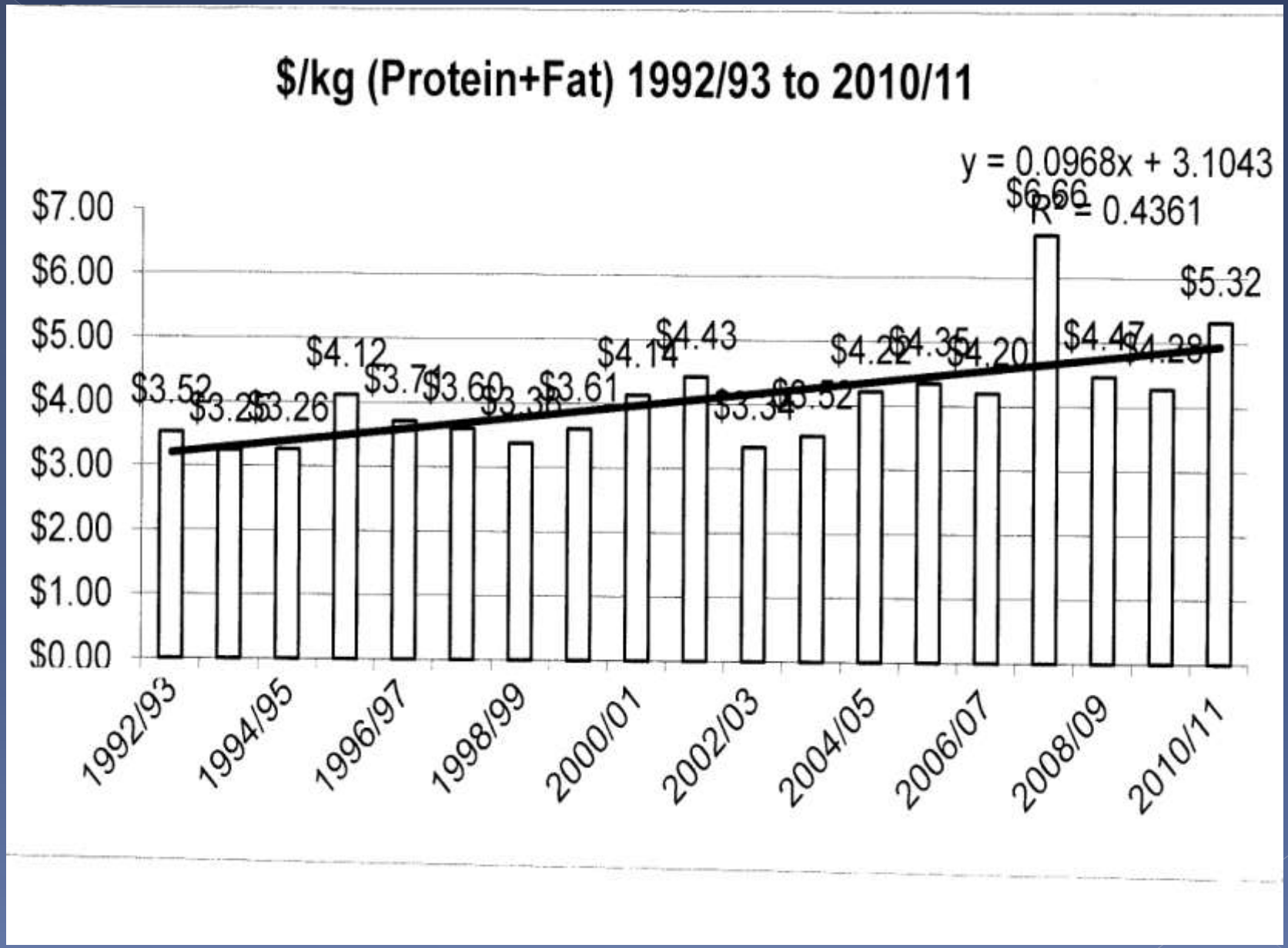
	Long Term Current	New Proposal
Operating Surplus	$269,923	$345,099
Budget Surplus	$104,207	$134,228
EBIT (Earnings Before Personals and Tax)	$89,093	$164,269
Return on Asset %	2.7%	4.1%
Marginal Return on Additional Capital		$75,176/$696,600 x 100 = 10.8%


The “change” journey is never smooth and sometimes the water is murky!

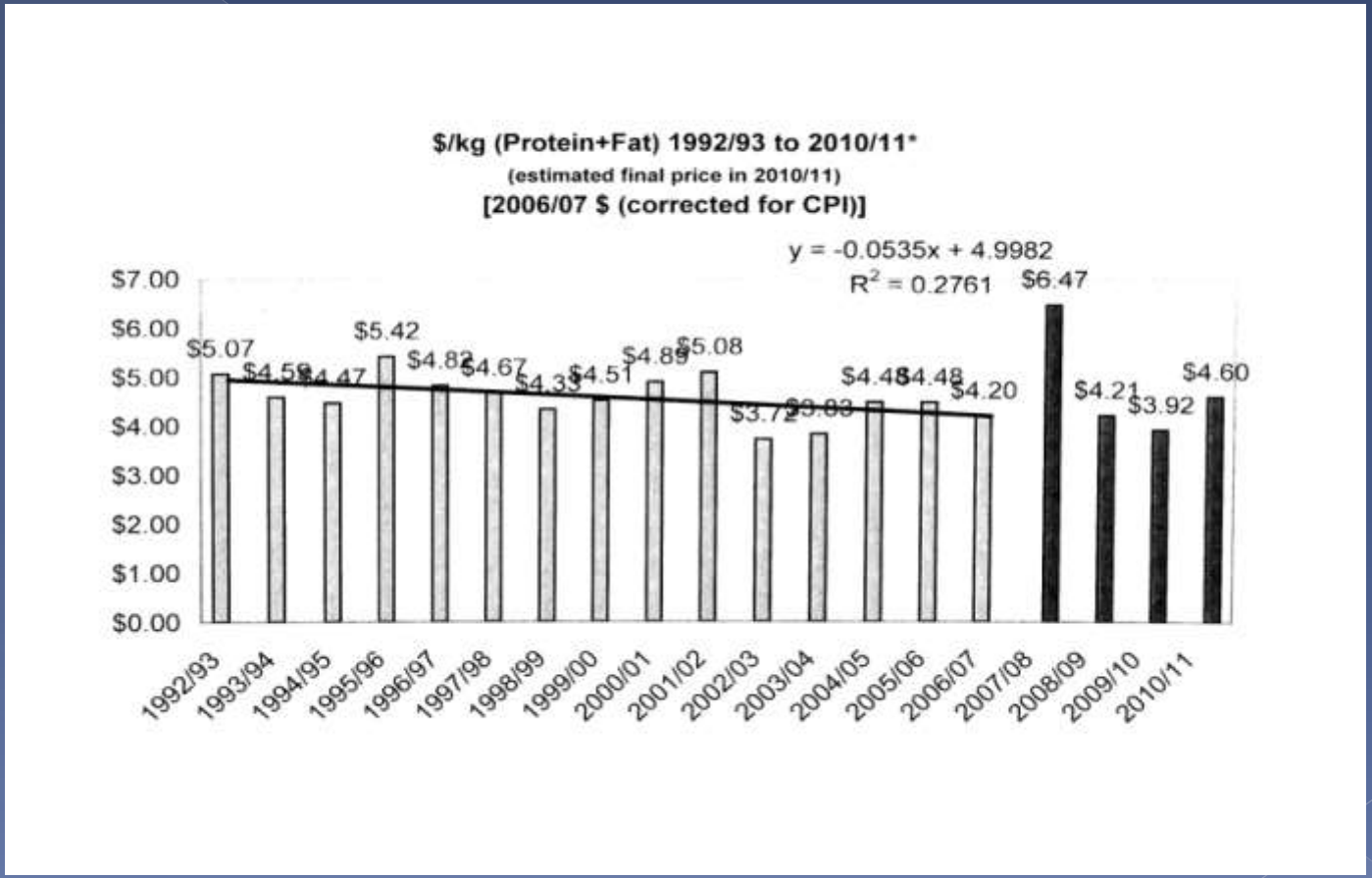
THREE WAYS OF LOOKING AT FINANCES

The Jones Family – "developing" business and 58% equity

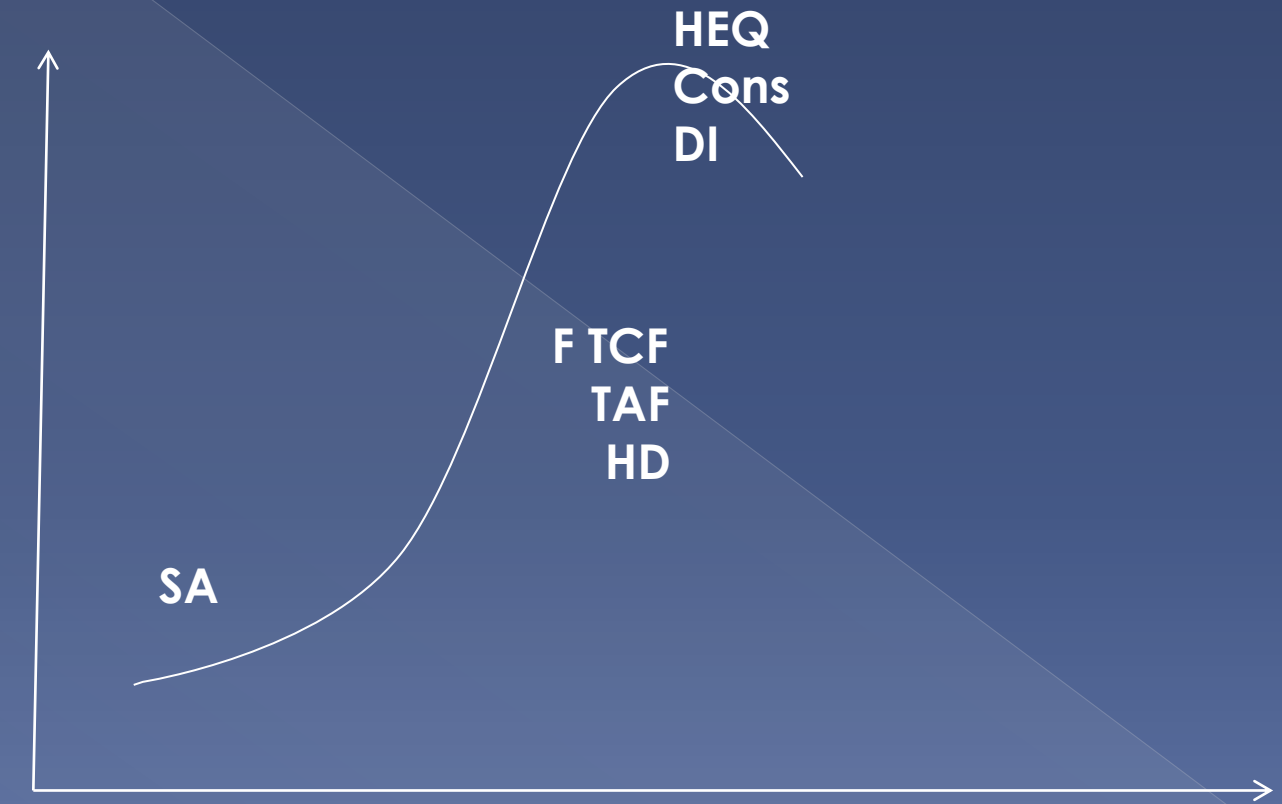



$/kg (Protein+Fat) 1992/93 to 2010/11
y = 0.0968x + 3.1043
R² = 0.4361
$7.00
$6.00
$5.00
$4.00
$3.00
$2.00
$1.00
$0.00
$3.52
$3.26
$4.12
$3.61
$4.14
$4.43
$4.22
$4.20
$6.66
$4.47
$5.32
1992/93
1994/95
1996/97
1998/99
2000/01
2002/03
2004/05
2006/07
2008/09
2010/11

Long Term Milk Price Trend in Victoria



"Chosen Change" Needs to Correlate to the Dairy Farmer Life Curve!!



What about "imposed" changes as opposed to choice?

e.g. Season and Climate

- Business settings are set to withstand surprises. If surprises become permanent then the business changes.
- The best marginal decisions are still made within the imposed changes
  - NE Victoria : Perennials to annuals; early cereal/brassica
  - Northern Victoria : No operational profit in 2006/2007; "park cows"

MILK PRICE AND SUPPLEMENT PRICE

MILK AND SUPPLEMENT PRICES

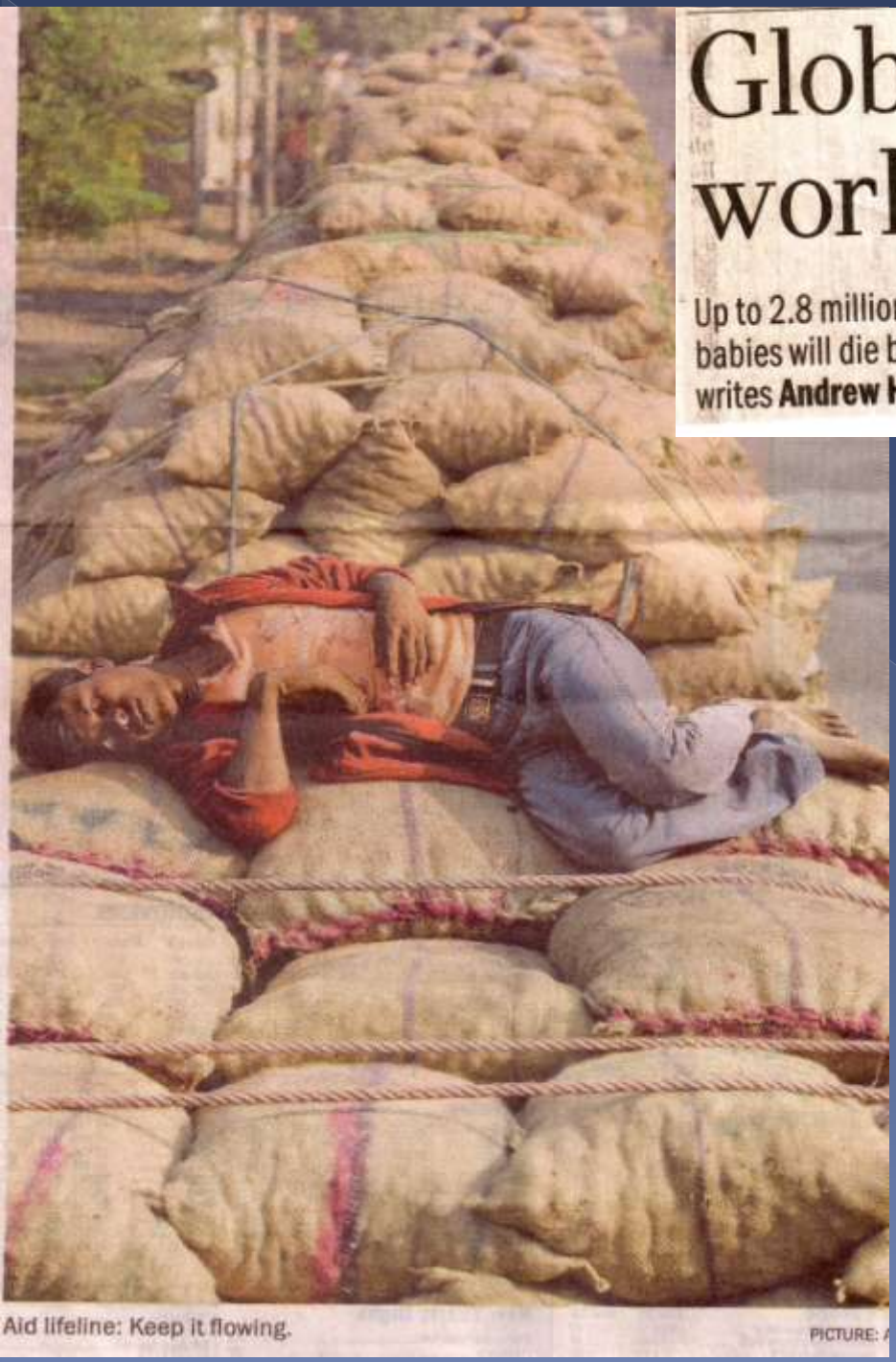
Historical milk price and supplement price ratios

Season	$/Kg Solids	cents/L	Grain	Fodder	Ratio
94/95	3.08	22.5	240	130	0.94
95/96	3.82	28.3	220	130	1.30
96/97	3.48	25.8	170	170	1.52
97/98	3.48	25.8	210	170	1.23
98/99	3.59	26.7	140	140	1.91
99/00	3.14	23.3	140	170	1.67
00/01	4.10	30.4	180	150	1.69
01/02	4.54	33.5	240	190	1.40
02/03	3.37	25.0	270	270	0.92
03/04	3.55	27.1	225	220	1.22
04/05	4.20	31.9	200	210	1.59
05/06	4.38	33.3	230	230	1.45
06/07	4.15	30.9	308	310	1.00
07/08	6.54	50.0	420	300	1.20
08/09	4.90	36.5	340	300	1.07
09/10	4.40	32.8	230	250	1.42
10/11 Trad	5.43	40.4	260	250	1.54
DI	5.80	43.2	220	190	1.96

Note:

- Opening Price with major companies varied from $4.70 - $5.10 depending on payment system.
- 5 year average milk price (2005 – 2010): $5.08 (Traditional)
- 5 year average grain price (2005 – 2010): $308
- Domestic processors opened at $5.30
- There is very significant farm variation.
- To convert c/L to $kg/MS multiply a standard litre by 13.42
- A step-up of 17cPr/7cBF equates to 12c/kg MS or about 1c/L
- Historical trends have seen a 13% increase (has been 30%) in milk price from opening.
- NE Focus Farm Opening $5.17 (48% DI, no growth included)

John Mulvany and Matt Harms ONFARM Consulting, 2011



Aid lifeline: Keep it flowing.

PICTURE:

Global meltdown hits world's poor hardest

Up to 2.8 million more babies will die by 2015, writes **Andrew Hewett.**

Age Weds March 18th.

"Preliminary analysis shows that infant deaths in developing countries may be 200,000 – 400,000 per year higher on average in 2009 – 2015."

"Those hardest hit are already on the bottom of the pile"

Andrew Hewett, CEO Oxfam Australia

A ballooning world population is only good for the dairy industry if that population can afford to pay for food!

The Foundations Have Been Shaken

Dear supplier…

- 27 June 07 “Opening price reaches record high – up 40%”
- 26 June 08 “2008/2009 opening price provides basis for ongoing confidence”
- 18 Dec 08 “World Dairy Markets have deteriorated rapidly…as the full impact of the world economic crisis hits the dairy industry. We deeply regret…”
- 28 Dec 08 “Commodity prices continue to decline”
- 20 Jan 09 “In light of recent competitive pressures at the farm gate…”

Imposed change!!

The combination of:

- Competition for supply
- A reduction or no growth in production
- Volatility in the export market

Has created fundamental and subtle changes to milk payment systems of the "big players".

MG, Fonterra, WBC all now have "domestic type" payment systems as options, based on the % supplied (solids) in February to July.

Of 60 farms that we review across Gippsland, Ne Victoria and Western Victoria the following has been noted:

Prior to the change in payment system, milk price in $/kg MS varied by 30c/kg MS (2.2c/L) per farm, and seasonality of production contributed 15 – 20 c/kg MS

Now, this variation is 60c/kg MS (4.5 c/L).

The implications are severe and this is not about supply curves – it's about supply.

Your direct base comparison is MG DI plus cartage.

Dairy Australia Situation and Outlook Survey

"... Milk price was nominated by 25% of respondents as the greatest challenge.... Cost of feed – grain – and the effects of climate/drought/flood were also dominant..."

Imposed Change! What can you do?

Cost of Production

Often loosely discussed

Cash costs do not equal cost of production!

- At the start of 2010/2011, NE Vic and Gippsland dairy farmers were asked to develop a case for a fair and reasonable milk price. This would need to cover cash costs, owner operator labour, depreciation and a return for having investment in the asset valued at about $10,000/cow.

- NE Victoria farmers came up with $6.00/kg MS (45c/L) and the Gippsland farmers came up with $5.50/kg MS (41 c/L)

	$/kg MS	c/L
Farm Working Expenses (excl. paid labour)	3.00	22
Paid and imputed labour	1.20	9
Depreciation	0.20	1.5
6% of $10,000/cow	1.11	8.3
Total	$5.51	41 c
Total plus flat curve/complex premium 10%	$6.06	45c

The true cost of production figure to generate a 6% return on asset and growth. If there's not growth you need 10% operational return!

As a NSW Dairy Farmer said recently "...I want to know what my enemy is doing..." Let's have a look

Two very diverse areas in Victoria but some strong consistencies
2010/2011 – good season, low supplement price/ reasonable milk price
50 wide ranging farms, mostly dryland * Incl. 38 - 42 c/kg MS paid labour

	North East Vic	Gippsland
Cows	281	278
MS/cow	528	549
Litres/cow	7,300	7,200
Stocking rate	1.9 (0.9 – 2.5)	2.4 (1.2 – 3.2)
Pasture consumed/cow	4.3	4.1
% Off farm supplement	31	32
Concentrate/cow	1.90	1.96
Cash Costs		
$/kg MS	$3.51*	$3.38*
c/L	26.5	25.5
Milk Price		
$/kg MS	5.73	$5.57
c/L	43	42
Operating Surplus /cow	1,354 (18.5 c/L)	1,388 (19.2 c/L)
EBIT/cow	984	$1,009 (14 c/L)
ROA %	9	8.7
Equity	78%	70%
$ invested/cow	$8,103	$11,578

Where does that leave you??

Dealing with banks and other lenders

Benchmarking physical and financial performance against other farms

Making sure that changes to the dairy business are sensible and profitable

Dealing with a family dairy situation – succession planning

How to identify good physical and financial dairy performance

Keeping reasonable physical and financial records

Understanding milk price and pricing systems now and into the future

Making sure your dairy business is resilient in a changing volatile world

Making better daily and life business decisions

Making physical and financial progress in the dairy industry

"…Dairy farmers are relishing the best conditions in years!.."

"... Dairy farmers are experiencing some of the best conditions in a decade, with strong demand from overseas markets coinciding with a favourable season according to a major report on the Australian Dairy Industry released today ..."

The Age 12 May 2011

So the job's fine!!

All systems go!

CRITICAL MILK PRICE SETTINGS

- $5.50/kg milk solids (41c/L) is a minimum milk price for the backbone of the industry (Owner-Operators) to justify the assets and effort.
- A milk price of less than $5.00/kg MS will not result in industry growth.
- A short “survivable” milk price is $4.50/kg MS.
- A large corporate investor requires $6.50/kg MS.
- The five year average milk price is $5.07/ kg MS (Excluding 2007/2008 it is $4.64/kg MS)

RESILIENCE OF INDIVIDUAL BUSINESSES

YOU DON'T KNOW WHO'S SWIMMING NAKED UNTIL THE TIDE GOES OUT

What are the characteristics of some businesses that make them more resilient?

THE RESILIENT DAIRY "TOWER"

Top 40 % management skills
Less than 40 % imported feed, especially purchased
3.0 – 4.0 T DM/cow home grown milking area feed; no more than 25% of this as silage
Farm Working Expenses (excluding labour) at $3.00 /kg MS
Equity in total assets 65%; less than 20% debt in short term debt; FMDs used. Debt servicing less than $500/cow ($1.00/kg MS, 7.5 c/L)
Significant owner-operator labour; less than 40% paid labour

It's not about rights or wrongs

It's about balance!

SUMMARY

- It's definite that variation will continue in the external operating environment
- It's definite that terms of trade will continue to impose pressure
- It's likely that variation will be more extreme
- The only response by individual businesses to any increasing variation is to reduce "exposure" and focus on the characteristics that aid resilience.
- There are still "chosen change" opportunities for the best but return goes with risk.

What about the future?

- The terms of trade will continue to erode margins. We need some new direction – genomics with cows and pastures?
- Labour will continue to be attracted away. Remaining labour will demand higher wages as is happening in other industries. Justifiable and economically efficient automation is critical.
- In most cases, the terms of trade is slightly eroding margins at the same time as total asset values have been increasing. Ownership is therefore harder and traditional ownership models will change.
- Succession of large dairy businesses to single individuals is becoming more difficult. Traditional succession will change.

So both "chosen" and "imposed" change will continue. Not changing is actually changing relative to the majority of the population.

It's all about individual businesses exploiting the possibilities