

Animals in Extensive Production Systems

VETS30031 / VETS90123















Dairy Farms – inputs/outputs and profitablility

David Beggs dbeggs@unimelb.edu.au



What is the aim of a Dairy Farm business?

Make a profit

Make a profit from sale of milk

Make a profit from sale of milk and stock

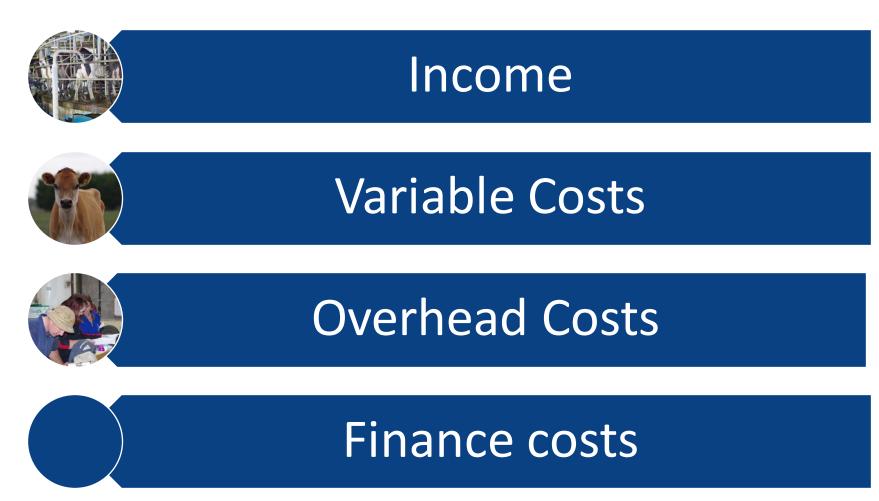
Make a profit by efficiently producing and selling milk and stock

Maximise profit by efficiently producing and selling milk and stock





Dairy Farm Inputs and Outputs



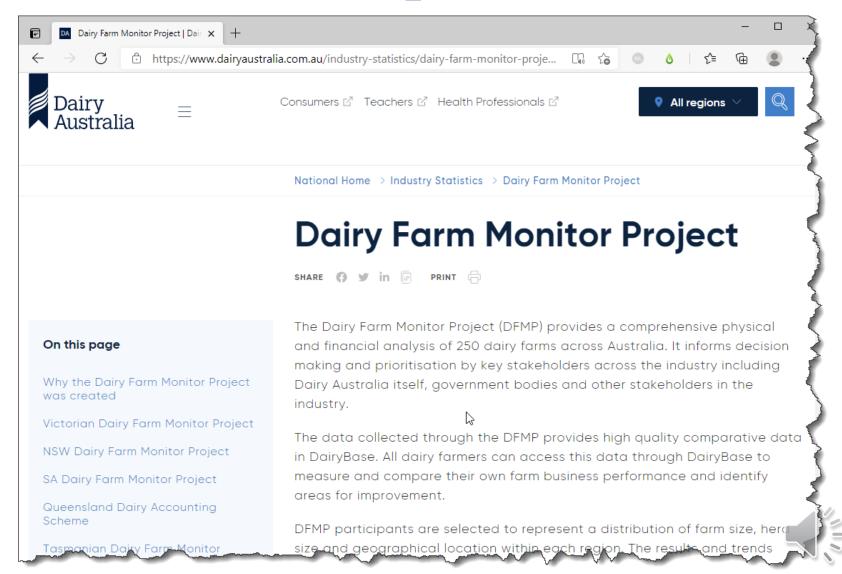




How do we describe financial performance?

Dairy Farm Monitoring Project

An "Industry standard" way of looking at a dairy farm business





Benchmarking

Profit is the sum of many small parts

If we can compare the parts between farms, we can detect inefficiencies

Need to compare "apples with apples"

Farms vary in size

Gross Margin or EBIT

- per Ha
- per Cow
- per kg Milk Solids

Farm income and cost category

INCOME

Feed inventory change

Other farm income

Livestock trading profit

Milk income (net)

Gross farm income

VARIABLE COSTS

Shed cost

Herd cost

Home grown feed cost

Purchased feed and agistment

Total variable costs

GROSS MARGIN

per kilogram of milk solids

OVERHEAD COSTS

All other overheads

Repairs and maintenance

Depreciation

Employed labour

Imputed owner/operator and family labour

Total overhead costs

EARNINGS BEFORE INTEREST AND TAX





Income

Milk income

- Farmers are paid for milk, but charged "levies" of about 0.75%
- Usually described as "Net of Levies"
- Often described "per Kg Milk Solids"



- Sale of cows
- Sale of surplus stock
- (Dairy beef, stud animals, bull sales ...)



- Off farm income
- Change in stored assets (eg feed)











How would you maximise income?

Get paid more for milk

More cows

Production per cow

Nutrition

Fertility (more days in milk)

Genetics





What are Variable Costs?

Herd Costs

- Animal Health
- Reproduction

Shed Costs

- Electricity
- Detergents
- Milking machine maintenance

Feed Costs

- Concentrates
- Forage
- Grass





Herd Costs

- Calf rearing
- Heifer rearing
- Reproduction
 - Bull management
 - _ A.I.
 - Pregnancy diagnosis (vet)
- Animal Health Costs
 - Vet Costs
 - Nutrition management
- Other management tasks
 - Disbudding
 - Ear tagging



Source: Dairy Australia





Shed Costs

Electricity

Detergents

Teat Spray

Milking Machine Maintenance







Feed costs



















How would you optimise costs?

Minimise shed costs

Optimise herd costs

Production per cow

Optimise feed costs

Fertility

Good management





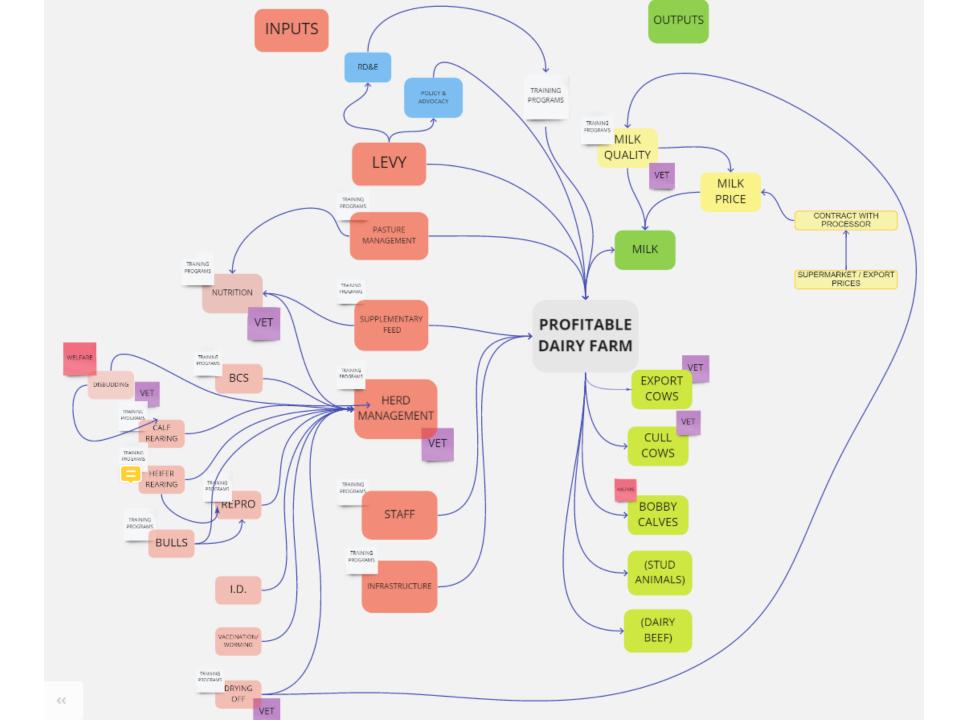






TABLE 2. AVERAGE FARM FINANCIAL PERFORMANCE PER KILOGRAM OF MILK SOLIDS - STATEWIDE

Farm income and cost category	Statewide	North	South West	Gippsland
INCOME				
Feed inventory change	\$0.15	\$0.10	\$0.21	\$0.15
Other farm income	\$0.10	\$0.12	\$0.05	\$0.12
Livestock trading profit	\$0.41	\$0.41	\$0.38	\$0.43
Milk income (net)	\$6.79	\$6.83	\$6.91	\$6.62
Gross farm income	\$7.44	\$7.46	\$7.54	\$7.33
VARIABLE COSTS				
Shed cost	\$0.22	\$0.21	\$0.23	\$0.21
Herd cost	\$0.28	\$0.27	\$0.25	\$0.31
Home grown feed cost	\$1.00	\$1.17	\$0.96	\$0.88
Purchased feed and agistment	\$1.90	\$1.96	\$1.94	\$1.79
Total variable costs	\$3.39	\$3.61	\$3.37	\$3.19
GROSS MARGIN				
per kilogram of milk solids	\$4.05	\$3.85	\$4.17	\$4.13
OVERHEAD COSTS				
All other overheads	\$0.25	\$0.23	\$0.26	\$0.27
Repairs and maintenance	\$0.33	\$0.29	\$0.41	\$0.28
Depreciation	\$0.21	\$0.19	\$0.24	\$0.21
Employed labour	\$0.48	\$0.46	\$0.47	\$0.49
Imputed owner/operator and family labour	\$0.76	\$0.66	\$0.77	\$0.86
Total overhead costs	\$2.03	\$1.83	\$2.14	\$2.11
EARNINGS BEFORE INTEREST AND TAX				
per kilogram of milk solids	\$2.02	\$2.02	\$2.03	\$2.03







