DAIRY INDUSTRY – HISTORY

Tony Baldwin
www.tonybaldwin.co.nz

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“Know the past if you would divine the future”

Confucius
Key sources on New Zealand’s dairy history include:

- **Lind, C.** “Till the Cows Come Home – Inside the battle that built Fonterra”, Overland Publishing Ltd, Wellington, NZ, 2014


- **Ward, A H.** “A command of cooperatives: The development of leadership, marketing and price control in the cooperative dairy industry of New Zealand”, New Zealand Dairy Board, 1975

As many leading authorities highlight, the culture and values of the dairy industry’s pioneering days continue to have a powerful influence in the modern era. So it is useful to understand those foundational values.

The purpose of these slides is to provide a brief overview of the industry’s formative years and its structure from 1900 to the present.
Outline

• Dairy industry’s roots 6 to 8

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The New Zealand dairy industry is deeply rooted in New Zealand’s social and political history. In the 1890s, dairying was vigorously promoted by the NZ Government to attract relatively poor and unskilled workers from the UK to immigrate and settle in NZ.
“Early dairy farmers all had the same ambition to achieve a decent life for their families. They all came from much the same class in Britain. All shared the same hatred of the worst features of English class society.”

David Yerex, “Empire of the Dairy Farmers”
As historian Gordon McLaughlan explains:

“Most of the small farms had been carved out of much larger blocks of land, so that there were, around the country, many areas where dozens of small farms stood cheek by jowl. Each dairy farmer was likely to have two or three other diary farms on his boundary...

These dairy farmers were all in the same boat. They were all poor, they all had the same simple ambition to achieve a decent life for their families, they all came from much the same class in Britain, and all share the same hatred of the worst features of English society...

Because their farms were small, the distance between them was not great; the community sprit was strong and they saw a good deal of one another....

So, isolated as they were....they had learned, of necessity, to work together on their farms and they had experience the need to pull together”
“White gold” dreams

Like gold prospectors of the era, dairy farmers shared a dream that milk production would deliver independence and prosperity
Dairy farmers’ dreams were best summed up by William Bowron, the Government’s Chief Dairy Expert, in his report to Parliament in 1894:
“White gold” dreams (cont’d)

“The untold enduring wealth of NZ lies upon the surface and the cow is the first factor in the way of securing it........”
“White gold” dreams (cont’d)

“We have only to make the prime article in butter and cheese, then no power on earth can stay the flow of white gold in this direction”

“White gold” dreams (cont’d)

The industry’s strategy was based on the simple idea that “no industry involved in the production of food would ever fail in a hungry world” - Arthur Ward

Our dairy farmers’ modern era strategies have strong parallels.
The “white gold” dream of those early days endured for 125 years, underpinning the creation of Fonterra in 2001 and the massive growth in milk production since:

- **Waikato Times, 11 October 1997:**
  “As Waikato's white gold builds to a record flush, milk tankers work around the clock to collect it from over 6000 farmers.....”

- **The Press, 14 October 2000:**
  “The great silver trucks glide up and down Ashburton's West Street, and then spread out to the plains of Mid Canterbury to fill their bellies with white gold”.

- **NZ Dairy Board, 6 April 2001:**
  “Milksolids are the white gold left for export processing...and the Dairy Board sells it all” - Neville Martin

- **Southland Times 21 June 2001:**
  White gold flows on down in Southland dairy sheds

- **NZ Herald, 14 August 2014:**
  “A recent trip through the "white gold fields" of the South Island has proven a real eye opener for Wanganui farming commentator David Cotton”.
The dairy industry was established by the Government with those settlers, and successive governments have remained strongly involved in shaping the industry’s future.

Early government measures included:

- Direct financial assistance
- Regulations on processing and standards
- Legislation to help set up cooperatives
- On-farm advice on how to operate a dairy farm and factory
- Powers to enable the industry to designate milk collection zones to eliminate competition between processors at the farm gate.
- Strong restrictions on the supply of non-dairy alternatives like margarine
Government’s ‘Dairy Experts’ strongly promoted the formation of cooperatives. As Arthur Ward notes: “The Government with its own expert dairy advisers had contributed greatly to the cooperative movement” (page 13 of Ward’s text)

- Competition between dairy factories was viewed as “pernicious” (to quote Mr Cuddie, Dairy Commissioner in 1914 – in photo left)

As Tony Nightingale notes (industry historian and former head of Ministry of Agriculture and Fisheries):

- The Dairy Industry Act 1892 established an unprecedented degree of government involvement in the industry. All cheese and butter for export to the UK had to be branded so its factory origin could be traced. The dairy instructors became inspectors and were given the task of tracing sources of unhygienic butter and cheese...The 1898 Dairy Industry Act largely completed state regulation of the industry. Under it the Government could provide cheap finance to set up dairy factories.
Government role (cont’d)

Tony Nightingale also notes:

• “The major problem was suspicion and competition between factory owners and dairy farmers. Factories were largely operated by private companies; farmer mistrust and price competition in pursuit of an increased share of milk supply led to bankruptcies and a lack of confidence in new ventures”.

• “The Government’s Diary Division strongly advocated the cooperative system to provide a framework within which producers and processors could settle their differences. The Government ‘Diary Experts’ believed that the cooperative system would not only help to solve the industry's organisational problems but also enhance the quality of production”.

Proprietary diary processors were, in fact, pivotal in the formation of the industry:

• "While admitting the force of the cooperative movement…, one should not forget that the industry owes much to the enterprise of the factory proprietors. When so-called cooperation had started the factory system and brought it to a standstill through bad management, it was the 'syndicator' who stepped in, bought up the discredited factories and built new ones, offered the public a fair price for their milk and put the industry on a sound financial basis." - 1897 report of the Department of Agriculture

• "One can scarcely overestimate the courage with which those early proprietors staked their scanty capital against a very doubtful return, well aware of the risk involved. They contracted for supply at so much a gallon of milk and it was necessary to make their offer before the season commenced. If the market prices turned out lower than anticipated, the proprietor often lost money. If, on the other hand, the rate paid to the suppliers gave him a more favourable return than he had hoped for, he was classed as a profiteer and thereby incurred the displeasure of his clients. Surely an unenviable position." H G Philpott (at page 102 of his text)
The risks taken and services provided by proprietary diary processors were unfairly distrusted and under-valued by dairy farmers and, as Arthur Ward points out – “The risks taken by the earlier proprietary processors and their courage in supporting the industry in periods of at least doubtful future potential were steadily forgotten” (at page 11 of Ward’s text)
Industry historian and former leader, Arthur Ward, explains that:

- "The diary farmer was cautious of outside help from authorities or commercial interests. He was suspicious, frequently unnecessarily and ungenerously so, of approaches from or commitments to those interests”.

- “He was slow to make business friends other than those with whom he had worked or of whose integrity he could be sure. He developed a suspicious of city and urban interests as not being allied to his own, and believed they were seeking more than a fair share of his hard-won livelihood. Consequently he sought through his cooperatives and district associations to secure as much of the selling price of his produce as was possible”.

- “He needed this for his own meagre leaving and for his farm development. His wife and family in most cases not only shared the rigours and shortcomings of his pioneer home, but also had been active amid the harsh realities and roughness of the milking shed. They, and he, were entitled to all that could be successfully fought for in the sale of his produce and he was determined that they should get it”.

Farmers’ attitudes
David Yerex elaborates:

- “The faith of dairy farmers in the cooperative systems was fuelled by several of the leaders rising from the ranks of the former small farmers. Among them memories were still strong of the way industrialists in Britain had exploited the lower classes. The factories, in a small way, represented "industry"; they were essential to the dairy farmers but they did not have to fall into the hands of the ‘industrialists’“

- The suspicion of ‘outside’ interests included virtually everyone beyond the farm gate: “processors, quality controllers, wholesalers, distributors, merchants, advertising agents, bureaucrats, retailers, financiers and tax gatherers”.

Clive Lind contrasts co-operatives and proprietary processors:

- “New Zealand exporters were dealing with experienced and sophisticated UK buyers. Well-organised proprietary dairy companies were usually run by professional managers with commercial links and knowledge.

- The cooperative dairy factories, on the other hand, had only local selling skills. Their knowledge and expertise on export markets were extremely limited”.

Farmer attitudes (cont’d)

Gordon McLaughlan highlights a contradiction that:

• “At the very time he [the dairy farmer] was building the cooperatives he was campaigning with simple fervour for the freeholding of lease-in-perpetuity land. His dripping sweat had made it grass-green. It was his, not God’s nor any other mans”.

Clive Lind also notes that co-operatives relied heavily on non-supplier capital:

• “Building early cooperative factories relied on wealthy people in the district buying ‘dry’ shares, supplementing the ‘wet’ shares issued to suppliers, but their was no guarantee of dividends and many such arrangements became virtually interest-free loans” (Lind, chapter 1, loc 206).

Clive Lind further notes that:

• Co-operatives' exporting representatives “knew deep down that they were not able to market as effectively as they would like” as they did not have the close connection to importers that proprietary companies had.
“Dairy farmers would congregate for hours and reinforce each other’s prejudices” - Gordon McLaughlan
“Unity among farmers emerged from their shared distrust of outsiders”
David Yerex

“Dairy farmers developed a suspicion of city and urban interests... were seeking more than a fair share of his hard-won livelihood” - Arthur Ward

These ‘outside’ interests included virtually everyone beyond the farm gate:
“processors, quality controllers, wholesalers, distributors, merchants, advertising agents, bureaucrats, retailers, financiers and tax gatherers”
David Yerex

Chew Chong of Taranaki – an early private processor – paid cash for milk (rather than goods like many processors), but was effectively driven from the industry by suspicious farmers
“Dairy farmers came to believe - and it was an article of faith - that they secured more of the selling price of their produce by the cooperative method”

“After a slow start, the concept of the cooperative dairy company spread like a faith – an extension of the small-holder’s desire for as tight a mastery as possible over his destiny” - Gordon McLaughlan

The culture and values of these pioneering days remain a strong influence in the modern era
Ward, McLaughlan and Yerex
The industry’s culture is driven by a fierce determination among farmers to be ‘free men’

Which makes it a paradox that the industry was created by the Government working with the early farmers…

…and that for the following 125 years, whenever problems arose, the industry turned to the Government for special treatment.

…and still does.
Lack of experimentation beyond farm gate

This section also looks at the first Dairy Board in 1923 – the market factors in play, the government and industry’s rationale, and an economic analysis of the single-seller logic.
Problem

• For the last 100 years, our dairy industry it has suffered from a serious dearth of diversity and experimentation beyond the farm gate.

• While our dairy industry has been highly successful in growing milk production, since monopoly exporting started during WWI, there has been minimal trialling by different parties of alternative approaches to aggregating capital, pricing, managing risk, using global value chains, understanding customers’ preferences and, most importantly, using different strategies to create wealth from the many market opportunities that a handful of decision-makers in a near-monopoly seller simply can’t see, or don’t have the capacity to exploit.
### Beyond the farm gate – Issues for producers

#### Signals of customer value that should drive producers

<table>
<thead>
<tr>
<th>Consumers</th>
<th>Producers</th>
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<tbody>
<tr>
<td>What are customers willing to pay?</td>
<td>Can I get a margin to cover my full costs?</td>
</tr>
<tr>
<td>What mix of products and services?</td>
<td>What are my competitors doing?</td>
</tr>
<tr>
<td>Demand outlook?</td>
<td>Trade access?</td>
</tr>
<tr>
<td>Risk of over-supply?</td>
<td>Exchange rate?</td>
</tr>
<tr>
<td>Best logistics?</td>
<td>Quality assurance?</td>
</tr>
<tr>
<td>How best to hedge risks?</td>
<td>Post-sales service?</td>
</tr>
<tr>
<td></td>
<td>Optimal production process?</td>
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</table>
“The responsibility of selecting a suitable marketing medium...was laid upon the bodies of farmers, who while mostly good farmers, were in no position to judge the markets or marketing organisation.”

Mr Pottinger
Director of State Marketing Dept, and then
NZ Dairy Products Marketing Commission

These organisations were in place between 1934 – 1946 (State Marketing Dept) and 1946 – 1962 (NZ Dairy Products Marketing Commission)
• In the years following World War I, there was a large over-supply of butter in the UK. Wholesale prices for butter crashed by about 50% (a plunge similar to the dairy price drop over the last two years – 2014 to 2016). In the early 1920s, dairy products also represented a significant proportion of total exports (22% then compared to 29% today)

• Frozen meat prices had a similar downward slide and the Government passed the Meat-export Control Act, 1921-22 with a view to controlling exports and influencing see-sawing prices.

• Dairy farmers sought similar legislation. The Dairy-produce Export Control Act was passed in 1923 (after a vote of dairy farmers approved it) and the Dairy-produce Board of Control was established.
As Clive Lind explains:

• “The thinking behind the [1923] legislation was reasonably straightforward. It was an attempt to give producers some combined strength when the market became difficult. The system was not designed to try to control the market – which would undoubtedly fail given milk’s widespread availability – but to enable the Board to manage the flow of products to minimise the effects of the worst declines”.

• “The Board’s powerful negotiating position resulted in huge shipping cost reductions, but market prices were still not where farmers thought they should be. This aggravated the tension between proprietary companies – with their close links to importers – and the cooperatives whose representatives, deep down, knew they were not able to market as effectively as they would like”.

• The rationale later evolved into the idea that a single dairy exporter from New Zealand could get higher prices for its products than competing exporters. This became an article of faith that determined the shape of the industry for most of last century and led to the formation of Fonterra.
Economic analysis

However, in discussing the price slump and other factors that led to the first Dairy Board in 1923, Veronica Jacobsen, Grant Scobie and Alex Duncan point out in a 1995 World Bank paper that:

• “Little if any analysis was undertaken of the underlying causes, nor was any consideration given to a range of policy responses, which might have led arguably to an assessment of the alternatives. Producers, dissatisfied with the returns they were receiving, felt typically that either international prices were inequitable, or that their share of the world price was unjustly low.

• “If prices on world markets were too low, then it was argued that collective action by producers would provide countervailing market power which would allow them to extract greater returns. If on the other hand, the depressed returns to growers were a consequence of inefficiency or exploitation by those marketing or processing the products, then grower control of these functions was seen as a way to avoid the excessive costs imposed by ‘middle-men’”
Veronica Jacobsen, Grant Scobie and Alex Duncan continue:

• “The effect of these [single seller] powers is to create a regulatory environment which restricts choice, limits competition, creates barriers to entry, encourages wasteful rent seeking and generates signals that distort the way scarce resources are allocated (ACIL, 1992; Finlayson, 1993).

• “Whether it is possible to duplicate the conditions required for a monopolist to exercise market power in an export market depends critically on:

  – how costly it is for new entrants, such as foreign competitors, to enter the market, given the state of technology. Other countries are not bound by restrictions imposed by New Zealand, when they trade the same type of meat or its substitutes. By controlling activities of New Zealand exporters in foreign markets, interventions may in fact deliver markets to third countries and inhibit the development of marketing expertise among New Zealand exporters; and
Economic analysis (cont’d)

- how readily consumers can choose cheaper substitutes. As noted above, in the telecommunications sector, even though it is costly for new entrants to set up a competing local network, there are potential substitutes such as mobile phone networks. These substitutes limit the ability of the monopoly supplier of the telephone network to exploit its position.”

• “The situation in export markets for New Zealand's agricultural products means that it is unlikely that both of the above conditions can be met for anything other than a short period of time. This severely limits the ability of single sellers to influence underlying prices, as Australian wool growers found to their cost with the collapse of their reserve price scheme”.


• There is a substantial body of further economic analysis critiquing the rationale and effects of an artificially created high dominant exporter.
The following slides provide an overview of the dairy’s industry’s structure since 1900 and its long term reliance on a single agency – government or government-mandated – to be responsible for activities beyond the farm gate.
Over 100 years, the industry drove out competition in processing and exporting. It also drove out diversity of ideas, which any industry needs to realise its full potential. The industry’s strategy is based on three misplaced myths:

• ‘Outsiders’ will reduce suppliers’ wealth,
• A single exporter will deliver higher prices for commodities, and
• Producers would not respond to consumer price signals, and could not manage the post farm gate business.

<table>
<thead>
<tr>
<th>Year Range</th>
<th>Description</th>
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<tbody>
<tr>
<td>1900-14</td>
<td>Open exporting</td>
</tr>
<tr>
<td>1914-22</td>
<td>Govt controlled</td>
</tr>
<tr>
<td>1922-25</td>
<td>Open exporting</td>
</tr>
<tr>
<td>1927-34</td>
<td>Open exporting</td>
</tr>
<tr>
<td>1935-2002</td>
<td>Single seller</td>
</tr>
</tbody>
</table>
1890 – 1914: Open Exports

Signals of customer value

Export contracts with individual co-ops

Shipping contracts

Vigorous competition to buy farmers' milk

National Dairy Association
Industry politics + administration

Farmers

Dairy companies + co-ops

'Tooley St' Importers

Wholesalers + retailers

UK consumers
1914 - 22: Single exporter

- UK consumers
- Wholesalers + retailers
- ‘Tooley St’ importers
- ‘Imperial Commandeer’
  NZ Govt purchased for UK Govt
- National Dairy Association
  Industry politics + administration
- National Dairy Association
- Lobbying on Govt prices
- Customer signals blunted
- Shipping contracts

- Dairy companies + co-ops
- Farmers
1922 – 25: Open exporting

- Consumers
- Wholesale + retail
- ‘Tooley St’ Importers
- Export contracts with individual co-ops
- Signals of customer value
- Shipping contracts
- National Dairy Association
- Dairy companies + co-ops
- Vigorous competition to buy farmers’ milk
- Farmers

- Export contracts
- Shipping contracts

- Vigorous competition to buy farmers’ milk

- Signals of customer value

- Dairy-produce Board of Control
- Industry some powers but not ‘single seller’ exporting
1926: Single exporter

- Consumers
- Wholesalers + retailers
- ‘Tooley St’ importers
- Dairy-produce Board of Control
- Dairy companies + co-ops
- Farmers

Customer signals blunted
Lobbying on prices
Shipping contracts

National Dairy Association
1927 – 34: Open exporting

- **Consumers**
- **Wholesale + retail**
- **‘Tooley St’ Importers**
- **Mainly dairy co-ops**
- **Farmers**

Signals of customer value

Export contracts with individual co-ops

Shipping contracts

**National Dairy Association**

Dairy-produce Board of Control

Industry some powers but not ‘single seller’ exporting
1927: Sir W Goodfellow’s proposal

- Consumers
- Wholesalers + retailers
- Empire Dairies (UK subsidiary)
  - Amalgamated Dairies (NZ marketer)
    - Supply milk
    - Voluntary shareholding in Amalgamated Dairies
- Dairy companies + co-ops
- Other processors
- Selected traders
- Farmers
- Farmers

Signals of customer value

Competition to buy farmers' milk
1934 – 46: Single exporter

- Consumers
- Wholesalers + retailers
- ‘Tooley St’ importers
- Govt Department
- Dairy co-ops
- Farmers

Customer signals blunted

Shipping contracts

Lobbying on prices

Dairy-produce Board of Control
  Industry some powers like ‘zoning’ but not ‘single seller’

National Dairy Association
  Industry politics + administration

Executive Commission of Agriculture

Govt pricing committees
Government had to “set prices that assure an efficient farmer of a sufficient net return to enable him to maintain himself and his family in a reasonable state of comfort.”
(extract from the relevant legislation)
1946 – 62: Single exporter

By statute, prices must "assure an efficient farmer of a sufficient net return to enable him to maintain himself and his family in a reasonable state of comfort"
1962 – early 80s: Single exporter

Customer signals blunted

Lobbying on prices

**Consumers**

**Wholesalers + retailers + traders**

**Merger of Dairy Products Marketing Commission + Dairy-product Board of Control**

**Dairy co-ops**

**Farmers**

**National Dairy Association**

**Govt Stabilisation Account**

**Dairy Loans Council**

**Milk Powder Council**

**Govt Price Fixing Authority**

By statute, prices must “assure an efficient farmer of a sufficient net return to enable him to maintain himself and his family in a reasonable state of comfort”
Early 1980s - 2002

Consumers

Wholesalers + retailers + traders + partners

NZ Dairy Board

Dairy co-ops

Farmers

Signals of customer value

Blunted signals of customer value

Co-op shares in Dairy Board from early 1990s. Board’s product pricing rewarded mergers

Milk supply + shares in co-ops

Limited direct exporting under NZ Dairy Board licence – about 2% of production
2002 – present: Open exporting

Consumers

Wholesalers + retailers + traders + partners

Signals of customer value

Fonterra

Independent processors

Regulated milk supply (up to 3% of total milk)

[86]% of milk

Compulsory shares in Fonterra

Tatua, Westland, Synlait, Open Country and a few others – [14]% of milk

Farmers

Farmers

Blunted signals of customer value