## A BRIEF HISTORY OF THE SOUTH AUSTRALIAN DAIRY INDUSTRY

Prepared by: Tony Morbey and Steve Rice

The dairy industry began in South Australia in 1837 with the arrival of the first European settlers. The cattle breeds they chose to bring to Australia were a strange mixture that included Devon, Zebu and Durham (Shorthorn). Full of ideas from centuries of 'Old World' practice, these prospective farmers undertook the production of milk, cheese and butter for their new community.

Demand for dairy produce was high and within seven years there were 30 000 cattle in South Australia. The dairy industry was mainly concentrated on the Adelaide Plains and in the Adelaide Hills. As early as 1842, some entrepreneurial dairy farmers were exporting high quality cheese and butter to India and South East Asia.

It was not until the 1880s the science of dairy production was introduced and farmers became more educated mainly through the distribution of North American findings through the South Australian Agricultural Bureau. Machine technology for milking cows and making cheese and butter was also made available. Behind this scientific and mechanical push were many farsighted people, including Albert Molineux – a great innovator and activist for the improvement of agricultural produce.

Molineux championed another concept that helped the industry to grow at a rapid rate – a system of dairy produce factories run by cooperative businesses owned by dairy farmers. By the late 1890s these factories were spread across South Australia and were exporting dairy produce in refrigerated ships. By 1917 South Australia had 86,000 dairy cows and produced over 4000 tonnes of butter and 1000 tonnes of cheese annually.

This cooperative system became the basis for the South Australian industry and some of the great names in butter, milk, cheese and ice cream, such as Farmers Union and Amscol were formed at this time.

Up until the Second World War and well beyond, the daily duty for dairy farmers was largely unchanged. Mostly the herds on farms were small, under 70 cows with farm sizes ranging between 32 ha and 48 ha. With little irrigation available for pasture, production was seasonal in order to take advantage of available green feed. Milking was performed twice a day – early morning and late afternoon – either by hand or machine. Stationary kerosene or oil engines powered the machines, until electricity was introduced to rural areas.

As the cows were milked, the milk was placed into storage systems, which were mainly ten gallon (45.5 L) milk cans made from galvanised tin. These cans were placed on wooden platforms along roadsides and were picked up by horse drawn drays or motor trucks and taken to local factories. In some areas farmers delivered the milk to the factory themselves or placed the cans on their farm railway sidings for transport to factories or river sidings for collection by boats along the River Murray. Some farmers also used machines called separators on their farms which, through centrifugal force, separated cream from the milk. The cream was placed in churns and sent to factories and the leftover skim milk often fed to pigs or calves.

Few dairy farmers were wealthy and their income from milk and cream was spasmodic and at the mercy of wide fluctuations. In the 1930s this led some dairy farmers to form breakaway cooperatives to gain higher returns for their produce. At places like Myponga, Meadows,

Jervois and Kenton Valley, farmers formed new businesses, built factories and began making cheese and butter for export and the local community. These farmers formed state-wide organisations to handle their discussions with government and other large commercial producers.

The government also became more involved in the dairy industry. Largely because of the need to organise industries during the Second World War, governments began to regulate such matters as pricing, health and safety. Dairy and factory hygiene were regarded as extremely important to governments. These regulations were even more important after the war, as the population of urban areas grew rapidly through immigration and a rising birth rate, and people demanded fresh milk daily. The government, and many dairy farmers, were concerned that the city milk market was controlled by a few large businesses and during the 1940s and 1950s there was a tussle to make this market open to the smaller cooperatives as well. Eventually, the cooperatives were successful.

Their success and a strong global demand for dairy produce led to the construction of a number of new dairy factories in South Australia during the 1950s. By this time a range of products, including powdered milk, were sought for export and local consumption. Each Australian state was self sufficient in dairy products and there was little interstate competition, other than in export markets.

During the 1950s and 1960s, as South Australian farmers applied new irrigation techniques and introduced better pastures, the industry continued to flourish. By the 1970s most dairy farms had moved to a system of bulk handling for milk and had installed stainless steel vats with refrigeration in their milking sheds in which to store milk. Dairy cooperatives and companies provided transport from these vats, in tankers, to the factories.

There was also a strong move to promote dairy products and as large supermarkets became the main form of consumer shopping, the range and variety of dairy products increased. Cheese, milk in cartons instead of wide-mouthed glass bottles that had been used for generations, flavoured milk, cream, powdered milk, ice cream, custards and flavoured yoghurt lined shelves. South Australia led the way in flavoured milk production, with Farmers Union Iced Coffee becoming a market leader.

By the 1980s the industry had been forced to change. Large herds, on irrigated pastures, became an economical alternative. High land prices in traditional dairying areas, such as the Adelaide Hills, began to push production to places where land was less expensive and water available. The creation of the European Economic Community in 1973 and the loss of markets in the United Kingdom were significant factors affecting the viability of smaller farms.

In July 2000, the Australian Dairy Industry was de-regulated. Deregulation meant the removal of both state and federal legislation specific to the dairy industry and changed the way farmers sold milk. Government subsidies and incentives were removed and deregulation led to milk prices being linked more closely to international trends and world market prices, rather than local demand and consumption.

Despite these many changes to the dairy industry in SA, milk production has almost doubled since 1980 to over 600 million litres. High value niche products such as speciality cheeses, milk from small regional processors and organic and biodynamic dairy production are becoming more popular and domestic consumption of dairy produce has increased gradually during the last 5 years. In Asia, increased demand for dairy products is providing additional export opportunities. A statistical summary page is attached.

Today the South Australian dairy industry continues to build on its innovative heritage and to adapt to the many new challenges and opportunities. Milk from goats and sheep is now

produced and processed and a number of farms are processing their own milk into dairy products on farm.

A key challenge facing the industry today is access to water and the high cost of purchasing water. With below average rainfall in the latter half of 2000's, access to water in the River Murray and Lakes has been severely restricted and this is reducing farm numbers and milk production in these areas.

During the last 10 years, representatives of all sectors in the dairy value chain, along with the SA Government and key industry bodies, have developed strategic industry plans that provide a more focussed direction for the industry in South Australia.

## THE SOUTH AUSTRALIAN DAIRY VALUE CHAIN - 2008

Prepared by: Tony Morbey

The gross food revenue for the dairy value chain is \$753m

Per capita consumption is 299 L of milk equivilents per annum

SA accounts for approx 7% of Australias milk production

SA has 334 farms producing around 600 ML of milk with a farm gate value of \$273m

There are four main dairying regions; South East, Murraylands, Fleurieu Peninsula/Adelaide Hills and Northern.

There are 100 000 cows with an average herd size of 300.

Most farms use pasture based grazing systems with medium to high levels of supplements. More flexible and intensive feeding systems are being introduced.

About 70% of farms irrigate 25% of their land area where water is available.

There are 43 accredited manufacturers, many of which are small and medium enterprises.

Major companies operating in SA are National Foods, Warrnambool Cheese and Butter Factory, Kraft, Murray Goulburn & Goodman Fielder.

1500 people are directly employed on farms and a further 425 in processing.

SA has a strong collaborative industry with key groups and government having a common commitment value through the value chain

## SOUTH AUSTRALIAN DAIRY INDUSTRY STATISTICS

Prepared by: Tony Morbey and Steve Rice

	1950	1970	1975	1980	1995	2000	2007	2009
Registered dairy farms	N/A	N/A	3064	1730	825	587	354	318
Dairy cows	175,000	149,000	N/A	103,000	93,300	105,000	100,448	99,082
Milk production (million litres)	406	483	365	329	485	713	652	631
Milk production per cow (litres)	2290	3291	3043	3163	5192	6790	6413	6361
Drinking milk sales SA (million litres)	N/A	N/A	N/A	* 127	167	185	207	205 (p)

<sup>\*</sup> Statistic for this year is white drinking milk only

Data Sources: Australian Dairy Industry in Focus (Dairy Australia)
Dairy Compendium (Dairy Research & Development Corporation)

Dairy Authority of SA (Annual Report)

Department of Agriculture Statistics