



# CountryProfile

## Turkey

Dairy herd (2008): 5.9 million head  
Dairy industry GDP contribution (2008): 0.4%

### Of mandiras and creeping modernity

**D**airy production in Turkey is a major component of the country's food processing industry and a good example of the bimodal nature of its overall agricultural sector – partly industrialised, mostly traditional, labour intensive and small scale.

Traditional family based backyard operators, known as mandiras, control a major share of Turkish dairy production and employment, but are only a fraction as productive as their modern counterparts.

Averaging three dairy cattle per farm, their approach is informal, and pays little heed to sanitary regulation.

Policymakers' ability to solve the challenges of informality and its influence in the downstream retail stream will dictate the pace at which the sector's overall productivity rises.

The number of modern milk processing plants has increased in recent years, closely linked to an increase in foreign direct investment and joint ventures.

Modern processors control much less than 50% of raw milk processing and have much room to grow until they assume a dominant role.

The steady introduction of value-added products to receptive consumers will help gain market share.

Yoghurt – the mainstay of the mandiras – is one of the most traditional and widely consumed dairy products in Turkey, at 32kg per head per year (excluding home made yoghurt).

Other traditional products

consumed in large amounts are butter, kefir and ice cream.

Dairy cattle raised by mandiras are principally fed on hay, various pulps, wheat bran and sugar beet pulp.

The informal system of dairy processing also dominates ewe and goat based dairy production, respectively the second and third largest source of dairy products in Turkey.

#### Much work still to do

Dairy exports have increased steadily over the last decade, led by cheese and milk. Turkey exports some 19,000 tonnes of cheese yearly, worth US\$76 million. Major export markets are Iraq, Saudi Arabia and Azerbaijan.

In March 2009, the European Union concluded that Turkey still has a long way to go to bring its dairy sector into line in segregating products that would be exported to EU markets.

While a traceability system was in place at all the plants visited, inspectors noted that no dairy processing plants could demonstrate a traceability system robust enough to document a proper separation between EU and non-EU eligible products at all stages of production.

Alltech has had a presence in Turkey since 1997.

"The dairy industry has two distinct segments," said Ufuk Talay, Alltech country manager.

"Alltech is keen to put its expertise and resources to good use to help educate traditional producers on the need for effective sanitary regulation, while working with large scale producers to ensure they can meet the challenges of a growing export market." ■

Sources: Export Promotion Turkey, Turkish Ministry of Agriculture



Nutrition, health, performance ...naturally

[www.alltech.com](http://www.alltech.com)

The country profile series is provided by Alltech, who this year celebrate 30 years of working in the animal health and nutrition industry. Operating in 120 countries around the globe, Alltech meets the needs of local markets by providing natural solutions. These country profiles offer an insight into some of the world's diverse dairy industries where Alltech's presence is contributing to their success.



# CountryProfile

## USA

Population: (July 2009 est.) 5.63 million.

Land Mass: 54,310 sq miles. Cattle Herd (2008 estimate): 3.35 million head. Share of US agricultural production: 3%

## Wisconsin: the dairy state

**W**isconsin's farms and agricultural businesses generate more than \$51.5 billion in economic activity and provide jobs for 420,000 people. About one out of every eight state citizens works in a job related to farming. The dairy industry dominates, churning out products worth \$2.7 billion each year from 13,000 farms.

In fact, Wisconsin is home to more dairy farms and produces more cheese than any other US state. However, since January 2008 milk prices have fallen by nearly half as global demand has plummeted and milk intended for export has spilled back onto the domestic market.

Wisconsin's farmers are suffering the consequences. The milk price has recovered in recent months to settle at around \$15 per hundredweight (45kg), but it is still vulnerable to fluctuation and barely covers producers' costs. The state is no longer America's top milk producer – California seized that title in 1993 – but the crisis interrupts a slow resurgence. Wisconsin produces 14% of the United States' milk supply.

Wisconsin has helped dairy producers forward by providing them with the advice of subsidised consultants. The initiative, combined with support for dairy processors helped milk production to reverse its decline in 2005. The state will continue to have both big farms and small ones, provided the smaller

ones find a profitable niche such as organic production.

National programmes should help. The Milk Income Loss Contract (MILC) programme issues payments to farmers in bad times. Fixed minimum prices, at which the USDA agrees to buy dairy products, help prop up the market. The merits of these efforts, however, are debated. MILC is expensive and may keep production artificially high. All the while, even with MILC assistance, many Wisconsin dairy farmers are selling below production cost.

USDA, faced with urgent pleas from farmers, expects to spend nearly \$1 billion on MILC payments and purchases of dairy products. Protectionism overseas is rising too: in January 2009, the European Union announced it would reinstate subsidies for dairy exports.

The machinations continue, but many dairy farmers say they are still losing money on every pound of milk they sell. Prices began to recover in the second half of 2009, and return over feed costs is improving as the price of forage reduces. Nonetheless, the number of farms has already dropped.

The Wisconsin dairy industry continues to maintain a strong and growing infrastructure to help the dairy industry be prosperous for years to come.

Furthermore, the creation of the National Dairy Industry Advisory Committee by the Obama administration should help Wisconsin's dairy farmers stay in the spotlight. ■

Sources: USDA, State of Wisconsin, Milk Marketing Board



Nutrition, health, performance ...naturally

[www.alltech.com](http://www.alltech.com)

The country profile series is provided by Alltech, who this year celebrate 30 years of working in the animal health and nutrition industry. Operating in 120 countries around the globe, Alltech meets the needs of local markets by providing natural solutions. These country profiles offer an insight into some of the world's diverse dairy industries where Alltech's presence is contributing to their success.



# CountryProfile

## India

### A tale of two sectors

**A**t over 100 million tonnes per year, India is the world's largest bovine milk producer. And there is plenty more room for further expansion: annual growth has averaged 6% over the last five years. India is one of the world's largest consumers of dairy products. Demographics – smaller families and cosmopolitan culture – in the nation's 'megacities' are driving the growth of the processed dairy products marketed by India's organised dairy industry. In parallel, a huge unorganised backyard dairy industry thrives by selling fresh products to the rural poor.

It is in the backyard sector that buffaloes dominate, contributing over 50% of total milk production. Buffaloes can be used for milk production, meat, and also as a work animal for small farmers. Buffalo milk has a higher fat content than cow's milk, resulting in higher prices per litre.

India's unorganised dairy industry processes approximately five times as much milk as the industrialised sector. Its share is substantial, as backyard producers are able to operate without large initial investments and their daily milk procurement and sales operations are small in scale.

More than 90% of India's milk production is sourced from 14 states (with the top three states being Uttar Pradesh, Punjab, Rajasthan), accounting for 80% of the country's villages. Milk and milk products are a significant part of the national diet, particularly for the huge vegetarian population. Per capita consumption

of milk is estimated at 250g per day, still below the world's average of 265g per day, indicating scope for further increases in consumption.

Dairy cooperatives account for the major share of processed liquid milk marketed in India.

Dairy production is an important direct and supplementary source of income for around 70 million small farmers and landless labourers. A number of Indian states place special emphasis on cross-breed cow development programs, and as a result the average milk productivity rate in those states is improving. Nonetheless, the productivity levels of most indigenous cow breeds are very low.

Despite substantial milk production growth, the prevalence of small farmers means that the Indian dairy sector still needs to overcome challenges.

Principal among them is the cost of production close to received milk price, caused by increased costs (raw materials, animals, land), low productivity, low fertility or long inter-calving intervals and high animal health costs. There is the need for more effective quality and hygiene control systems, and an enhanced network of cold chain infrastructure from the production area to the consumer.

Alltech is working hard with dairy farmer organisations in the huge 'unorganised' sector to improve animal productivity/ cost effectiveness and improved profitability through tailored natural nutrition and education, an example being the Cow Centric Management Program. ■

Sources: National Dairy Development Board, India Dairy Association



Nutrition, health, performance ...naturally

[www.alltech.com](http://www.alltech.com)

The country profile series is provided by Alltech, who this year celebrate 30 years of working in the animal health and nutrition industry. Operating in 120 countries around the globe, Alltech meets the needs of local markets by providing natural solutions. These country profiles offer an insight into some of the world's diverse dairy industries where Alltech's presence is contributing to their success.



# Country Profile

## Kazakhstan

**A**fter Kazakhstan gained its independence in 1991, state and collective farms were dismantled and privatised.

Dairy production fell drastically as private farmers lacked the knowledge, skills, and financial resources to farm their land and livestock profitably. Sheep and cattle were often used for cash or barter, so their numbers plummeted.

Even today, milk yields remain low by western standards. Many of the things that Western farmers take for granted are not available to Kazakh farmers, such as affordable credit and organised markets.

Especially lacking is a marketing infrastructure: farmers often have no place to sell their products and must settle for very low prices.

### Government programme

For the first time, the government recently implemented a three year programme to help dairy farmers by reducing some input costs, such as feed and animal health products.

While Kazakhstan has made significant progress since gaining its independence, economic growth has been slow in coming to rural areas and farmers in particular.

The quality of raw milk remains an issue because of the high seasonality of raw milk production (summer – about 15 litres per cow, winter – 5 litres per cow).

Problems associated with corruption of local officials and dif-

iculties in obtaining an adequate supply of quality milk are likely to be deep seated for the country's dairy industry.

Most milk suppliers in Kazakhstan have so little bargaining power that it is difficult for them to stay in business.

Additionally, dairy processing and marketing firms will need to devote substantial efforts to training programmes to give employees the management and marketing skills needed to operate under market conditions.

There are high barriers to entry into Kazakhstan's dairy markets at the size and level of sophistication at which western businesses operate.

The capital costs and scale economies associated with achieving nationally recognised brand status are large – both local and multinational companies fight for value share.

Economically priced traditional dairy products are the most popular, with the 'pouch pack' taking around 80% of the market for pasteurised dairy products.

### Working partnership

"Despite the difficulties the Kazakh dairy industry faces, average annual growth of milk production is predicted at 4-5% over coming years," according to Tigran Papazyan of Alltech.

"Today, there are more than 250 dairies in the country. Nonetheless, profit margins remain razor-thin. Alltech is proud to work in partnership with the country's dairy farmers to help boost their profitability and raise the profile of the dairy industry in a market with great potential."



Nutrition, health, performance ...naturally

[www.alltech.com](http://www.alltech.com)

The country profile series is provided by Alltech, who this year celebrate 30 years of working in the animal health and nutrition industry. Operating in 120 countries around the globe, Alltech meets the needs of local markets by providing natural solutions. These country profiles offer an insight into some of the world's diverse dairy industries where Alltech's presence is contributing to their success.



# CountryProfile

## USA

Population (2009 estimate): 36.8 million  
Land Mass: 163,696 sq miles  
Cattle Herd (2009 estimate): 5.25 million head  
Share of US livestock revenues (2009 estimate): 8%

## California: struggling to turn the page

California is the United States' largest milk producing state, but its dairy industry is in crisis. The Golden State's dairy farmers are in the clutches of an unprecedented financial crisis brought about by global recession and a sizeable reduction in consumption of milk and dairy products.

In 2009, the prices that dairy farmers receive for their produce dropped by over half the previous year's level. Feed overheads have kept milk production costs at levels that greatly exceed farm milk prices. As a consequence, Californian dairy farmers lost an estimated US\$1.4 billion dollars in the first nine months of last year.

More importantly, the state's 2009 milk production reversed a 30 year trend, finishing almost 4% lower than the total for the previous year.

This resulted in a large number of the state's dairy farmers exiting the industry.

For the first time in decades, California's milk production last year was less than the total needs of its processing plants.

California's total milk production decreased 4.1% in 2009 to 39.5 billion pounds. Dairy producers were forced to trim

their herds in the wake of lower milk prices. The weakened state of the economy combined with higher than average feed costs, consistently low prices paid to producers and the numerous herd buyout programs, contributed to dairy closures.

At the end of 2009, there were a total of 1,752 dairies operating in the state. This equates to a net loss of 100 total dairies compared to the previous year.

Other factors affecting slowed milk production were continued high feed prices, encouraging producers to change to cheaper, less protein rich feed rations; and the continuing pressure of environmental and water regulation concerns, which forced some producers to limit the size of their herds.

"It is widely recognised that the present crisis has changed dairy production for good," Nick Adams of Alltech told International Dairy Topics.

"The search is still on for signs the California industry has turned the corner, as the dairy crisis takes more than a financial toll.

Multi-generation family farms feel the brunt of the impact and see the direct effects of shutting down their operations on their communities and the people they employ." ■

Sources: USDA, Dairy Council of California, California Department of Food and Agriculture



Nutrition, health, performance ...naturally

[www.alltech.com](http://www.alltech.com)

The country profile series is provided by Alltech, who this year celebrate 30 years of working in the animal health and nutrition industry. Operating in 120 countries around the globe, Alltech meets the needs of local markets by providing natural solutions. These country profiles offer an insight into some of the world's diverse dairy industries where Alltech's presence is contributing to their success.



# CountryProfile

## Saudi Arabia

### Dairy in the desert

**M**ilk demand in Saudi Arabia is growing exceptionally, as much as 4% annually. Milk prices have dropped by more than a quarter over the past 12 months in the fight for market share.

There are currently 26 major dairy producers in the Kingdom, but only two – Alsafi, owned by France's Danone, and Almarai – have significant market share. The pair controls more than 60% of the market, with another 25% divided between producers Nadeq and Nada.

More than \$1 billion has been invested in developing dairies, and billions more were ploughed into other livestock and arable farming in former desert areas. This has left producers with significant overcapacity, despite periodic attempts to carve out an export market around the Middle East.

Market leader Alsafi operates the largest integrated dairy farm in the world, home to 37,000 head of cattle. The farm produces 125 million litres of high quality milk annually, and is a result of the 1973 Arab oil embargo against Western nations. During the embargo, the Saudi royal family realised their nation could not rely on food imports.

Alsafi's huge dairy herd, producing 462,000 litres of milk a day, supplies 33% of the Saudi dairy market. The cows survive in temperatures that drop to freezing in the winter and soar to 46°C in the summer.

In addition to the Alsafi plant, two new modern dairy process-

ing plants began operation in 1998, and are already exporting significant quantities of milk to the Gulf Cooperation Council (GCC), a political and economic union involving the six Arab states of the Persian Gulf. The surge in dairy production in the Kingdom has stimulated the growth of agricultural products needed to support it. The production of alfalfa, a product increasingly used by dairies, has grown hugely over the last 10 years.

Saudi Arabia now accounts for a 61% share of the GCC's dairy market, with an increasing number of health conscious consumers helping sustain strong demand for dairy food products.

Moreover, healthy and nutritious products such as fruit juices, flavoured milk drinks and yoghurt are becoming more popular among younger people, who comprise up to 70% of the country's total population.

Through government subsidies, Saudi farmers have been able to import irrigation equipment to grow grain. They have also imported dairy cattle from Europe, Canada, and the United States. In parallel to its significant domestic dairy production, Saudi Arabia is purchasing land in countries such as Ethiopia and the Sudan to grow food and produce milk. That could mean more 'mega-farms' in other unlikely places.

Alltech has had a presence in Saudi Arabia since 1990. "The dairy industry here is regionally significant," said Martin Hanika, Alltech regional sales manager, Saudi Arabia. "Alltech is keen to put its expertise and resources to work in helping the Kingdom's record-beating dairy producers to meet the challenges of a growing export market." ■



Nutrition, health, performance ...*naturally*

[www.alltech.com](http://www.alltech.com)

The country profile series is provided by Alltech, who this year celebrate 30 years of working in the animal health and nutrition industry. Operating in 120 countries around the globe, Alltech meets the needs of local markets by providing natural solutions. These country profiles offer an insight into some of the world's diverse dairy industries where Alltech's presence is contributing to their success.