Campaign to Protect Rural England
Standing up for your countryside

CPRE's Vision for the future of farming:
The future of dairy farming

The number of dairy farms in the UK has declined dramatically over the last two decades, with a move towards larger farms and herds. The average herd size in the UK is currently about 117 cows. In 2000 the average dairy herd size in the UK was 84. In many countries the herd size is over half the UK average. The number of registered dairy producers in the UK fell from 35,741 in 1995 to 14,793 in 2011. There were nearly 200,000 UK dairy farmers in the 1950s.

Despite the fall in the number of dairy farms the UK is the third largest producer of milk in the European Union after Germany and France. Our climate is ideally suited for growing grass and the UK's dairy farms produce about 5 billion litres of milk per year and we each consume an average of 1.6 litres (about 3 pints) a week. On top of that, 7 billion litres go into dairy products such as cheese, butter and dried milk powder, which is a vital component of many other food products. The UK now produces over 700 different types of cheese.

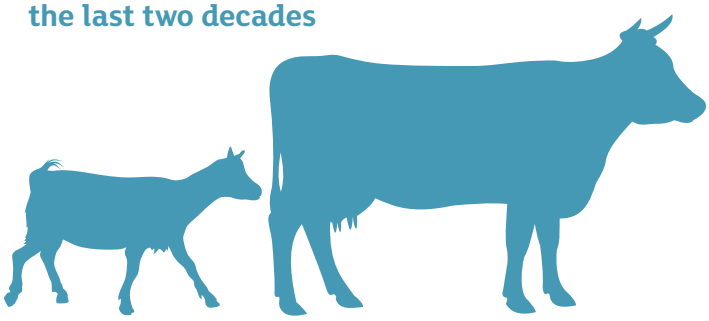
Modern milking parlours are typically operated by the farmer and his/her staff, although some are entirely automated to allow the cows to choose when they want to be milked.

Key issues

Environment
As with any agricultural commodity the way that milk is produced can have consequences for the environment.

The economically driven increase in herd sizes could mean higher concentrations of animals on the best grazing land. And that could lead to damage to soil and water quality.

The number of dairy farms in the UK has declined dramatically over the last two decades



More fertiliser might be needed to make grass grow more vigorously in fields used for grazing and for silage making. There could be increased soil erosion caused by the trampling of the ground by cattle's hooves (a process known as poaching). This can mean soil is more easily washed away into water courses, wasting a valuable natural resource and silting up river and stream beds to the detriment of fish and other aquatic wildlife. Finally, intensification of production can mean larger buildings are needed in the countryside to house the animals; this could damage the character of some of our landscapes.

Growing maize to feed cattle can also mean more soil is exposed to erosion by wind and rain. Maize tends to be harvested in the autumn, when wet conditions are more likely, which leads to problems with soil compaction and an associated increase in run-off (when water drains away from fields). Once maize is harvested, fields of bare soil are often left exposed to autumn and winter rainfall, which can result in extremely high rates of erosion taking place. There are pollution risks from land containing higher levels of nutrients resulting from intensively fertilised fields.

In May 2008 the Dairy Supply Chain Forum published *The Milk Roadmap*, which set out a number of targets to help the dairy sector address its environmental impacts as well as taking into account its economic and social sustainability. It set a target to have 50% of the land on dairy farms in the Entry Level Environmental Stewardship Scheme (one of England's green farming schemes) by 2010, rising to 65% by 2015. In 2009 Natural England data revealed that there are almost 4,500 dairy farms in a green farming scheme.

Climate change
There has been increasing concern about the contribution of livestock farming to global warming. When cows chew and digest food they emit methane. Methane can come from a number of other sources, but high levels of greenhouse gases such as methane contribute to global warming. Another of the dairy industry's targets, as set

out in *The Milk Roadmap*, was to reduce the emission of greenhouse gases emitted by dairy farming. Greenhouse gas emissions from UK dairy farms have declined sharply over the last 20 years, and today represent just 2% of the UK's total emissions. This compares with emissions from transport in the UK, for example, which amount to about 25% of the UK's total emissions.

The slurry from dairy farms could be used to produce renewable energy through anaerobic digestion (a process in which micro-organisms break down biodegradable material producing methane gas, which can be used as a fuel, and a digestate [the solid material remaining after anaerobic digestion] that can be used as a fertiliser), which would help to mitigate the emissions of greenhouse gases by dairy farms. However, there are risks to the environment, for example nitrates from the digestate that has been spread on farmland ending up in water courses, so such risks would need to be addressed to make sure energy produced from anaerobic digestion was truly sustainable.

Economics
Figures from DairyCo show that over the last four years an average of 78 producers per month have quit dairy production in England. Some farming organisations have serious concerns that Britain may need to import milk in the future. As the number of dairy farms declines the size of herds is likely to increase, as the remaining farmers try to achieve greater economies of scale. Analysis of milk production data for the year 2007/8 shows the production gap is growing between larger and smaller producers, with just a quarter of Britain's dairy farmers producing over half of the year's milk supply.

Milk quotas were introduced in 1984 as a means of stabilising production across the European Union. Quotas became a tradable asset and some farmers sold or leased their quota to other farmers, accelerating the trend towards fewer, larger herds which continues to this day. Each country was given a certain quota and farmers were allocated an amount on the basis of their previous level of production. In the UK, milk production was restricted by the quota system, which had an impact on self-sufficiency in milk. Some farmers who did not get the amount of quota they wanted, or who could not buy more to make their businesses larger and more viable, decided to diversify or leave milk production altogether. Quotas are due to be phased out by 2015.

Prices paid to farmers for their milk have been the subject of much debate for many years, particularly why there should be such a difference between the price farmers receive when the milk leaves the farm gate and the price it is sold for on the supermarket shelf and doorstep. Often the price paid to dairy farmers for each litre of milk has been less than it costs to produce. Clearly, there is something wrong with the way milk is bought and sold that leaves dairy farmers at an economic disadvantage undermining their ability to continue farming.

The future of dairy farming?

Recently, proposals have emerged that move away from the traditional model of pasture based milk production in Britain to a way of producing milk more commonly associated with the USA. Intensive indoor production in Britain has mostly been associated with pig meat and chicken and egg production, but a planning application was made in Lincolnshire in early 2010 to build a large-scale indoor production unit of 8,000 dairy cows, with the potential to produce 90 million litres of milk per year. The cows would have been housed and fed in large sheds for almost the entire year. Farmland near the 'mega dairy' would have been used to grow crops to feed the cows. CPRE and a number of other organisations joined together to campaign against this proposal. Eventually, it was withdrawn following concerns about water pollution but we remain concerned that unless pasture based dairy farmers receive a fair price for their milk the pressure to switch to this type of intensive, indoor production will continue.

Dairy farming: CPRE's vision

In general we favour extensive and outdoor livestock production, as this complements our vision for the future countryside. Extensive and pasture-based production plays an important role in local food networks, contributing to the rural economy, helps maintain wildlife habitats and ensures that features (such as hedgerows and drystone walls) that add character to our landscapes are maintained. However, dairy cows need to be kept in sheds over the winter months, and we recognise that nearly all livestock are usually kept inside at some point in their lives.

CPRE is concerned about the effects on the environment of a decline in dairy production. As our report *Living Landscapes* (July 2007) revealed, the countryside is heavily reliant on farmers to manage our landscapes. Some habitats rely on a mix of sheep and cattle grazing, sometimes extensively (i.e. over large areas of land) to maintain the diversity of animal and plant species that inhabit them. We supported the NFU's 'Why Beef and Sheep Farming Matters' campaign which highlighted

the important role livestock farming has for our wildlife, as well as the rural economy.

CPRE believes farmers should receive a greater share of the difference between the price of their milk when it leaves the farm gate and what it is sold for on the supermarket shelves and doorsteps. We would like to see much greater transparency in the pricing and supply of milk. We believe the price a farmer receives for their product should reflect the true cost of production and the quality of that product. Milk processors and retailers should use a pricing mechanism that at the very least, takes into account what it costs to produce a litre of milk. Efforts by farmers to make milk production more environmentally sustainable should also be rewarded by retailers and processors by paying a price premium to the farmer that recognises the value of the environmental benefits that are being delivered.

In addition environmental measures that benefit landscape character and wildlife should continue to be supported through agri-environment schemes. CPRE believes agri-environment schemes must be properly funded so that farmers do not have to resort to intensified production practices to remain profitable, as these can damage the character of our landscapes and wildlife habitats.

We would like to see rural development funding used to help farmers adapt their farming infrastructure to address climate change, soil and water quality issues, in cases where farming businesses (such as small family farms) can demonstrate that they could not otherwise afford to do so. This will require a big increase in funding for rural development measures, which could be achieved by reforming the Common Agricultural Policy.

CPRE would like to see support provided by the Government and from the private sector to help farmers develop small-scale anaerobic digestion plants to provide renewable energy to local communities and to mitigate against methane emissions from livestock.

CPRE is particularly concerned about the economic consequences of consolidating milk production into a relatively small number of large-scale intensive, indoor units in a few locations around the country. While large milk production units may suit supermarkets' centralised supply and distribution models, the economies of scale that mega dairies are capable of achieving could increase the economic pressures faced by small and medium-sized dairy producers which could cause more of them to go out of business. This could have serious consequences for local food networks and the character of the countryside.

These same concerns are relevant whether such units are built for dairy production or to rear other types of livestock. The impact on the landscape may arise not only from the large size and number of the buildings themselves and their related infrastructure. There may also be an impact on the local landscape because there may be a need to grow monocultures of feed crops (such as maize) on the surrounding farmland to feed the animals inside the buildings. These crops may require the use of artificial fertilisers and crop protection products, which could affect soil and water quality. Twenty-four hour operating regimes could also lead to increases in light pollution and a loss of tranquillity. Increases in traffic on local roads could also affect tranquillity and make it more difficult for people using these roads.

There is also a danger that our food supplies may become less secure with a reduced diversity of supply, because of increased risks from disease, extreme weather events etc. This may be more likely to happen if a significant proportion of production is concentrated in a few areas particularly suited to this type of intensive indoor production, for example those locations with sufficient arable land to grow feed crops.

What you can do

- Write to the chief executives of supermarkets or ask the manager of your local branch if the supermarket chain has a fair pricing mechanism for dairy farmers and if not when will it introduce one for all of the milk it buys. Ask what the supermarket is doing to support and reward farmers for making milk production more environmentally sustainable.
- Alternatively, if you can, buy your milk from local dairy farmers, either directly or at local shops or by using a milkman to keep the supply chain short and to help sustain the local food economy. If the milk is sourced from a milk processor, check that it has a fair pricing mechanism in place.

We believe the price a dairy farmer receives for their milk should reflect the true cost of production and the quality of that product

Campaign to Protect Rural England
5-11 Lavington Street
London SE1 0NZ

T 020 7981 2800
E info@cpre.org.uk
www.cpre.org.uk