

CPRE's Vision for the future of farming: The future of pig and poultry farming

Throughout history poultry and pigs have been an important source of protein and fertiliser, but pig and poultry farming have seen some of the greatest recent changes to production methods. Recently, intensive production of pork and chicken meat and eggs has resulted in a number of campaigns to change the way pigs and chickens are reared, some backed by television programmes, which have highlighted a range of welfare and environmental concerns. This has provoked widespread debate and brought about changes to consumers' buying habits and retailer buying policies.

Poultry farming

Poultry farming includes many different types of domesticated birds that are farmed for their meat or eggs, including laying hens, meat chickens (broilers), turkeys, geese and ducks. Huge numbers of poultry are reared in the UK, with over 30 million laying hens and around 850 million meat chickens reared every year on average.

Chicken meat production

More meat chickens, also known as broilers, are farmed in the UK than any other type of farmed animal and they account for about one third of total meat production in the UK. In 1953, production stood at 5m chickens a year. But by 1996 this increased to 778m (Department for Environment, Food and Rural Affairs [Defra], 2005). In 1950 consumption was around 0.75 kg per person per year but today average



consumption of chicken meat in the UK is around 23kg per person per year, exceeding that of any other type of meat. While we still import some 600,000 tonnes of chicken breast meat from places like Brazil and Holland there is also an export trade.

Chickens bred for meat production are reared to grow very quickly so as to produce the maximum amount of meat in the minimum amount of time. Some chickens can now reach slaughter weight in as little as five weeks, whereas 50 years ago it would have taken around 12 weeks.

The British chicken industry is worth an estimated £3 billion at retail level, and is the largest producer of chicken meat in the EU, accounting for 17% of total EU production. About 6% is produced as free-range. Currently, most chickens are reared according to standards set by the Red Tractor Farm Assurance Poultry Scheme. In addition to these standards, some supermarkets may also require their suppliers to rear chickens to standards that the supermarket has set itself, which can be higher than those of the Red Tractor scheme.

The British poultry sector is an integral part of the wider farming industry; for example it buys some 19% of the UK's annual wheat and barley crop for feed. It is estimated around 50,000 people are employed in the poultry sector in the UK.

Broilers are reared in three ways:

Intensive indoor

Most meat chickens are reared in large, closed buildings, where temperature, artificial lighting, ventilation, food and water are all controlled to ensure that the birds grow efficiently. Food and water are provided in lines along the length of the building and wood shavings are provided as a floor covering. Typically, around 25,000 birds are housed together within a building, but some can house 50,000 birds. There can be several buildings on a farm – for example, an average grower may have 140,000 birds on one farm in a number of buildings, and will rear just under one million birds per year.

Chickens may be kept in near-constant dim light. This encourages them to eat more and move around less, which maximises their growth rate, and also reduces electricity costs.

The amount of space provided per bird within a building is commonly referred to as the stocking density (the total weight of the birds in a given amount of space, on average). This stocking density provides space for each bird equivalent to the size of an A4 sheet of paper, which is less space than that allocated to laying hens in cages.

Improved indoor reared

A smaller proportion of meat chickens are reared in indoor systems that provide conditions that improve their welfare. These systems are similar to those described above, but include improvements, such as:

- the provision of natural daylight through windows;
- reduced stocking densities; and
- environmental enrichment such as straw bales for the birds to peck at.

In addition, slower growing breeds of chicken may be used.

Free-range and systems which allow access to the outdoors These chickens are reared in systems that allow them access to an additional outdoor range area for at least part of their lives.

Egg production

There are around 34 million commercial egg-laying hens in the UK. In 2011, 959 million dozen eggs were consumed in the UK. We imported 173 million dozen eggs and exported 22 million dozen.

Three different types of systems can be used to house hens on an egg laying unit; cages, barn reared or free-range (which may also be organic). In 2010 the proportion of eggs produced in these different systems in the UK was:

- 50% produced in cage systems;
- 8% produced in barn systems; and
- 42% produced in free-range systems (of which 3% were organic systems).

More people are choosing to buy eggs that are laid by hens kept in free-range or barn systems. Ten years ago 28% of eggs in the UK were produced by hens kept in these systems compared to around 42% now. Additionally, some retailers now specify the use of free-range eggs in their processed foods. However, about 80% of eggs used as ingredients in products like quiche, cakes and sandwiches are still from hens kept in cages.

The pharmaceutical sector is a significant market for eggs. For example, Novartis alone takes about 200 million eggs a year for the cultivation of vaccines. These have to be barn-reared, fertile eggs and are inoculated, then incubated for 12 days before the vaccine is drawn off for human use.

Caged hens

Egg-laying hens are one of the few types of farm animal in the UK that, on some farms, are still kept in closeconfinement cage systems for all of their productive lives. A typical commercial laying breed in the 1960s produced about 200 eggs per year but today will produce more than 300. During this time the way in which laying hens are kept has also changed dramatically.

After hatching, the chicks are transferred to a pullet-rearing farm where they stay until they are about 16 weeks old. Pullet is the term for a young hen before it starts laying eggs. Pullets destined for non-cage systems will typically be reared in large barns, sometimes with access to an outdoor range, while many pullets destined for cages will be kept in cages from one day old. Just before they are ready to start laying eggs the birds are then moved to a laying unit where there are facilities for egg collection.

From January 1 2012 conventional battery cages have been banned in the European Union; although there are concerns that not all member states are complying. However, so-called enriched cages will still be permitted. These 'colony' cages provide limited additional space and facilities for perching, nesting and scratching, although it is argued that they still do not provide for the full behavioural and physical needs of the birds. Eggs with the British Lion mark are legally compliant with the new rules.



Barn systems

In barn systems hens have the freedom and space to move around, stretch and exercise within a building. Perches are also provided for the hens to roost on, as well as material to dust-bathe and forage in, and nest boxes where they can perform their nesting behaviours and lay their eggs. Some non-cage housing systems are multi-tier, providing additional levels above the ground, which the birds can use to move up and down.

New regulations will restrict the amount of live birds in barns.

Free-range

The majority of free-range hens on commercial farms live in buildings similar to the barn system, but with access to the outside through openings called pop holes. EU laws require that free-range hens must always have access to an outside area with adequate vegetation during the daytime. Half of free-range egg-laying farms use a paddock rotation system.

Sales of free-range eggs are now worth around £2bn a year and output matches that from caged systems. There are concerns that if free-range egg supply in the UK is not expanded retailers will be forced to source their eggs from abroad. However, there are concerns that successful campaigning for free-range egg production has led to increased stocking densities and intensification.

Some free-range standards require no more than 2,000 birds per hectare of range over the life of the flock, while allowing up to 2,500 per hectare for periods of time. This allows resting of various areas and active management of the range area in order to maintain vegetation quality and minimise risk of disease. This, along with shade and shelter on the range, helps to encourage hens to use the area fully.

The future of poultry farming?

Case study: Woodland Farms

Around 200 Woodland Farms produce eggs for Sainsbury's stores. Farmers are members of the Federation of Woodland

Two-thirds of cheap pork imports will have been produced under conditions which would be illegal in the UK



Egg Producers. The Federation works closely with the Woodland Trust. Farmers receive a bonus payment of 2p for every dozen eggs they supply, providing an additional investment of £1m per year. Farmers are required to follow strict guidelines, with auditing and monitoring by industry bodies and Sainsbury's.

The farms are planted with trees which cover at least 20% of the chickens' range. The trees are a mixture of fastgrowing and slower native trees which are indigenous to the local area and are planted close to the house to encourage the hens outside to range. As with the Linking Environment and Farming (LEAF) marque it is possible to learn more about the farms where woodland eggs are produced by visiting a website and entering the five digit code printed on each egg.

Woodland egg production aims to create and maintain woodland and ensure high standards of hen welfare. Since 2004 300,000 trees have been planted on 134 farms throughout the UK. Before planting of woodland takes place, careful consideration is given to the species best suited for each individual site. Fast-growing poplars are mixed with species such as oak, ash, alder, field maple, wild cherry, spindle, privet, hornbeam, hawthorn and blackthorn. The poplars are included in the mix as they provide shade and shelter for the chickens as the slowergrowing native trees develop.

Where practical the perimeter of each woodland area is planted with shrubs such as hawthorn, hazel and holly to create a graded edge; this approach tries to ensure maximum wildlife benefit can be gained from the planting.

Pig farming

Pigs are very efficient producers of lean meat and little of the animal is wasted at slaughter. Roughly nine million pigs are slaughtered every year in the UK. Over 40% of pork and about 80% of bacon consumed in the UK is imported, or processed in Britain using imported pig meat. 70% of the UK's imported pig meat does not meet British pig farming standards.

Around 93% of growing pigs in the UK are kept indoors. While about 40% of sows are kept outdoors, only 7% of piglets are reared outdoors after weaning and only 2% remain outdoors until slaughter.

Around 55% of sows in the UK give birth while confined in crates, which they remain in until their litter is weaned. About a third of pigs reared for meat in the UK are kept in barren systems without any straw bedding.

The average pig herd size for all farms in the UK is around 75 sows. Approximately 92% of pigs are kept on 1,400 pig farms and the rest on some 10,000 small-holdings and smaller and mixed farms. Currently, the largest existing pig farm in the UK has around 1,100 sows, with the average

large-scale intensive pig farm in the UK containing around 500-900 sows. Intensively farmed pigs across the EU are routinely kept in low light conditions to subdue their inquisitive nature. Pigs kept in barren conditions often resort to biting the ears and tails of other pigs.

Pig farming consumes many of the by-products of the food processing industry; brewers' waste, dairy products and cereals to name but a few.

Since 2003 EU legislation has:

- required that pigs be given environmental enrichment; specifically they must have 'permanent access to a sufficient quantity of material to enable proper investigation and manipulation activities, such as straw, hay, wood, sawdust, mushroom compost, peat or a mixture of such...'; and
- prohibited routine tail docking. Under the legislation tail docking may only be used as a last resort. The law provides that farmers must first take measures to improve the pigs' conditions, and only where these have failed to prevent tail biting may they then tail dock.

Sow stalls are narrow metal cages with bare concrete slatted floors that prevent sows with piglets turning round and which make laying down or getting up difficult. They have been criticised for completely inhibiting the naturally protective behaviour of a sow. They were banned in Britain in 1999. But the cost of this advance in welfare has often been blamed for adding additional costs, making British pig farmers less profitable and reducing their ability to compete with imports. A ban across the European Union will only come into force in 2013, but even then there will be an exception for the first four weeks of pregnancy. A recent Compassion in World Farming report into 60 pig farms across Europe discovered that only 11% of German pig farms and none of the Spanish pig farms surveyed provided environmental enrichment (straw or other material for nesting, rooting, foraging etc) compared to over two thirds of British farms.

Key issues

Environment

The main environmental impacts associated with both indoor and outdoor pig and poultry farming are from odour and noise, dust, ammonia and from the disposal of litter, manure or slurry which have high nutrient levels. The latter can affect the environmental quality of waterways and aquifers, that store water in layers of rock underground. Waste pollution problems and solutions are overseen by the Environment Agency. Farms over certain size thresholds are subject to Integrated Pollution Prevention and Control regulations and require a permit if there are more than 750 sows, more than 2,000 finisher pigs over 30kg, or more than 40,000 poultry (including chickens, pullets, laying hens, turkeys, ducks and guinea fowl) on a farm.

Pig slurry from indoor production units is often sprayed onto land as a fertiliser. Outdoor, free-range pig rearing can also result in water pollution problems, but farmers can undertake measures that ensure that waterways are protected from pollution caused by soil contaminated with pig manure running off from fields in which pigs are being kept.

Economics

Pig and poultry production have not been part of the Common Agricultural Policy and this means the economics for these farming sectors are significantly different compared to farming sectors that receive European farming payments.

Supermarkets should commit to selling only pig and poultry products that meet British environmental and welfare standards The need for feed crops to feed pigs and chickens means the profitability of the pig and poultry sectors is heavily influenced by rises in the price of cereal crops. As with other farming sectors this means the price retailers and processors pay at the farm gate is vital to the economic viability of pig and poultry farmers.

A recent British Pig Executive report, *Profitability in the Pig Supply Chain*, found that:

- in the 12 weeks to 23 January 2011, British pig producers amassed losses of £35 million, equal to around £21 per pig;
- in the same period the processing sector's profits are estimated at £100 million; and
- retailers enjoyed combined profits of £192 million from pork and pork product sales in the same period.
- In addition, while the quantities of pork being sold are increasing, extra sales are being driven by cheap imports, two-thirds of which will have been produced under conditions which would be illegal in the UK.

Public procurement contracts are particularly important for supporting British producers. A recent Defra report on the proportion of domestically produced food procured by the government, covering 2008-09, showed that 1% of bacon and 47% of other pork products were British.

The future of pig farming?

Case study: Foston pig farm

Midland Pig Producers are proposing to build a 30 acre intensive indoor pig unit at Foston in Derbyshire. The unit will house 2,500 sows and 20,000 piglets in a state-of-theart unit, producing 1,000 pigs a week for sale. It will include a biogas plant to generate energy from animal waste. Concerns have been raised about noise levels for adjoining residents from machinery, traffic and the animals themselves.

The future of pig and poultry farming: CPRE's vision

We believe that food should be sustainably produced to high environmental and animal welfare standards. We would like to see greater support for those producers who produce food to higher standards and who are often important for maintaining local food networks. CPRE helped to publicise the findings of the Pig Business documentary and the associated campaign. The documentary explored the true costs of intensively farmed pork in Europe. Investigating some Polish pig farms, the documentary examined how the globalised nature of the food industry can have serious consequences for the quality of the countryside, animal welfare standards, human health and independent farm livelihoods. Independent UK pig farmers could be threatened by imports of intensively reared pork products. Current labelling of pig meat products prevents consumers making informed choices about welfare standards based on where the pigs have been reared.

It is commendable that the UK has been at the forefront of improved welfare conditions for pigs and poultry. It is not acceptable that other member states have been permitted to retain an economic advantage by the timescales allowed for transposing welfare Directives into domestic legislation. The European Commission should introduce a strict timetable for imposition of welfare legislation, limit derogations to the absolute minimum and allow those member states that have introduced legislation ahead of schedule to label their food on the basis of national provenance where measures in a Directive have been implemented in advance of other member states.

CPRE has concerns about the effects of increasing the scale of intensive indoor production of pigs, poultry and eggs on the countryside and the economic viability of smaller producers. Instead we favour barn-raised or outdoor free-range systems with associated environmental and planning safeguards. CPRE recognises that these systems are not perfect in terms of welfare, and can have impacts on soil and water, and that ultimately both systems require large numbers of pigs and poultry to be kept in sheds. One criticism of outdoor production is that it contributes to soil erosion and manure can affect water resources. However, we believe measures can be implemented to address these problems. These types of systems can also provide producers with marketing advantages that could improve profitability, thereby providing benefits for the rural economy and improve the economic sustainability of pig and poultry farmers.

Supermarkets should commit to selling only pig and poultry products that meet British environmental and welfare standards. CPRE welcomes moves by supermarkets to increase the use of free-range eggs in processed products but there is a need to recognise that this increased demand will inevitably lead to an increase in the number of free-range units. Recently, the very large flock sizes of free-range egg and poultry production has caused concerns about the numbers and size of sheds as well as associated transport issues. Very large-scale free-range enterprises are in effect creating 'intensive free-range' production. Supermarkets need to set, monitor and enforce standards that ensure the original principles of free-range production are maintained and free-range units should be required to take into account and address the environmental impact on local communities.

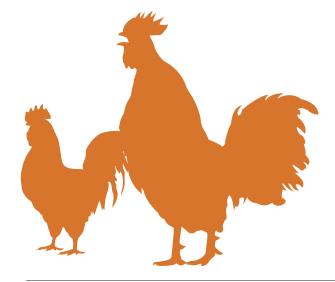
Support could be provided from rural development funding or by supermarkets to help those who wish to produce barn-raised and free-range chicken and pork meat and eggs in an environmentally sustainable way.

Legislation is needed to ensure clear labelling so that consumers can know whether the eggs, pig and poultry products they are buying have been bred, raised and processed in the UK. It is currently possible to import pig meat, process it in some way and then label it as British. Changes to public procurement rules are needed that require food to meet British welfare and environmental sustainability standards.

We want to see more Government and farming industry initiatives to raise consumer awareness about the higher welfare and environmental standards practised by British farmers.

What you can do

- If you can, support local pork, chicken meat and egg producers in your area by buying their produce, which will help to support the local farming community by buying directly from farmers at farm shops or farmers' markets, or talk to your local butchers about the source of their pork and poultry.
- Visit www.legaleggs.com for more information on the battery cage ban.
- If you shop in a supermarket ask to speak to the manager and ask about its buying policies for eggs, chicken and pork products. How do they support British producers and what standards they expect? Can they guarantee their products meet the same standards that British poultry and pig producers adhere to? What are they doing to improve welfare and environmental sustainability?
- Support British pig farmers by buying their products but carefully check labels when buying pork products to check what you are buying has been bred, raised and processed in the UK. If you think the labelling in your supermarket or local shop is unclear ask the manager about where the meat originates.
- Look out for the following labels which give an indication of the standard and method of rearing:
 - organic, particularly Soil Association, guarantees higher welfare standards;
 - free-range, outdoor bred and outdoor reared offer higher welfare potential. Outdoor reared means the pigs are likely to have spent the majority of their lives outside. Outdoor bred indicates that the piglets spent at least some of their lives outside; and
 - RSPCA Freedom Food (indoor and outdoor rearing systems) offers higher welfare but permits the limited use of farrowing crates.



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