

2015/03: Should all Australian states ban factory farming of pigs and chickens?

What they said...

'These birds spend their lives inside a dimly lit shed with tens of thousands of other birds'

Animals Australia describing the conditions under which chickens reared for meat are generally kept

'The majority of people would say they are opposed to factory farming but ... this concern does not show in their consumer behaviour'

Hans Kriek, the executive director of the animal welfare group SAFE

The issue at a glance

On November 11, 2014, the New South Wales Greens gave notice of a bill to ban the use of sow stalls and farrowing crates in New South Wales.

In September, 2014, the Victorian Greens introduced the Prevention of Cruelty to Animals Amendment (Domestic Fowl and Pigs) and Food Amendment (Free-range Eggs) Bill into state parliament.

The Bill proposes to ban hen cages, sow stalls and the debeaking of hens. It also proposes to clarify the meaning of 'free range' for the purposes of egg production.

On February 25, 2014, the Australian Capital Territory (ACT) became the first jurisdiction in Australia to ban factory farming of pigs and chickens. The ACT Animal Welfare (Factory Farming) Amendment Act effectively bans the use of 'battery cages' and 'enriched cages', by omitting them from the definition of what constitutes 'appropriate accommodation'. The Act also bans the debeaking of hens and makes it illegal for sows to be kept in sow stalls or farrowing crates.

In May 2012 Tasmania became the first state in Australia where all locally produced eggs are guaranteed cruelty-free and free-range.

Supporters of such legislation claim that it is the only way to remove cruelty from the management of these animals. Opponents claim that such measures exaggerate the negative aspects of intensive farming and that the changes that would make these industries uneconomic.

Background

'Factory farming' or 'intensive farming'

The term 'factory farming' refers to the intensive farming of livestock (here pigs and chickens) in Australia and overseas, involving the restraint or confinement of animals for all their lives or at significant points in their lives.

The term 'factory farming' is usually used by opponents of the practice as it carries negative connotations. 'Intensive farming' is the phrase generally used by supporters of the practice. Throughout much of this issue outline the term 'factory farming' will be used because 'intensive farming' is also applied to a wider range of farming practices, including some of those used to grow plant crops.

When applied to the rearing of laying hens the term 'battery cages' is sometimes used.

Factory farming of pigs and chickens in Australia

In Australia ninety-five percent of meat chickens and ninety-five percent of pigs for meat consumption are raised in factory farms. The production and consumption of both meats has increased dramatically. Over the past 40 years the increase in chicken meat consumption has been from 5.9kg per year to 36kg in 2007-2008 (the equivalent of 27 chickens) per person, an increase of approximately 600 percent. Over the past 50 years the chicken meat production has increased from three million to 470 million chickens per year.

Both industries (meat chicken and pork) are highly concentrated, with three percent of piggeries being in the control of 54 percent of the total sow herd and only three companies supplying 80 percent of Australia's meat chickens.

According to the Australian Bureau of Statistics (ABS), in 2004 there were 320,000 sows in Australia. The animal rights group Voiceless indicated that in 2005 some 200,000 breeding sows were in factory farms in Australia.

Animals Australia has also claimed that 12 million laying fowls are kept in small cages for their entire laying lives, while some 435 million chickens are kept within sheds before being slaughtered for meat production.

Free-range farming

In some European markets, free-range and organic animal products have overtaken those produced using conventional intensive systems. Organic animal production aims to provide a natural environment for animals, to foster natural behaviours, and to avoid the use of synthetic chemicals. While the precise standards may vary, organic certification bodies usually require the use of free-range production systems.

Free-range egg farms

The term 'free-range' is not precise as it covers a variety of practices. Regarding eggs, free-range eggs come from hens that have been housed in a shed and have access to an outdoor area where they can roam.

But there are several standards in Australia and no legal definition of free range.

The consumer advice organisation, Choice, recommends looking out for logos from the Free Range Egg and Poultry Australia or the RSPCA, which have clearly defined standards and conduct farm inspections. Shoppers may also spot the logo for the Egg Corporation, representing the vast majority of egg producers in Australia, which has less specific standards for free range than other groups.

The Egg Corporation Assured standard, based on a government-endorsed code of practice:

- Hens are housed in sheds and have access to the outside area for about eight hours a day.
- Within a shed there are a maximum of 14 birds per square metre.
- Outside there are is a maximum of 1500 birds per hectare.
- If measures such as reducing bird density do not prevent cannibalism, beak trimming is allowed.

Free Range Egg and Poultry Australia standards:

- Hens are housed in sheds and have access to the outside during daylight hours.
- Within a shed there are a maximum of 10 birds per square metre up to 1000 birds.
- Outside there are a maximum of 750 birds per hectare.
- Beak trimming is allowed to prevent feather pecking.

RSPCA standards:

- Hens are housed in sheds and can go outside by choice.
- Within a shed there are a maximum of nine hens per square metre.
- Outside there are a maximum of 1500 hens per hectare.
- Cannibalism should be at first be prevented by removing possible stressors such as lighting or humidity, before beak trimming is considered necessary and is carried out.

Different types of pig rearing

The RSPCA has classified a variety of pig-rearing practices which are offered as alternatives to stall-rearing.

Free-range pork

Free-range pork comes from pigs that were born and raised with free access to the outdoors. That is, where the sows and growing piglets have access to paddocks, as well as huts or other forms of housing for shelter, and are not confined to sow stalls (for pregnant sows) or farrowing crates (for lactating sows and their piglets).

The RSPCA Approved Farming Scheme requires that pigs live in a well-managed outdoor system, or within enhanced indoor environments that cater for all their behavioural and physiological needs, or a combination of both (referred to as 'bred free range'). You would not see sow stalls or farrowing crates on an RSPCA Approved pig farm. All pigs are reared, handled and transported with consideration and care and then slaughtered humanely.

Bred free-range pork

'Bred free range' is a term used to apply to pig products (pork, bacon, etc) from pigs that were born in a free-range environment but were subsequently raised indoors. These pigs may be raised in large open sheds with straw bedding (known as ecoshelters) or in small pens on concrete floors as in conventional pig farming systems.

The RSPCA Approved Farming Scheme requires that pork marketed as RSPCA 'bred free-range' comes from farms where sows and boars range freely outside, piglets are born outside on the range and, once weaned, are raised in ecoshelters with straw bedding.

Sow-stall free pork

The Australian pig industry has committed to phasing out sow stalls and moving all female breeding pigs (sows) to indoor group housing, An initiative strongly supported by the RSPCA. The term 'sow-stall free' is used to differentiate pork product from pigs that have been born to sows in group housing. The pig industry defines 'sow-stall free' as a system where a sow may have been kept in a stall for up to 5 days following last mating up to one week before farrowing; however, other definitions allow only one day in a stall. These stalls are called 'mating stalls', are very similar to a sow stall, and are used at mating to prevent aggression between sows and hence potential injury or abortion. Following this period of confinement, the sow is housed in groups with other pregnant sows.

The move from sow stalls to group housing is a very important first step. The next priority is transitioning away from farrowing crates which may be used to confine the sow for up to five weeks (from about a week before giving birth to her piglets up until they are weaned). Farrowing pens which allow the sow freedom of movement while protecting the piglets from crushing are under development. Piglets from sow-stall free sows may be raised in large open sheds with straw bedding (known as ecoshelters) or in small pens on concrete floors as in conventional pig farming systems.

Internet information

On November 11, 2014, the New South Wales Greens issued a media release giving notice of a bill to ban the use of sow stalls and farrowing crates in the state.

The full text of the release can be found at <http://archive-nsw.greens.org.au/content/greens-launch-bill-ban-sow-stalls-and-farrowing-crates-pigs>

On November 11, 2014, Animals Australia issued a report detailing the achievements toward the banning of factory

farming in Australia.

The full text of this report can be found at <http://www.animalsaustralia.org/features/MIP-anniversary-2014.php>

On November 5, 2014, The Herald Sun published a comment titled 'Cracking the egg dilemma may cost poorer shoppers'

The comment argues that no longer selling eggs produced on factory farms will disadvantage less well off consumers. The full text of this comment can be accessed at <http://www.heraldsun.com.au/news/opinion/cracking-the-egg-dilemma-may-cost-poorer-shoppers/story-fni0ffsx-1227113880627>

On October 2, 2014, Shell Ethics published a report on the Prevention of Cruelty to Animals Amendment (Domestic Fowl and Pigs) and Food Amendment (Free-range Eggs) Bill.

The article detailed the provisions of the Bill. The article can be accessed at <http://www.shellethics.com/animal-abuse/2014-factory-farming-bill-victoria-australia/>

On June 18, 2014, The Age published a letter to the editor titled 'Don't blame activists, outlaw factory farming'

The letter can be accessed at <http://www.theage.com.au/comment/the-age-letters/dont-blame-activists-outlaw-factory-farming-20140617-3abhk.html>

On February 25, 2014, the animal welfare group Voiceless published a report on the banning of factory farming of pigs and chickens in the Australian Capital Territory.

The full text of this report can be found at <https://www.voiceless.org.au/content/animal-law-spotlight-act-factory-farming-ban>

On October 1, 2013, Life Hacker published a comment titled 'Why Free-Range Eggs Cost More But Don't Help The Hens'

The comment argues that a lack of an agreed definition of free-range in Australia means that changes to the type of eggs supposedly stocked by retailers may actually not significantly improve conditions for hens.

The full text of this comment can be found at <http://www.lifehacker.com.au/2013/10/why-free-range-eggs-cost-more-but-dont-help-the-hens/>

On May 13, 2013, ABC News published a report titled 'Where does your chicken come from?' which examined the production of meat chickens in Australia.

The full text of this report can be accessed at <http://www.abc.net.au/news/2013-05-11/where-does-your-chicken-come-from3f/4682700>

On October 23, 2012, The Age published a report titled 'Coles tackles factory farming' which detailed Coles intention to ceased selling home branded battery eggs and sow stalled pork.

The full article can be accessed at <http://www.smh.com.au/national/coles-tackles-factory-farming-20121022-281gt.html>

On May 22, 2012, The Australian published a report titled "'Clean and green" state Tasmania bans battery eggs'

The full text of this report can be found at <http://www.theaustralian.com.au/national-affairs/state-politics/clean-and-green-state-bans-battery-eggs/story-e6frgczx-1226362836421>

On February 22, 2012, Mamamia published a report titled 'Do you know what you're eating?'

The report contrasted animal welfare groups' complaints about the harm done animals through intensive farming practices with a defence of these practices from the National Farmers Federation.

The full text of this article can be accessed at <http://www.mamamia.com.au/news/factory-farming-and-animal-cruelty-do-you-know-what-youre-eating/>

Arguments in favour of banning the factory farming of hens and pigs

1. Hens and pigs are sentient, social animals

A range of animal welfare groups have stressed that both pigs and chickens are aware, sentient animals with a capacity to feel pain and experience fear. It is argued that decisions about these animals' treatment must acknowledge these capacities. They are not, it is argued, like either plants or lower order animals such as shellfish, whose sensory capabilities are either absent or relatively undeveloped.

Sentience in an animal is defined as its 'being aware of its surroundings, its relationships with other animals and humans, and of sensations in its own body, including pain, hunger, heat or cold'.

In 2012, an international group of eminent neuroscientists signed The Cambridge Declaration on Consciousness, which confirmed that many animals, including all mammals and birds, possess the 'neurological substrates that generate consciousness'.

It has further been argued that the capacity of birds and mammals to feel pain is likely to be similar to that of human beings. Comparing the physiological similarities between these lower order animals and human beings, Peter Singer, the DeCamp Professor of Bioethics at Princeton University, has stated, 'It is surely unreasonable to suppose that nervous systems that are virtually identical physiologically, have a common origin and a common evolutionary function, and result

in similar forms of behaviour in similar circumstances should actually operate in an entirely different manner on the level of subjective feelings.'

Animal welfare groups claim that an animal's ability to experience pain and fear places human beings under a moral obligation not to inflict those sensations on animals being raised either as pets or to supply food products.

The animal rights group Voiceless has stated, 'Cruelty towards animals cannot be justified by their level of cognition, communication skills or sheer difference of species - traits which are irrelevant to an animal's capacity for suffering and preference for a good life.'

It is also claimed that the social bonds of both chickens and pigs is often under-estimated. It has been demonstrated that chickens share information with specific calls to communicate their frustration, the discovery of food or the presence of a predator, suggesting some level of language. While, familiar pigs greet each other by touching noses and grunting, and those with close bonds groom each other. Both species are distressed if their social behaviours are disrupted.

2. Conditions in factory farms inflict pain and stress on the animals

It has been claimed that the practices that occur on 'factory farms' inflict significant pain on pigs and chickens and cause distress for each species.

Piglets have their teeth cut or filed back to prevent damage to the sows from which they suckle. Those sows when pregnant are confined to small sow stalls. Sow stalls are metal cages which female pigs, after being mated, are confined to for between six and 16 weeks, the full duration of their pregnancy. The animals are unable to turn around or make themselves comfortable. They are moved to an even smaller farrowing crate, immediately before giving birth.

As they are unable to move, the pregnant pigs are forced to lie down in the same space where they urinate and defecate. Rather than individual feeding troughs, many sow stall sheds utilise long grooves or ditches that span across multiple stalls, where their bodily fluids can mix with the food. The pigs inability to shift position means they sometimes suffer from injuries such as swollen limbs and lameness. The alternative to sow stalls in intensive pig farming is group housing. This system of housing allows female pigs to move in and out of the sow stalls and into a small area with other females, still within confined areas in large sheds. This method, though allowing for greater movement, leads to more fighting between sows.

Regarding the intensive farming of laying fowl for the production of eggs, some twelve million hens are confined in cages, often containing up to three other hens, which allow them a space of approximately the size of an A4 sheet of paper. There is not sufficient room for the hens to stretch their wings. Animals Australia notes, 'The combination of lack of exercise and continual egg-laying, which depletes hens of calcium, leads to weakened bones. It is estimated that one in six battery hens live in their cages with untreated broken bones.'

Animals Australia also notes. 'As chicks, egg-laying hens are commonly 'debeaked'. This involves slicing off part of the bird's sensitive beak with infra-red rays or a hot iron.' This procedure is performed without an anaesthetic.

More chickens are raised in factory farms for their meat than any other animal - 435 million in Australia every year.

Animals Australia has stated, 'These birds spend their lives inside a dimly lit shed with tens of thousands of other birds. Bred to grow at three times their natural rate, these animals are still babies - just five weeks old - when they are slaughtered. They may be the size of an adult bird, but they still have baby feathers, baby blue eyes and cheep like chicks the day of their death.' It has also been claimed by Animals Australia that, 'Unnaturally rapid growth...causes a range of debilitating physical problems ranging from heart disease to lameness.'

3. There is growing community support for 'free-range' farm products

It has been noted that though a majority of consumers still buy factory-farmed eggs, chicken meat and pork, there is a steady growth in demand for free-range products.

In an article published in Farm Weekly on October 27, 2014, Andrew Marshall wrote, 'Demand for free-range eggs has jumped more than 15 per cent in the past five years and now accounts for one in every five eggs produced in Australia.'

Farmers have been warned that if they do not reduce their production of caged eggs they are likely to find themselves with product they are unable to sell.

The research group IBIS World has stated, 'As supermarkets and fast food outlets change their purchasing policies, cage eggs producers could find themselves having to accept lower prices from downstream players, or selling their eggs for processing into low-value powder.'

Woolworths has committed to phasing out all caged eggs and to no longer using cage eggs as an ingredient in their home brand products and to labelling the hen stocking density on Woolworths Select free range eggs. In 2012 Coles announced that it would stop selling company branded pork, ham and bacon produced from pigs kept in cramped stalls and company branded caged eggs by 2013. Woolworths has similarly ceased selling home brand products produced from stall-confined pigs.

Fast food outlets McDonalds and Subway have also responded to consumer demand by stating they are switching to free-range products. On September 12, 2014, McDonald's announced that it would have replaced caged eggs with free-range eggs in all its 900 restaurants by 2017. In an apparent response to consumer concerns, McDonalds posted on facebook, 'We'd like to let our fans know first and announce that we're working towards a move to cage-free eggs with our suppliers by the end of 2017. This is part of a broader animal welfare initiative, which we will share more details on in the coming weeks.' The reference to a 'broader animal welfare initiative' has led some commentators to speculate that McDonalds may also be going to source its chicken meat differently. On September 17, in a similar response to consumer pressure, Subway also announced on its facebook page that it was phasing out caged eggs.

4. Free-range products are of a higher quality and promote human health

Supporters of free-range chicken meat, eggs and pork argue that they are a better option for promoting human health. A growing body of research indicates that pasture-raised meat, eggs, and dairy products are better for consumers' health than conventionally-raised, grain-fed foods. In addition to being lower in calories and total fat, pasture-raised foods have higher levels of vitamins, and a healthier balance of omega-3 and omega-6 fats than conventional meat and dairy products.

Free-range chickens have 21 percent less total fat, 30 percent less saturated fat and 28 percent fewer calories than their factory-farmed counterparts. Eggs from poultry raised on pasture have 10 percent less fat, 40 percent more vitamin A and 400 percent more omega-3's.

Animals grown on pasture do not suffer the disease burden of those grown under unnatural confined conditions and therefore do not need to be constantly fed antibiotics to keep them in good health. Over use of antibiotics in production animals can have far-reaching human health effects, perhaps contributing to the rise of antibiotic resistant bacteria that can affect both animals and humans. 80 percent of antibiotics in the United States are fed to animals, mostly to make them grow faster and prevent them from getting sick and dying under dirty and crowded conditions.

In pork, another major health consideration is the quality of the fat. This is largely determined by the nature of the pigs' diet. Pasture-reared pigs have an opportunity to forage and eat a wider variety of naturally-occurring foods. The typical diet for factory-farmed pigs is largely based on corn and soybean meal, together with other by-product additives. This feed is very high in Omega-6 PUFA which then forms a major component of the meat the pig produces. Omega-6 PUFA induces inflammation and is not recommended as a major part of a healthy diet.

5. Free-range, pasture-based production is more environmentally friendly and sustainable

It has been claimed that less intensive agricultural practices do less environmental damage, produce stronger animals and overall are more environmentally sustainable.

Regarding egg production, it has been claimed that cage systems use more energy and water and produce more pollution. When smaller flocks forage outdoors, the manure can be absorbed into the ground as fertilizer. When tens of thousands of hens are kept on one farm, the huge volume of manure becomes a disposal problem. When it seeps into the waterways, high levels of phosphorus boost algae growth and kill fish. When it decomposes, it releases ammonia, methane and other harmful gases into the air.

It has also been claimed that non-intensively reared pigs and chickens increase agricultural biodiversity. In Australia, most pork, for example, comes from just three breeds of pig - Large White, Landrace, and Duroc - because these breeds are most suitable for confinement breeding operations. Most pastured pork, however, comes from hardy, self-sufficient heirloom breeds, such as the Large Black, Berkshire, Saddleback and Tamworth crossed with commercial breeds. Increased bio-diversity increases the disease resistance of a species.

Arguments against banning the 'factory farming' of hens and pigs

1. The welfare of intensively farmed animals is a priority for farmers

It has been claimed that there is a natural correspondence between healthy farm animals and productive farms that supply the farmer and the consumer with a saleable product.

The National Farmers Federation has stated, 'For Australian farmers, their animals are their living, so looking after their welfare is not only the right thing to do, it also makes good business sense. Australian farmers are committed to ensuring their animals are healthy and well cared for.'

A 2012 review of pig farming practices employed in the European Union, that included comparisons with Australian practices, noted the extent to which good profits for the farmer depend on the maintenance of healthy animals. It has been claimed that intensive farming practices would not be persisted with if they resulted in animals whose products could not be sold for a good price.

The 2012 review states, 'During abattoir meat inspection pig carcasses are partially or fully condemned upon detection of disease that poses a risk to public health or welfare conditions that cause animal suffering e.g. fractures.'

The review went on to explain, 'This incurs direct financial losses to producers and processors. Other health and welfare-related conditions, such as bruising, may not result in condemnation but can necessitate "trimming" of the carcass, and result in financial losses to the processor. Since animal health is a component of animal welfare these represent a clear link between suboptimal pig welfare and financial losses to the pig industry.'

One of the review's conclusions is that there is an economic imperative for pig farmers to maintain their animals in the best possible health.

2. Regulations and audit procedures are already in place to ensure the welfare of intensively farmed animals

Defenders of intensive farming argue that regulations and monitoring guidelines ensure that animal welfare is not jeopardised.

For example, the conditions under which meat chickens are housed and the way in which they are managed during their growing, transportation and slaughter are set down in several government- and industry-endorsed Model Codes of Practice designed to safeguard their health and wellbeing.

The industry has developed a model animal welfare audit program, which covers hatchery, breeder rearing, breeder laying, growing, and the pick-up, transport and processing sectors. Several companies have incorporated elements of this welfare audit in their own quality plans. All companies incorporate elements of good practice for bird welfare in their grower manuals.

Similarly, regarding intensive pig-rearing practices, a report produced by the New South Wales Department of Primary Industry in June 2014 it has stated, 'Australian pig farms are required to adhere to high welfare standards that are based on animal care. These standards were developed through a process of consultation between government and industry representatives, veterinarians and animal welfare groups.'

These standards are legislated in Australia. Indoor intensive farms continue to upgrade to meet changes in animal welfare regulations, marketplace requirements and community expectations.'

Australian Pork Limited (API) has stated, 'The Model Code of Practice for Welfare of Animals (Pigs) is a guide that has been developed in consultation with all levels of industry, regulators, RSCPA and scientists to detail the acceptable practice for the management of pigs. It outlines all responsibilities involved in caring for pigs - including their housing, food, water and special needs. Standards in the Model Code have been incorporated into the Australian Pork Quality Assurance Program and are independently audited each year to ensure producers comply.'

3. Some intensive farming practices are required to ensure the welfare of animals

Farmers claim that some of the farm practices which animal rights activists object to are actually necessary for the wellbeing of the animals.

Referring to pig farming, the National Farmers Federation has stated, 'People often ask why sows are kept in individual housing. It's because pigs can be aggressive animals and aggression between sows increases in the early stage of pregnancy. During this vulnerable time, individual housing is the best way to ensure sows are getting food and are totally protected from bullying, bites, injuries and the increased chance of miscarrying their babies.'

The Federation has further explained, 'Similarly, farrowing crates are used to protect piglets. The average sow weighs over 250 kilograms - equivalent to three standard fridges. During the short period new piglets are suckling, they are extremely vulnerable to being crushed to death by their mother, so the temporary use of farrowing crates play a crucial role in protecting piglets from being crushed.'

Finally, the Federation has stated regarding pig rearing that even on free range farms there are occasions where sheds are necessary. The Federation has claimed, 'On some farms, sows have piglets in a free range environment, and once weaned, the piglets are moved into group housing, eco sheds or shelters. This is for a number of reasons: it helps protect the pigs from predators and from the elements of the weather (pigs suffer from sunburn, and are very susceptible to extreme temperatures), and ensures that the pigs receive the nutrition they need as their feed can be monitored.'

4. Free range products are too expensive for many consumers

It would appear that many Australian consumers are either unwilling or unable to pay the higher prices associated with 'free-range' food products.

The Lifehacker website has noted that among those buying home brand eggs in Australia's supermarkets, 80 percent purchase 'caged' rather than 'barn-raised' or 'free-range eggs'. That may not be a surprising figure as those purchasing home brand products are normally looking for a reduced price. However, a survey conducted by Choice magazine suggests that only 40 percent of eggs purchased in Australia are free-range. This suggests that for a comfortable majority of Australian egg consumers price is an important factor in their purchasing decisions. The two figures combined also imply that for those on limited incomes, free-range eggs may simply be too expensive. A comparison conducted in New South Wales in 2013 suggests that free-range-eggs are twice as expensive as caged eggs.

The same situation exists with regard to chickens reared for meat rather than egg production. John Hazeldene, the managing director of Hazeldene chicken meat producers, has stated, 'The consumer, to buy free range or to buy RSPCA [accredited chicken meat], they must pay a premium because it costs us a lot more money to rear... [the birds]. For instance, to build a shed would probably be 30 per cent more expensive if we were doing it all with RSPCA [accreditation] because we simply put less birds in the shed, so it's a cost thing.'

Mr Hazeldene has claimed that while there is more consumer interest in animal welfare, many people still do not want to pay too much for their chicken products.

Similar patterns have been discerned in other countries. Surveys by New Zealand Pork have shown that although consumers may oppose factory farming pigs, they are not necessarily willing to pay more for free-range pork.

New Zealand Pork chairman, Ian Carter, has said of pork consumers, 'They may answer surveys that they want free-range pork but they don't vote with their wallets.'

Referring to consumer behaviour, the executive director of the animal welfare group SAFE, Hans Kriek, has stated, "'It is a mixed bag. There is a small group of people who are very conscientious and would not be caught dead buying factory-farmed pork even if it meant paying more for free-range pork.'

However, Mr Kriek also acknowledged, 'Then the majority of people would say they are opposed to factory farming but have very busy lives and animals are not at the forefront of their minds when they are shopping and so this concern does not show in their consumer behaviour.'

5. Intensive farming measures are necessary to keep pace with domestic and overseas demand for chicken and pig products

It has been claimed that intensive farming methods are the only way to keep pace with a growing demand for chicken and pig products. An increase in Australia's population is expected to result in a significant growth in the market for these food sources.

For example, the Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) estimated that in 2012-13 annual consumption of chicken meat would increase slightly to 44 kilograms per person, making it the most

consumed meat in Australia. ABARES noted that while per capita poultry consumption is anticipated to increase, population growth is expected to be the key driver of total consumption growth in poultry. Industry projections show Australian consumption will be 45 kilograms per person by 2015.

Some commentators are concerned that Australian agricultural output is not keeping up with this demand. In 2014, research analyst Jack Di Nunzio stated, 'To satisfy export growth targets while maintaining domestic food security, Australia must...increase agricultural production and improve sustainability.' In a research paper published by Future Directions International, Di Nunzio stated, 'Since the early-2000s, however, total factor productivity (TFP) in Australian agriculture has been almost stagnant; running at less than one per cent.' There are those who claim that in this context Australia cannot afford to abandon intensive farming practices; the country must find ways of increasing farm production rather than employing lower density techniques which would increase costs and reduce productivity.

Further implications

It is not surprising that the Australian Capital Territory (ACT) has become the first jurisdiction in this country to ban factory farming of both chickens and pigs. A 2012 study of food production in the ACT found that it had only six businesses with 84,246 chickens for egg production and no chickens were identified as being grown for meat. Most of the pig products consumed in the ACT also come from other states or overseas and the piggeries in the ACT (in common with those across the country) had already pledged to phase out sow stalls by 2018. This means there is not a significant farming sector within the ACT to be affected by the new legislation.

The Australian Capital Territory is also a relatively wealthy jurisdiction. Australian Bureau of statistics figures for 2012-13 show total factor incomes grew in the ACT by 4.5 percent compared to declines of .4 percent and .5 percent in Tasmanian and Western Australia respectively. The highest gross household disposable income per capita in Australia in 2012-13 was in the ACT. This means that those living in the ACT are going to be most able to absorb an increase in the cost of some foodstuffs as a result of the banning of factory farming.

Spokespeople for the agricultural industry have also claimed that all the law is likely to do is encourage food retailers to source even more of their food products from outside the Australian Capital Territory.

The chief executive of Australian Pork Limited, Andrew Spencer, has stated, 'The really unfortunate thing is that we'll be eating 70 per cent of the ham and bacon coming from overseas where they're still using these sow stalls and they have no intention of stopping using them.'

That particular consideration may well have implications Australia-wide. With free trade agreements signed with both China and the United States, one of the consequences of banning factory farming in Australia may be that consumers will simply purchase cheaper products imported from overseas where factory farming continues to be practised.

If factory farms are to be banned across Australia, it will be necessary to raise public awareness of the animal welfare issues associated with this type of farming so that those who can afford the more expensive product are prepared to do so.

Newspaper items used in the compilation of this issue outline

Most newspaper items for this issue outline are from online publications or, if in print newspapers indexed by Echo, were not present in the paper edition. Therefore, see the *Web Documents* section for links to these items.