INDUSTRIAL ANIMAL AGRICULTURE

Throughout most of the "developed" world, and increasingly in some "developing" countries, billions of farm animals are kept in industrial systems – factory farming. Fattening pigs and broilers (the chickens reared for their meat) are crammed into overcrowded sheds; breeding sows and calves are confined in crates so narrow that they cannot even turn around; laying hens are packed into cages; and dairy cows are pushed to their physiological limits and beyond.

What are the main welfare problems associated with factory farming?

- **Overcrowding** fattening pigs and broiler chickens are packed together, leading to stress, aggression and frustration due to an inability to express their natural behaviours, and creating ideal conditions for the rapid spread of dangerous, disease-causing pathogens.
- Unnatural social groupings broiler chickens are kept in enormous groups, far exceeding their capacity to recognise all individuals. This results in chronic stress because the birds are unable to form a stable social group. At the other extreme, calves and breeding sows are isolated in individual crates, causing severe stress due to a lack of social interaction with others of their species.
- **Confinement** breeding sows and calves in crates, and laying hens in battery cages, are denied any opportunity for exercise, leading to chronic stress and physical degeneration.
- **Barren environments** breeding sows in farrowing crates and laying hens in battery cages are prevented from building a nest, resulting in extreme frustration. Dairy cows in cubicles, and sows and fattening pigs, suffer chronic discomfort and injuries due to inadequate bedding material; and sows in crates suffer from boredom and display repetitive stereotypical behaviour, such as bar biting, due to a complete lack of environmental enrichment.
- Mutilations piglets are often tail-docked or teeth-clipped, cattle de-horned and hens de-

beaked in order to lessen the impact of aggression, which arises as a result of the barren overcrowded environments in which the animals are reared. Male piglets and calves may be castrated, even though many will be slaughtered before they reach sexual maturity; and dairy cattle may be tail-docked, which brings no benefits to the animal. These painful mutilations are almost always performed without anaesthetic, and can lead to chronic pain.

- Selective breeding broiler chickens have been bred to grow so quickly that their bones and heart are frequently unable to support their overdeveloped bodies, and modern breeds of dairy cow have been bred to produce so much milk that they are in a constant state of metabolic hunger. Modern breeding technologies, genetic engineering and cloning involve painful medical procedures, and may be used to accelerate the breeding process, pushing animals to ever more extreme and unsustainable levels of production.
- Feed restriction/Inappropriate diet broiler breeders are subjected to long term feed restriction, resulting in chronic hunger. This is necessary to counteract the effects of breeding them for oversized bodies, which causes serious health problems in the adult birds. Breeding sows are given insufficient roughage to satisfy their hunger. Laying hens may be starved to shock them into another cycle of egg laying. Calves raised for "white" veal are fed on a diet deficient in iron and roughage to keep

their meat pale.



Laying hens



Hens crammed in battery cages

There are over five billion laying hens in the world, producing over 50 million tonnes of eggs every year. Modern breeds produce around twice as many eggs as they did 50 years ago, with each hen laying on average over 300 eggs in a year. The male chicks of these egg-laying breeds are usually killed immediately after hatching, as it is not considered economic to raise them for meat. The females destined for the factory farm will be crammed into a tiny cage with several others just before they start laying, at around 18 weeks old. These cages are arranged in rows, up to 8 tiers deep, in large sheds.

The battery cage is so small that the hens are unable to stretch their wings or turn around without difficulty. The lack of opportunity for exercise, combined with the constant demands of egg production, cause battery hens to develop such brittle bones that many suffer from broken bones by the time they come to be slaughtered. The hens also become frustrated because they are prevented from performing their natural behaviours of nesting, dust bathing and perching.

The barren environment and close proximity of other hens can lead to feather pecking and cannibalism. Many hens therefore have part of their beak removed, causing severe and often lasting pain. In some countries, such as the US, hens may be subjected to forced moulting, where they are deprived of food for up to two weeks in order to extend their productive lifespan by shocking them into another cycle of egg laying.

Improving welfare

Alternatives to the battery cage include free-range and perchery (barn) systems which, if well managed and well designed, have the potential for higher welfare. Forced moulting by the complete withdrawal of food is prohibited in the UK and de-beaking is banned from 2011. The conventional battery cage is prohibited in the EU from 2012, but this is likely to be replaced with the "enriched" cage. This contains a few token improvements, but provides no significant welfare benefits and it still has insufficient space to enable hens to perform many basic movements, let alone achieve any meaningful exercise. All cages have been banned in Switzerland since 1991, and are prohibited in Germany from 2006.

CIWF Trust believes the following steps are necessary to ensure reasonable welfare standards for laying hens:

- All cage systems should be abolished
- Hens should have access to the outdoors or, where they are kept indoors, they should be provided with sufficient space and adequate nesting, perching and dust bathing facilities
- De-beaking and forced moulting should be prohibited



Broiler with crippling lameness

Worldwide, over 43 billion broiler chickens are slaughtered for their meat every year. Around half of these are reared in industrial systems, where tens of thousands of birds are crammed together in huge sheds. The litter in these sheds soon becomes dirty and soaked with ammonia from the birds' excreta, which can cause breast blisters, hock burns and ulcerated feet; and overcrowding leads to severe welfare problems as a result of heat stress and inactivity. In a few countries, broilers may be kept in cages similar to those used for laying hens. Modern broiler chickens have been bred to grow so quickly that they can reach slaughter weight in just 40 to 42 days, twice as fast as 30 years ago. This puts such enormous strain on their heart and lungs that around five percent die of heart failure whilst still in their infancy; and their legs are unable to support their overdeveloped bodies, to the extent that almost all exhibit some degree of lameness, with many suffering from painful and often crippling leg deformities.

At the end of their lives, the birds are often handled very roughly during catching, before being hung upside down from shackles to be slaughtered. It is almost impossible to ensure high welfare standards in modern automated high-throughput slaughterhouses.

The effects of selective breeding are so extreme, that if the birds were not slaughtered, many would die before reaching sexual maturity. It is therefore necessary to severely restrict the feed intake of the broilers intended for breeding to slow down their growth rate, resulting in chronic hunger.

Improving welfare

A more humane alternative to factory farming is to rear slower-growing breeds in free-range systems. Some specialist broilers, such as 'Label Rouge' in France, are generally reared on small free-range farms and are slaughtered at over 81 days old.

At present, legal regulations for broiler rearing exist only in Sweden, Switzerland and Denmark. The EU is currently preparing a Directive on the welfare of broilers.

CIWF Trust believes the following steps are necessary to ensure reasonable welfare standards for broiler chickens:

- The use of fast-growing breeds, in which high levels of leg disorders and heart failure are common, should be prohibited
- Chickens should have access to the outdoors or, where they are kept indoors, environmental enrichment, such as straw bales, should be provided to encourage exercise
- Chickens should be stocked at a density of no more than 25kg/m^2 to allow them to express their natural behaviours
- Breeding flocks should be given sufficient feed to prevent hunger



Sow in sow stal

In the factory farm, breeding sows are kept indoors in sow stalls (gestation crates) throughout most of their adult lives. These barren metal pens are so narrow that the sow is unable to turn around and can only lie down with difficulty. In some cases the stall has no back, and instead the sow is tethered to the floor by a short chain attached to a collar or belt. The floor is usually made of concrete, and may be slatted. Sows kept in stalls are denied opportunities for exercise, social interaction, and natural rooting and foraging behaviour. As a result, they suffer chronic physical discomfort and elevated stress levels, and reduced muscle and bone strength and cardiovascular fitness. Many will have injuries, joint swellings, infections and reproductive problems, and exhibit abnormal stereotypic behaviour and apathy.

Up to a week prior to giving birth, the sow is moved to a farrowing crate, where she is again prevented from turning around and has difficulty sitting or lying. She will remain here for two to four weeks until the piglets are weaned, and then be returned to the sow stall for another cycle of pregnancy. In the farrowing crate, the sow cannot follow her strong instinct to build a nest before giving birth and is unable to reach the piglets as they are born, resulting in extreme frustration.

Following their abrupt early weaning, the piglets are usually kept indoors in barren, overcrowded pens. The pen floor is normally concrete and may be slatted. In this impoverished environment, the piglets often resort to biting each others' tails, and many will have their tails docked and teeth clipped in an attempt to prevent them injuring each other. At five to six months old the pigs are taken to slaughter. More than one billion pigs are slaughtered worldwide every year.

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Improving welfare

More humane alternatives to factory farming include free-range outdoor rearing systems with shelter provided by pig arcs or huts, and indoor strawbedded group housing and farrowing systems.

Sow stalls and tethers have been prohibited in the UK since 1999. Tethering is banned in the EU from 2006; and sow stalls are prohibited in Florida from 2008, and in the EU from 2013. The EU also has legislation setting minimum space allowances for sows and fattening pigs; requiring the provision of straw or other manipulable material; and preventing routine mutilations.

CIWF Trust believes the following steps are necessary to ensure reasonable welfare standards for pigs:

- Farrowing crates, sow stalls and tethering should be prohibited
- Pigs should be given sufficient space to allow them to express their natural behaviours
- Pigs should always have access to bedding material, preferably straw
- Castration, tail-docking and teeth-clipping should be prohibited

Dairy cows



Dairy cow with distended udder

There are over 200 million dairy cows in the world, producing nearly 500 million tonnes of milk annually. Selective breeding has dramatically increased productivity in the modern dairy cow, with milk yields often exceeding 40 litres per cow each day. The enormous physiological demands that this level of milk production places on the cows have serious consequences for their welfare.

High yielding dairy cows have an increased susceptibility to metabolic disorders and infectious

diseases, such as mastitis (a painful inflammation of the udder). They are also prone to lameness because their enlarged udder forces their hind legs into an unnatural position, placing excessive pressure on the outer part of the foot. Indoor housing and inadequate bedding can further exacerbate foot problems. In some countries, dairy cows may now be kept indoors permanently in zero-grazing systems.

Dairy cows have their first calf at around two years of age. They are then kept in a state of almost constant overlapping lactations and pregnancies. By the time they reach their third or fourth lactation most will be culled because they are thin, exhausted, infertile and/or chronically lame.

Each time the cow gives birth she will be separated from her calf, usually within 48 hours, causing extreme distress to both. Purebred male dairy calves are considered unsuitable to raise for beef. Many are therefore killed when very young or kept in individual crates, so narrow that they cannot even turn around, and fed on a diet deficient in iron and roughage, in order to produce "white" veal. These calves suffer from both psychological stress and severe physical health problems due to their isolation, confinement and inappropriate diet. By the time they go to slaughter, at between four and six months old, many can barely walk.

Improving welfare

Dairy cows can be kept in less intensive systems, as are found in organic dairy farming, where they are placed under less physiological strain.

Veal crates have been prohibited in the UK since 1990 and are banned in the whole of the EU from 2007.

CIWF Trust believes the following steps are necessary to ensure reasonable welfare standards for dairy cows and calves:

- High-yielding modern breeds of dairy cow should be abandoned in favour of dual purpose breeds capable of yielding sustainable quantities of milk and producing calves which can be reared for beef
- Cubicle housing should be prohibited and dairy cows given access to the outdoors, with housing when necessary in spacious straw-bedded sheds
- Veal crates should be prohibited and replaced with straw-bedded group rearing systems
- Calves should be fed sufficient quantities of iron and roughage to maintain good health

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Long distance transport

Before being slaughtered, many farm animals are sent on appallingly long journeys, during which they become increasingly exhausted, dehydrated and stressed. Some get injured and may be trampled by their companions. In the worst cases, many die. For example, in 2001 over six million sheep were exported live from Australia to the Middle East. These animals may travel for up to three days just to reach the sea port, and must then endure a sea journey that can last as long as three weeks. Around 85,000 sheep died during these sea journeys in 2001. CIWF Trust believes the long distance transport of live animals should be abandoned and replaced by a trade in meat.



Gasping for ai

Slaughter

The slaughter process usually involves rendering the animal unconscious using percussive or penetrative stunning, gas, or an electric current. The animal's throat is then cut and it bleeds to death. In some cases, the animal may not be stunned effectively or may recover from the stun and regain consciousness during bleeding out, causing extreme pain and distress. In certain types of religious slaughter, the animals are often not stunned at all. Also, in many countries, there is no legislation, or even guidelines, governing slaughter practices. CIWF Trust believes that all animals must be effectively stunned or killed instantaneously to minimise suffering.

What are the risks to human health from factory farming?

In some countries, including the US, intensively farmed animals are routinely given hormones to

increase growth rate or milk production. The use of hormones has been banned in the EU due to serious concerns about their effects on animal welfare and the potential risk to human health. Another deeply worrying issue is the overuse of antibiotics in farm animals, which can lead to the development of resistant strains of bacteria. Antibiotics are often used routinely as growth promoters or to prevent the rapid spread of bacterial infections that can occur in the overcrowded conditions of intensive farming systems. A World Health Organisation meeting of 70 health experts concluded in 1997 that "Resistant strains of four bacteria that cause disease in humans have been transmitted from animals to humans and shown to have consequences for human health. They are Salmonella, Campylobacter, Enterococci and E. coli."

What are the environmental impacts of factory farming?

Intensively farmed animals are concentrated, often indoors, at stocking densities that are too high to be environmentally sustainable, on agricultural operations that are too small to grow their feed or absorb their manure. Production and transport of high energy and high protein animal feed crops consume energy, land and water resources. Intensive feed production involves the use of artificial fertilisers and pesticides, and contributes to the loss of wildlife habitats and biodiversity. Surplus nutrients from factory farms pollute rivers, lakes, groundwater and seawater, damaging ecosystems and contaminating drinking water sources. Factory farming is also an important source of emissions associated with global warming, ozone depletion and acid rain.

What are the socio-economic impacts of factory farming?

As environmental, animal welfare and labour law become more and more stringent in industrialised countries, factory farming is relocating to developing countries where legislation may not exist to protect people, animals and the environment. When factory farming is introduced into developing countries, small farmers are unable to compete and many lose their livelihoods. This increases rural to urban migration and associated social problems. Factory farmed produce is often intended for wealthier urban populations or for export, and so does not meet vital food security needs of poorer people. Factory farming is also technology and input dependent, making a dependent and unsustainable agricultural industry.

The World Trade Organisation

In recent years, significant improvements in animal welfare have been achieved, especially in the EU, in response to public opinion and scientific evidence. However, the free trade rules of the World Trade Organisation (WTO) are seriously hampering progress. Under the WTO rules a country, or group of countries such as the EU, cannot ban imports on ethical grounds, or insist that its animal protection laws are applied to imported products as well as domestically produced products. For example, the EU has banned battery cages from 2012, but under WTO rules it cannot ban the import of battery eggs. There is a real danger that European egg producers will lose some of their market share to cheaper imported battery eggs. The EU is therefore planning to review its cage ban in 2005. If by then the WTO rules have not been revised to allow the EU to require imported eggs to meet similar welfare standards to those applying to EU eggs, the EU may decide to drop its ban on battery cages. CIWF Trust believes the WTO rules must be reformed to end their detrimental impact on animal welfare.

Advocates of free trade often argue that developing countries would be adversely affected if other countries could take account of animal protection criteria in their import policies. However, the majority of farmers in most developing countries still rear animals in small-scale extensive systems, which avoid many of the welfare problems inherent in factory farming. They could therefore actually gain a competitive advantage by exporting produce from these systems, helping to support sustainable small-scale farmers and reduce poverty.

Compassion in World Farming Trust's vision of humane and sustainable farming



CIWF Trust believes there should be economically, socially and environmentally sustainable food production that does not compromise animal welfare. Intensive factory farming should be abandoned in favour of extensive humane farming



systems, capable of sustainably delivering sufficient quantities of food to the highest standards of animal and human welfare, environmental protection and food safety.

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