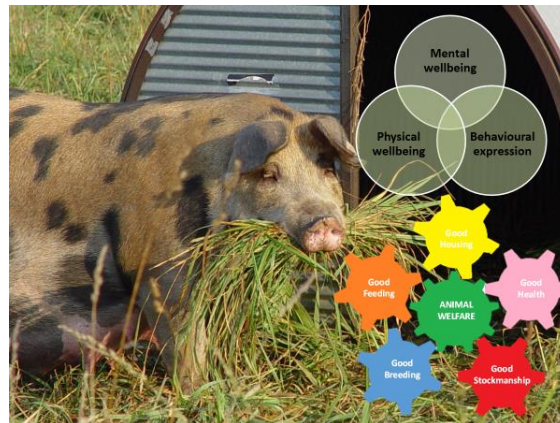


***“Factory farm animals are deprived of everything that makes life worth living”***

Peter Roberts MBE. Founder of Compassion in World Farming (1)

### Animal welfare

Farmed animals are sentient beings and deserve a good quality of life and humane death. Animal welfare is not just about the absence of suffering, but about the provision of ‘*what animals want and need*’ so that they can lead healthy, happy lives. An animal is considered to have good welfare when he/she is in good physical condition, has a strong mental state (for instance: confident, not fearful or in pain) and is able to express important behaviours (such as foraging; dustbathing; making a nest; socialising).



Good animal welfare is underpinned by good feeding, housing / environment, health, breeding, and critically good stockmanship / management (animal care).

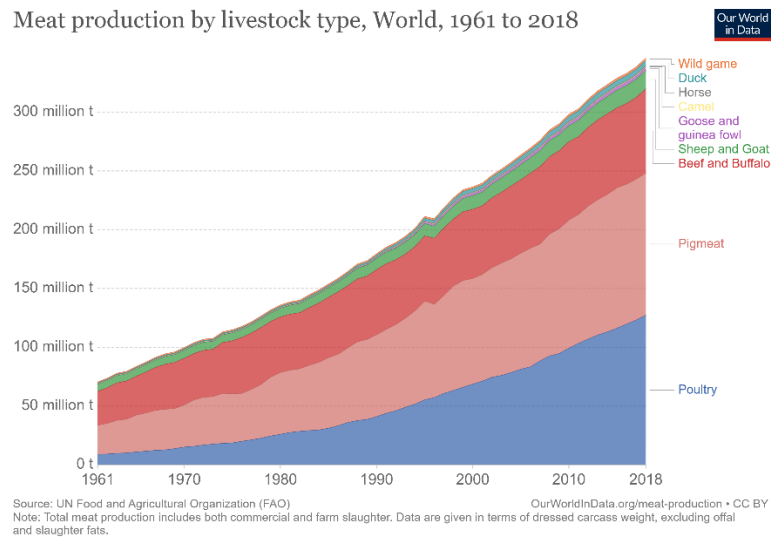
**How we treat animals is our ethical and moral imperative; how they perceive their lives is their welfare state.**

### Introduction to the problem and scale

- Demand for animal protein is growing at an unprecedented rate, driven by population growth, rising incomes and urbanisation.
- Over the past 50 years, meat production has more than quadrupled, with the world producing more than 340 million tonnes of meat in 2018 compared to 71 million tonnes in 1961 (2)
- In 2018, this equated to an estimated 69 billion chickens; 1.5 billion pigs; 656 million turkeys; 574 million sheep; 479 million goats; and 302 million cattle killed for meat production per annum (2)
- Chicken meat accounted for only 12 percent of global production in 1961. However, with its value undermined by commoditisation, its global share tripled, representing 36 percent of global production in 2018 (see Figure 1).

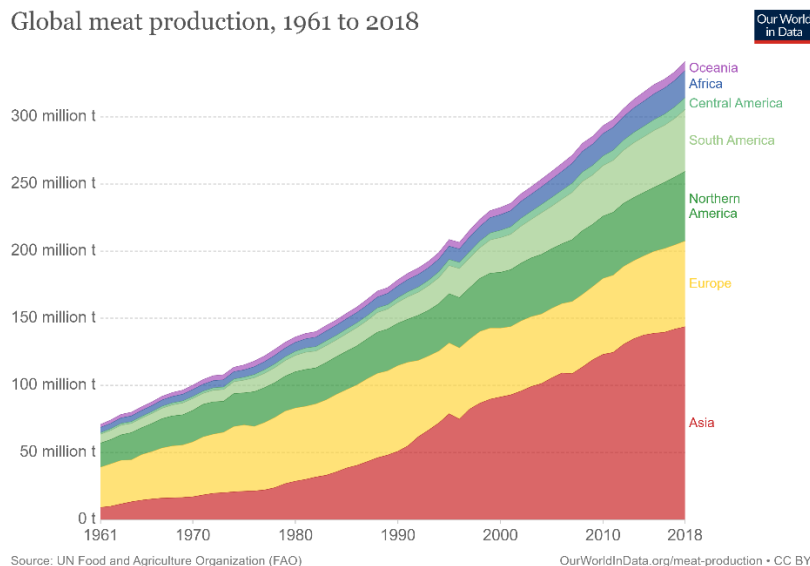
- Beef and buffalo meat nearly halved its share of global production in the same period (now accounting for around 22 percent), whilst pigmeat's share remained more or less constant at approximately 35-40 percent.
- In 2020, the FAO estimated more than 85 billion animals were kept for food each year globally; 77 billion being slaughtered for meat, and 7.5 billion laying hens producing 1.4 trillion eggs, and 280 million dairy cows producing 660 billion litres of milk (3) .

Figure 1:



- Regionally, Asia is the largest meat producer, accounting for around 40-45 percent of total meat production, largely driven by the production scale in China. Europe, and North and South America are also major producing regions, see Figure 2.

Figure 2:



- The vast majority of animals reared for food are kept in intensive systems.
- Intensive animal farming threatens several planetary boundaries, including climate change, biogeochemical flows (nitrogen and phosphorus), land-system change, freshwater use, and the loss of biodiversity.

- Intensive livestock production is already responsible for 14.5% of global anthropogenic greenhouse emissions. Under a business as usual model of food production, in which meat and dairy consumption rises in line with a growing global population and rising GDPs, the agriculture sector alone would emit enough greenhouse gasses to take up the entire two degrees Celsius emissions budget by 2050 (4)
- The intensification of crop production used for animal feed has accelerated land and soil degradation (5)
- Around one million plant and animal species are now threatened with extinction (6), with intensive animal production a primary factor (7). As meat consumption rises, so farmland expands depriving wildlife of their natural habitat and bringing them into dangerously close proximity to human activity providing the perfect opportunity for pathogens to spread, some of which are zoonotic and pose a threat of pandemics.
- Every year there are around 600 million cases of foodborne diseases and 420,000 deaths (8) predominantly from Salmonella, Campylobacter and E. Coli. In addition, agricultural intensification is associated with 50% of emerging zoonotic diseases since 1940.
- Intensive livestock systems have an enormous impact on the welfare of the billions of animals reared for our food each year.

### Welfare issues associated with intensive animal farming

This section is taken from Jones 2017 (9).

Intensive farming relies on systems and practices that at the minimum level do not meet the needs of animals, do not provide animal choice, do not promote positive welfare experiences mentally or behaviourally and require modification of the animal in an attempt to fit the animal to the surroundings rather than fitting the surroundings to the animal. The most obvious causes for concern are:

**Confinement.** Examples of the most severe forms of confinement are cages for laying hens, rabbits, quail and even broiler chickens (in countries such as Russia, Turkey, China); sow stalls and farrowing crates; tethered systems for dairy cows; veal crates for calves. Confinement systems are associated with a lack of movement and opportunity to express even the most basic of behaviours, such as wing stretching and scratching (laying hens), sitting upright or hopping (rabbits), walking and turning around (sows), or having the comfort of one's own kind (calves). Severe confinement leads to stereotypic behaviours such as bar-biting and sham chewing, even depression (in sows), and is associated with muscular weakness.

**Over-crowding.** High stocking densities and limited space allowance per animal in barns and pens, limit behaviour. Broiler chickens constantly bump into each other and disturb each other at commercial stocking densities (10) are averse to sitting in such close proximity (11); sit in a compressed state (12); and choose areas with more available space if given choice (13). Animals such as pigs have barely enough room to lie down simultaneously near slaughter weight and are unable to create functional areas (separate feeding, drinking, resting and activity zones) in their pens.

**Barren environments.** These are usually associated with fully or partially slatted systems indoors or with feedlots outdoors. A lack of stimulation and meaningful occupation leads to boredom and frustration in pigs and laying hens, contributing to damaging behaviours such as tail biting in pigs and aggression and feather pecking in laying hens. It also leads to stereotypic behaviours such as tongue rolling in cattle and over-mating in broiler breeders.

**Mutilations.** A range of mutilations are commonly performed in commercial practice. These include: beak trimming of hens and turkeys; tail docking of pigs, dairy cattle and sheep; mulesing of sheep; dehorning or disbudding of cattle; castration of male pigs, cattle and

sheep; and spaying of female pigs and cattle in some regions of the world. Most mutilations are performed without anaesthesia or analgesia and so involve short- and long-term pain, neuroma formation, and associated depression of appetite and behaviour modification.

**Breeding for high production traits.** Livestock are selected for ever higher growth rates in meat animals, milk yields for dairy animals, litter sizes in pigs and egg yields for laying hens. Rate of growth in the modern broiler is directly linked to lethargy, poor walking ability (14) and cardiac dysfunction (15). It is also associated with severe feed restriction and chronic hunger in the parents of the meat chicken (16). High production performance is correlated to high rates of lameness, mastitis and poor reproductive performance in dairy cows (17), high rates of stillborn and low litter weights in pigs, and osteoporosis in laying hens.

**Transport.** The concerns centre on handling stress during loading and unloading and space allocations that do not allow for normal standing postures or for animals to lie down without risk of being trampled. The duration of transport (i.e. transport time itself) is also of concern because of animal hunger, thirst and fatigue, and the occurrence of deaths in transit.

**Slaughter.** The concerns at slaughter centre on the provision of rest in lairage, handling stress to the point of slaughter, whether the animals are effectively stunned before slaughter, and the distress associated with the slaughter method.

**Animal health.** The prevention of disease and maintenance of healthy animals is a major topic in its own right. One aspect of this is ensuring that farm animals are fit and healthy. In addition, there are important public health concerns linked to the manner in which disease is prevented; examples include the overuse of antimicrobials in livestock production resulting in the development of antimicrobial resistance, and the food safety impacts that result from food contamination with bacteria such as *Salmonella*, *Campylobacter*, and *E. coli*. Of increasing concern, is the risk of pandemics following zoonotic transmission of animal origin viruses (18).

**Poor welfare outcomes.** Physical conditions that impair welfare are increasingly being measured. Examples include the incidence of lameness and mastitis in dairy cows, feather loss due to feather pecking in laying hens, poor walking ability in broiler chickens, and the incidence of tail biting in pigs. To date, most indicators of welfare are associated with the physical condition and production of animals (such as growth rate and mortality), while measures of behaviour are still in development (for a further discussion, see (19) and the work of the Animal Welfare Indicators project (20) Welfare Quality (21) and the AssureWel project (22)

## Animal welfare legislation

The EU has some of the world's highest standards for animal welfare; Council Directive 98/58/EC is core (23) and lays down minimum standards for the protection of all farmed animals. It ensures owners "take all reasonable steps to ensure the welfare of animals under their care" and that "animals are not caused any unnecessary pain, suffering or injury".

Other EU legislation sets welfare standards for farmed animals during transport (24) and at the time of slaughter (25) - requiring all animals, including poultry, to be stunned (rendered unconscious) before slaughter (with the exceptions for animals slaughtered to provide food for religious communities).

There is species specific legislation setting minimum standards for the protection of laying hens, calves, pigs, and meat chickens via the 1999 Laying Hens Directive (26), 2008 Calf Directive (27), 2008 Pigs Directive (28), and 2007 Broiler Directive (29).

EU legislation has prohibited some of the worst aspects of industrial livestock production: veal crates have been prohibited from 2007, barren battery cages for egg-laying hens from 2012 and sow stalls

(gestation crates) were prohibited (except during the first four weeks of pregnancy) from 2013 (See (30) (31) for overviews).

However, even though the legislation is some of the most comprehensive in the world, it still permits certain systems and practices that prohibit animals from living a good life – such as cages and crates, high stocking densities; barren environments and mutilations – and sadly there is no species-specific legislation for other farmed animals.

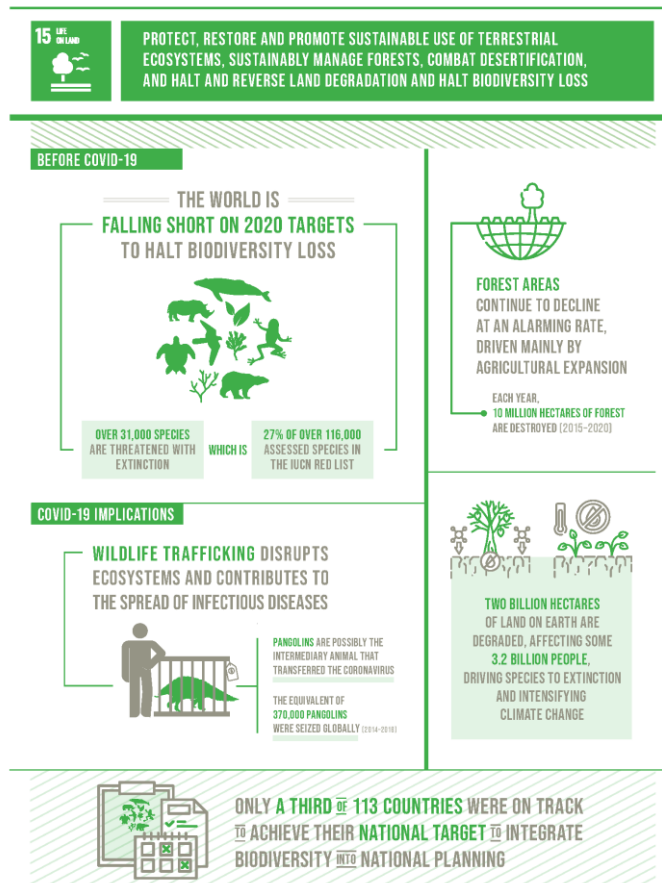
### Consumer awareness of animal welfare is rising

The public's expectation for higher animal welfare standards is increasing and is firmly recognised by many governments and food businesses

- In a recent European survey (European Commission, 2016), 94% of EU citizens believe it is important to protect the welfare of farmed animals while 84% believe it should be better protected than it is now, and 64% want more information on the conditions in which farm animals are treated in their respective countries. (32)
- More than half of all Europeans are prepared to pay more for products sourced from animal welfare-friendly production systems (59%). (32)
- In the US 63.5% of consumers perceived conventional systems as being detrimental to hen welfare; 86% reported positive attitudes towards more animal-friendly, alternative production systems. Over 85% of participants in the same study stated they would be willing to pay a premium for production systems that increase welfare states for hens including outdoor access, cage-free housing and non-induced moulting.

### Link to the relevant SDG(S)

- **SDG 15: Life on Land:** Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss



Source: <https://unstats.un.org/sdgs/report/2020/>

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