



Essay on Factory Farms: Reasons for adopting a plant-based diet

Jane Goodall and Koen Margodt

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Resident rescued pigs at Farm Sanctuary, USA.
Credit: Jo-Anne McArthur / We Animals Media

When Dr. Jane Goodall is asked what she thinks about animal factories, she responds with three words: “Pain, Fear, Death”.¹ Animal factories are amongst the worst atrocities ever perpetrated by humanity. Animal factories are inherently cruel and create massive suffering for billions of animals, destroy the environment and even undermine our health. One of the simplest ways of helping animals, the environment and humanity is shifting from factory-farmed animal products to a plant-based diet. Our considered belief is that it is imperative that there be an end to factory farms, as all will benefit – animals, people and the environment.

¹ See for example <https://www.youtube.com/watch?v=YjtkOuoekoM>, <https://www.youtube.com/watch?v=Tl00lg-E8wE>, <https://news.janegoodall.org/2017/11/22/eatmeatless-people-animals-environment/> and <https://news.janegoodall.org/2017/04/28/why-i-went-plant-based-and-why-we-should-all-eat-less-meat/>.

Pain, Fear, Death

A large, modern slaughterhouse in Europe, that claimed to be a facility of excellence, is slaughtering more than 1.4 million pigs a year in what it states is a highly professional way. An animal advocacy organisation shattered this assertion with a five-minute video, captured by a brave man who had worked undercover at the facility for a month. Pigs are beaten, kicked, and pulled violently by their ears and tails. One image shows a pig being beaten/kicked as he drags himself along on his front legs, his back legs seemingly broken. Several pigs have open wounds. Other footage shows a pig who was meant to be electrically stunned but was still alive and screaming in terror as he was pushed backwards towards his cruel death. Other pigs lay shaking and kicking with their feet in a pool of blood.

Another pig who was still alive was hung up by his hind legs and his throat was sliced. Still alive and conscious, he was dropped from the hook into a sixty degrees Celsius (or 140 degrees Fahrenheit) scalding bath. He tries to swim, he tries to escape, his eyes look frantic, he screams, his head goes underwater, he reappears a few times before finally disappearing, drowned in the hot water. This footage is amongst the worst animal suffering we have ever seen. Towards the end of the video, a member of staff calmly comments that some things should not reach the public eye.²

This is just a brief glimpse into the dark world of factory farms, where billions of pigs, calves, cows, rabbits, chickens, turkeys, salmons, and other animals are used for their meat, milk, eggs, hides and other products. Factory farms are constructed to be as efficient as possible – generating profit by breeding the largest number of animals in the shortest timespan. Slaughterhouses, to be profitable, must kill as many animals as possible in the shortest possible time. Thus, cruelty is inevitable. The treatment of the pigs in the above example is not, unfortunately, atypical – it is an inevitable outcome of the system. Factory farms try to conceal the immense animal suffering they cause from the public eye. Fortunately, brave photojournalists and other animal advocates are revealing the horrific truth.³

Most factory-farmed animals are kept in close confinement. Farrowing cages for pregnant sows don't even allow them to turn around. Calves raised for veal live out their short lives in 'veal crates' allowing them virtually no movement

² Warning: this 2017 video contains highly upsetting footage of extreme animal cruelty: <https://www.youtube.com/watch?v=c7b2Yp6JU4>.

³ See the shocking, but excellent book *Hidden: Animals in the Anthropocene* (2020), with testimonies from forty photojournalists: <https://weanimalsmedia.org/our-work/hidden/>. See also the *Cowspiracy* documentary <https://www.cowspiracy.com/> and <https://www.dairy-truth.com/>.

(now banned in some countries). When pigs are raised for slaughter in cramped and totally barren enclosures, they are forced to lie in urine and faeces. Dead individuals are often left, and this can lead to cannibalism. Electric stunning of animals about to be slaughtered often fails to work. Hens crammed together are typically debeaked – that is the ends of their sensitive beaks are cut – to prevent them from harming each other. In dairy farms newborn calves are allowed to suckle as this encourages the milk to flow but then they are cruelly separated from their mothers. The suckling also strengthens the bond between mother and young – their desperate cries as the mother calls out in response to calls of her terrified calf is heart-rending. Pigs, chickens, and turkeys have been genetically selected to create overweight animals – some are hardly able to walk. In some countries farmed animals are fed growth hormones. Typically, antibiotics are administered routinely in food – just to try to keep the victims alive. In facilities that breed hens for their eggs, unwanted male chicks are thrown alive into sacks to be disposed of. Those are just some of the practices that make up the secretive world of factory farms.

These animals are all sentient beings

What makes factory farms so unspeakably horrific is that all the animals are treated as though they are simply unfeeling 'things'. Yet, as we now know, they are all capable of rich emotional lives. They know depression, frustration, boredom, fear, terror. All feel pain, including fish. You only have to watch calves gambolling in fields, cows standing together in the shade or lying and chewing their cud, pigs rootling in the grass or grunting in pleasure as they lie dozing in the mud, a hen, duck or goose leading her chicks from one place to another, calling to them when she finds food, to realise what the factory farm prisoners are deprived of. Some domestic animals are highly intelligent. Pigs are as intelligent as dogs – more so than some. And they are able to enjoy playing with objects. Pigcasso, who was rescued from a factory farm, has gained fame through her joy in wielding a paint brush. Her colourful pictures are sold around the world, with proceeds supporting the farm sanctuary where she is living.⁴ Yet factory-farmed animals are deprived of any opportunity to express their natural behaviour and treated as mere 'things' to be raised and killed so that pieces of their bodies can be placed on our tables. It is desperately important that we should recognise that each one is an individual, with his or her own personality.

⁴ See https://www.youtube.com/watch?v=OJBnF3kb_Lw and for a book on Pigcasso, with a foreword of Jane Goodall, see <https://www.amazon.com/Pigcasso-Million-dollar-artistic-saved-sanctuary/dp/1788404203>.



Rescued pig Pigcasso painting at the Farm Sanctuary, South Africa.
Credit: pigcasso.org / Joanne Lefson

More than 200 billion animals are slaughtered per year

There are literally billions of animals bred for meat, milk, or eggs – around 200 billion are killed every year, and the number is rising. Of all mammals in the world, some 60% are farmed animals – such as cows, pigs, goats, sheep, buffaloes and even in some cultures, dogs, and horses. Only about 4% of mammals are wild and their number is decreasing, often because they are killed for food. The remaining 36% are humans and that number is increasing. Some 70% of all birds on the globe are domestic – not only chickens and other poultry but also farmed ostrich, emu, and guinea fowl. The worldwide number of chickens has more than doubled since 1990 – of the over 100 billion land animals that are slaughtered every year – around 70 billion are chickens. The number of farmed fish is even higher, around 111 billion. This means that more than 200 billion sentient beings are slaughtered, often cruelly, every year.⁵ And around three-quarters of them have been raised in factory farms.

The demand for products from farmed animals is expected to further increase, especially in developing countries in Asia, Africa, and South America. A growing human population and more people with higher incomes is driving an increasing demand for meat, milk, and eggs.⁶ To meet this demand, China is constructing high-rise breeding facilities. For example, a 26-storey sky-scraper-sized farm in the Hubei province has the capacity to keep 650,000 pigs in a single building. These pigs are fed at automatic feeding spots at the click of a button from the central control room.⁷ Each one is an intelligent, sentient individual knowing only Fear Pain Death.

⁵ <https://ourworldindata.org/how-many-animals-are-factory-farmed>.

⁶ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2935116/>.

⁷ <https://www.theguardian.com/environment/2022/nov/25/chinas-26-storey-pig-skyscraper-ready-to-produce-1-million-pigs-a-year>.



Hens kept for egg-laying in battery cages.
Credit: Juhan Kuus / Compassion in World Farming

Destroying our Planet

The increasing numbers of animals kept in factory farms not only means horrendous suffering for the animals but also has a devastating effect on the environment. First, huge areas must be cleared to grow grain and soy to feed all the animals. Industrial agriculture of this sort that creates monocultures, makes use of chemical herbicides and pesticides that are having a devastating effect on biodiversity and killing the soil. Nutrient run-off from artificial fertiliser has harmed the environment, especially rivers, lakes, and the ocean where the nitrogen forms repeated algal blooms such as those in Lake Erie and 'dead zones' such as the huge one in the Gulf of Mexico.

Farmed animals take up over 80% of all farmlands, and this figure is growing as their populations and the human population grow. 80% of the deforestation of the Amazon rainforest is due to clearing land for cattle ranching and in many countries cattle and goats are being driven further into forests in search of food. It is estimated that over half of biodiversity loss around the globe is related to meat consumption.⁸

Because of the greenhouse gases that trap the heat of the sun, the climate of the planet is heating up, causing changes in weather patterns around the globe: storms, flooding, heat waves, droughts and wildfires are becoming more deadly

⁸ <https://sentientmedia.org/why-is-eating-meat-bad-for-the-environment> and <https://www.theguardian.com/environment/2018/may/31/avoiding-meat-and-dairy-is-single-biggest-way-to-reduce-your-impact-on-earth>.

and more frequent. The World Health Organisation considers climate change as the single biggest threat to human health. And the greenhouse gases generated by the industry of farmed animals form a considerable proportion of global greenhouse gas emissions. It is estimated that the generation of one kg of beef emits 60 kg of greenhouse gas, whereas only one kg of greenhouse gas is emitted per kg of pea production. Transforming vegetable protein to animal protein is costly: for example, the production of a kg of meat requires 25 kg of grain. And in many places, due to longer and more frequent droughts, along with pollution, fresh water is getting scarce – and it takes a great deal of water to turn vegetables into animal protein. Thus, to produce about one kg of beef it takes 15,000 litres of water as compared with only 1,200 litres of water for a kg of maize and 1,800 for a kg of wheat.⁹

As Dr. Jane Goodall comments we are making unsustainable demands on the natural world, and we must realise that there cannot be infinite economic growth on a planet with finite natural resources and a growing number of humans and farmed animals.¹⁰



Thirty-three thousand chickens raised for meat on an industrial broiler chicken farm.
Credit: Jo-Anne McArthur / We Animals Media



A mother hen and her chicks.
Credit: provided by the Jane Goodall Institute Global

It is clear that there needs to be a global reduction in factory farming and meat eating to save the planet's natural resources for future generations – indeed, Compassion in World Farming argues that “without a dramatic global reduction in meat consumption before it's too late, we will be unable to avert a climate catastrophe.”¹¹

⁹ <https://www.ciwf.org.uk/factory-farming/environmental-damage/>.

¹⁰ <https://www.independent.co.uk/climate-change/news/jane-goodall-planet-earth-patron-london-extinction-b2336955.html>.

¹¹ <https://www.ciwf.com/research/breaking-the-taboo-why-diets-must-change-to-tackle-climate-emergency/>.

Undermining our Health

There is another reason to reduce the eating of meat. Several studies have shown that eating meat, especially red meat, can result in negative health consequences, including heart disease, cancer, diabetes, obesity, and pneumonia. And the fact that meat from factory-farmed animals has become cheaper means that people tend to buy and eat more.

Also, as human populations grow and push further into wildlife habitats, clearing huge areas to create agricultural land to grow the grain to feed the billions of imprisoned farm animals, or for cattle ranching, this not only destroys biodiversity, but results in ever closer contact between people and wild animals. This enables pathogens to jump from an animal to a human. If a pathogen bonds with a cell in a human's body a new zoonotic disease – or zoonosis – may result.

It is almost certain that the COVID-19 pandemic started in a Chinese wet market that sold wild animals for meat. HIV originated when chimpanzees were butchered for meat in two African countries.¹² And Ebola probably spread from a gorilla to humans. Factory farming also helps spread zoonotic diseases and increases the risk of pandemics. The high density of animals in factory farms and the transport of animals and their products provide opportunities for spreading viruses. Avian flu and swine flu are linked to the industrial breeding of chickens, turkeys, and pigs. Then there is the fact that the conditions on typical factory farms, where the animals are crowded together, are ideal for the spread of bacterial infections such as *Escherichia coli* and Salmonella which not only infect the animals but also those working amongst them.

Factory farms pose another and very serious threat to our health. Around 73% of important antibiotics are routinely fed to factory-farmed animals, including farmed salmon, simply to keep them alive. And this, of course, enables bacteria to develop antibiotic resistance – the World Health Organisation considers antibiotic resistance as one of the biggest threats to our health, contributing to millions of deaths every year.¹³

Finally, the health and safety of those working in factory farms is often compromised, particularly for those working in slaughterhouses where the work is particularly demanding. It is stressful and physically and psychologically draining. The combination of working long hours, at a fast pace and making repetitive movements can cause chronic pain in arms and other body parts. Most of these workers come from low-income families, and many of them are immigrants. As factory farms are usually situated near low-income communities, the people living close by are frequently affected by the terrible stench of the open pits of animal waste. When the wind blows this in the direction of their

¹² <https://www.science.org/doi/pdf/10.1126/science.287.5453.607>.

¹³ <https://sentientmedia.org/antibiotic-use-factory-farms>.

houses, they have to keep all windows closed, something especially distressing in the hot summer months as in low-income areas waste pits are typically not covered.



A slaughterhouse in South-Africa
Credit: Juhan Kuus / Compassion in World Farming



The bond unbroken – Mother and calf
Credit: provided by the Jane Goodall Institute Global

Plant-based Diets and Other Solutions

For all the above reasons – the cruelty involved, the harm to our environment and the danger to our own health – it's clear that we should work to bring the era of the factory farm to an end. Thus, whilst we do not urge everyone to stop eating meat overnight, we strongly believe that all meat, milk, and eggs from factory-farmed animals should be boycotted, and we urge people to stop consuming these products.

Instead, let us try to increasingly move towards a plant-based diet. Fortunately, this is beginning to happen as people become more concerned about animal welfare, the environment, and their health.¹⁴ Thus more people, especially young people, are becoming vegetarian and even vegan. In the UK the number of young adults identifying as flexitarian – living mostly vegetarian, eating only occasionally meat or fish – has doubled from 10% in 2019 to 20% in 2021. Those who identified as frequent meat-eaters dropped from two-thirds of young adults (67%) to just over half (52%). Red meat is indeed a source of iron, zinc, and B vitamins (vitamin B12 is especially important) for our health, but there are supplements that provide these and they should be taken by vegetarians and vegans.

A major, recent scientific study shows that “vegan diets resulted in 75% less climate-heating emissions, water pollution and land use than diets in which more than 100g of meat a day was eaten”. Vegan diets also cut the destruction of

¹⁴ <https://www.weforum.org/agenda/2022/05/what-share-of-people-are-vegetarian-vegan-or-flexitarian/>.

wildlife by 66% and water use by 54%, the study found.”¹⁵ Thus the single best way to help animals, the planet and your own health is shifting towards a plant-based diet.

Every step matters. People who do not want to make this shift at once can begin by reducing their consumption of meat and other animal products, for example by starting to eat a plant-based meal once a week, then gradually increasing the number of days per week – most people find this makes them feel “lighter” and healthier. If you do purchase animal products try to ensure that the animals were raised humanely, on local, small, organic farms. Regenerative farming methods improve biodiversity by rotating crops and respect the soil by minimising ploughing. Animals on these farms do not experience the confined conditions of factory farms. Of course, meat, eggs and milk from humanely raised animals are more expensive (though decreasing as demand increases) so alleviating poverty, along with increased education, is important. And it should be said that things that cost a little more are valued more and there is likely to be less waste.

It is particularly encouraging to realize that exciting, innovative methods of developing cultured meat, by producing animal cells in vitro – ‘growing’ meat in the laboratory – are being trialled. The price of cell-cultured burgers is decreasing considerably.¹⁶ Moreover, vegan alternatives to milk, cheese and meat are improving all the time so sometimes it is hard to tell the difference.

Consumers need transparent, correct information. Food labels need to inform customers about the impact of food products on the environment, animal welfare and human health.



Cows living on a farm in Switzerland, as part of the TransFARMation project
Credit: Sabina Diethelm / We Animals Media



Cows with calves grazing in an organic farm orchard
Credit: provided by the Jane Goodall Institute Global

¹⁵ <https://www.theguardian.com/environment/2023/jul/20/vegan-diet-cuts-environmental-damage-climate-heating-emissions-study>.

¹⁶ <https://www.forbes.com/sites/lanabandoim/2022/03/08/making-meat-affordable-progress-since-the-330000-lab-grown-burger/>. For a guide on mindful eating, see Dr. Jane Goodall's book *Harvest for Hope* (2005).

Conclusion

Factory farms are one of the worst ethical developments in human history. During their years of confinement billions and billions of animals suffer Pain, Fear and Death. At the same time, this is in principle one of the easiest ethical issues to resolve, as we can and should shift towards a plant-based diet. This will be a win-win-win situation for animals, people, and Mother Nature. We have outlined the reasons why we should work to end the evil of factory farms and relegate these places to where they belong – the past.

Authors

This statement has been co-authored by Dr. Jane Goodall and Dr. Koen Margodt.

Dr. Jane Goodall, DBE, Founder of the Jane Goodall Institute, and UN Messenger of Peace, vegetarian since around 1970 and for several years mainly vegan. www.janegoodall.org and www.thejanegoodallinstitute.com.

Dr. Koen Margodt is a Belgian ethicist, co-chair of the Global Ethics Committee of the Jane Goodall Institute, vegetarian since 1987 and for several years mainly vegan. www.koenmargodt.com.

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Contact

For correspondence, please email Koen.Margodt@JaneGoodall.Global.