PROTECTING ANIMALS TO PROTECT THE PLANET

Animal Welfare and Sustainable Development
Improving animal welfare is *intrinsically interlinked with sustainability* and can help achieve the Sustainable Development Goals (SDGs). Conversely, our current treatment of animals limits us reaching the SDGs.

Intensive animal farming represents a *significant share of greenhouse gas emissions*. More plant-based diets can quickly reduce emissions and are an important contribution to climate change mitigation.

Around 20% of the world’s commercially-caught fish are turned into feed for farmed animals, mostly for farmed fish. Limiting the number of wild fish caught for aquaculture is directly linked to achieving the SDGs.

Intensive animal farming is the breeding ground for *future pandemics* and perpetuates antimicrobial resistance.

The *welfare of working animals plays a role in several SDGs* as working animals support the livelihoods of many people in low income countries and also play a role in sustainable cities and rewilding.

Under the UN climate regime, governments can recognise the interconnectedness of animal welfare with reaching the UN Sustainable Development Goals and start to include animal protection when deciding how to build more sustainable and resilient societies.

*We envisage a world in which (...) humanity lives in harmony with nature and in which wildlife and other living species are protected.*

– UN 2030 Sustainable Development Agenda
ANIMAL WELFARE IS INTRINSICALLY INTERLINKED WITH SUSTAINABILITY

The pioneering resolution on the animal welfare – environment – sustainable development nexus was adopted at the United Nations Environment Assembly (UNEA)’s 5th session in 2022.

It recognises that animal welfare is supported by a strong body of science, and that it contributes to addressing environmental challenges, promoting the ‘One Health’ approach and achieving the Sustainable Development Goals (SDGs). Even though animal welfare is not explicitly stated in the SDGs adopted in 2015, there is increasing recognition that improved animal welfare and achieving the SDGs should be seen as compatible and mutually reinforcing. Improved animal welfare is interlinked with all the SDGs, including social and economic impacts in terms of prevention of non-communicable diseases, reducing antimicrobial resistance, preventing pandemics and promoting healthy lives. Conversely, the way we currently interact with animals limits the achievement of the SDGs.

The Stockholm+50 report “Unlocking a better future”, calls on governments to elevate the importance of animal welfare for sustainable development, and sustainable development for animal welfare, in international instruments and to protect animal welfare by mainstreaming it in sustainable development governance. Considering animal welfare in sustainable development to a larger extent than hitherto is an opportunity to develop policies that benefit both humans and animals as well as the environment.

Our relationship with nature needs redefining, from one of extraction to one of care. Human-nature connectedness should be strengthened in our social norms and value systems, and in how we live our everyday lives, by integrating nature in our cities; protecting animal welfare and shifting to more plant-based diets; increasing nature-based education for children and youth; and recognizing and drawing on indigenous local knowledge.

THE RELATIONSHIP BETWEEN ANIMAL WELFARE AND THE SDGS

1. NO POVERTY
   - Negative impact of industrial farming on wages and working conditions
   - Improved welfare can lead to higher productivity in livestock farming
   - Positive economic impact of working animals (e.g. horses, donkeys, mules, oxen and buffaloes)

2. NO HUNGER
   - Feed-food competition
   - Improved animal welfare is linked to improved food quality
   - Role of working animals in access to quality food

3. GOOD HEALTH AND WELLBEING
   - Poor animal welfare conditions are linked to:
     - Overuse of antibiotics and antimicrobial resistance
     - Spread of zoonoses
     - More food-borne diseases
     - Poor human health is linked to overly animal-based diets
     - Positive impact of owning a pet on mental health

4. QUALITY EDUCATION
   - Learning about animals can increase empathy and reduce interpersonal violence
   - Role of working equids in accessing education

5. GENDER EQUALITY
   - Learning about animals can increase empathy and reduce interpersonal violence
   - Role of working equids in accessing education

6. CLEAN WATER AND SANITATION
   - Industrial animal farming pollutes surface and ground water (e.g. nitrates)

7. RESPONSIBLE CONSUMPTION AND PRODUCTION
   - Improved animal welfare can reduce food losses along the production chain
   - Consuming less meat and dairy products can help reduce:
     - Heart disease
     - Antimicrobial resistance
     - Water pollution
     - Agricultural emissions

8. DECENT WORK AND ECONOMIC GROWTH
   - High proportion of work-related injuries in livestock sector
   - Higher benefits of wildlife-based tourism, rather than trafficking
   - Impact on mental health of witnessing poor animal welfare conditions

9. CLIMATE ACTION
   - A shift towards fewer plant-based diets, and fewer farmed animals, is highlighted by most international organisations
   - Animals can capture carbon

10. LIFE BELOW WATER
    - Improved fish welfare can help reduce the use of antimicrobials
    - Negative impact of relying on wild fisheries to produce fish meal

11. LIFE ON LAND
    - Link between intensive livestock farming and deforestation
    - Positive impact of higher welfare farming methods (i.e. agroecology, pastoralism) on biodiversity
ADDRESSING THE ELEPHANT IN THE ROOM – THE ROLE OF INTENSIVE ANIMAL FARMING

Intensive animal farming negatively affects the environment at all stages of production, with a far greater impact than other forms of agriculture.

The most important greenhouse gas emissions from animal agriculture are the potent greenhouse gases methane and nitrous oxide. Even if we succeed in eliminating fossil fuel emissions, emissions from the current global food system, heavy in animal protein, would leave the 1.5°C target out of reach and it would even make it difficult to stay below 2°C of global warming.

Crops to produce food for farm animals use 40% of the arable land in the world. The conversion of natural ecosystems into croplands also contributes to a rise in carbon dioxide emissions as they are no longer carbon sinks. Feed production to supply intensive animal farming and demand for meat and other animal products are one of the key drivers of deforestation in the Amazon.

Some of the greenhouse gas mitigation techniques that have been suggested, such as the use of feed additives and technological fixes to reduce methane emissions, tend to sustain intensive systems and therefore have negative impacts on animal welfare. Switching from greenhouse gas intensive beef to chicken and pig meat from intensive systems will both require more grain feed grown on arable land and be detrimental to animal welfare. These examples show how animal welfare is affected by policy making for sustainability that does not consider how improved animal welfare must go hand-in-hand with achieving the SDGs.
REDUCING MEAT AND DAIRY CONSUMPTION AND PROMOTING PLANT-BASED FOOD TO FIGHT CLIMATE CHANGE

The Intergovernmental Panel on Climate Change (IPCC) recognises the high mitigation potential of a dietary shift, with a larger share of plant-based food, to quickly reduce greenhouse gas emissions. The EU Farm to Fork strategy, part of the European Green Deal, notes that the transition to a sustainable food system will not happen without a dietary shift moving towards more plant-based diets.

The EAT–Lancet Planetary Health Diet is a global reference for keeping diets within the planetary boundaries. It is predominantly plant-based with moderate amounts of animal proteins such as poultry, fish, eggs and dairy and limited amounts of red meat.

There is broad agreement that current trajectories towards the SDGs and countries’ commitments under the Paris Agreement are slow and that transformation of food systems is needed.

— IPCC, Mitigation of Climate Change. Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change.
BATTLING CLIMATE CHANGE UNDERWATER

Nearly 90% of the world’s fish populations are now fully exploited, overexploited or depleted. Current capture, retrieval, and slaughter practices in capture fisheries cause significant suffering.

Target species are affected by low-welfare in aquaculture and wild fisheries, including disease, mutilation and crushing injuries. Non-target species, such as marine mammals and seabirds, are affected by fishing gear lost in the sea that continues to kill aquatic animals.

Around 20% of the world’s commercially-caught fish, in terms of tonnage, are turned into feed for farmed animals, mostly for farmed fish. This translates to around 1.2 trillion individual animals. Limiting the amount of wild fish required for aquaculture feed is directly linked to achieving the SDGs.

Firstly, bottom trawling is a significant contributor to overfishing and it releases carbon that would be otherwise stored in the seabed. It also causes ocean acidification and reduces the ocean’s ability to store carbon dioxide. Secondly, wild capture for animal feed deprives food-insecure regions that rely on local fishing for livelihoods of a source of high-quality nutrition.

It must be a priority for aquaculture to transition away from intensive aquaculture systems with fish species which demand large amounts of wild-caught fish as feed, towards the cultivation of algae and systems with low trophic species, such as mussel farms and carp ponds that can use naturally available resources and contribute to carbon sequestration and other ecosystem services.

Large marine fish represent an oceanic blue carbon stock that can store carbon in different ways and constitute a carbon sink through carcasses deadfall. Carcasses from fish left in the ocean would naturally sink and sequester carbon. Depletion of fish stocks by extracting massive amounts of fish removes large amounts of carbon which is released into the atmosphere. The overexploitation of the world’s fish population has reduced, or even wiped out, the capacity for blue carbon sequestration.
Highly contagious diseases, either emerging or endemic, in animal populations such as Avian Influenza, African Swine Fever or, more recently, COVID-19 stress the need to build more resilient and sustainable societies.

COVID-19 demonstrated the human and economic costs of a zoonotic pandemic and, while it likely emerged from wildlife, it has also reminded the world of the role played by intensive farming in spreading zoonoses.

The report *Preventing the Next Pandemic* by the UN Environment Programme (UNEP) and the International Livestock Research Institute (ILRI) highlight that “Pandemics such as the COVID-19 outbreak are a predictable and predicted outcome of how people source and grow food, trade and consume animals, and alter environments.”

Land-use change, driven by the expansion of animal agriculture and croplands for livestock feed, alters resource availability for wild animals and affects ecosystem processes that protect humans from spillovers. Implementing spillover prevention measures that reduce pandemic risk would bring ancillary climate benefits. Protecting rainforests alone would bring approximately USD 4.3 billion annually in social benefits from reduced greenhouse gas emissions.

An increased focus on animal welfare can play a key role in finding solutions to many of the current global challenges we are facing. De-intensifying animal production by reducing the numbers of animals coupled with better animal welfare will improve animal health and welfare and contribute to reducing the risk of future pandemics.
Intensive livestock production has significant consequences on the climate, which in turn renders food production even more vulnerable. Climate change impacts livestock directly, for example through heat stress and increased morbidity and mortality, and indirectly, through quality and availability of feed and forages, and animal diseases. Smallholders, livestock keepers, fishers and pastoralists are among the most vulnerable to climate change, especially those in the Global South. Yet, the practices they employ have a lesser carbon footprint and can often mutually reinforce ecosystem services for example through sustainable water and soil management.

The IPCC also recognises that agroecological principles and practices and “other approaches that work with natural processes support food security, nutrition, health and well-being, livelihoods and biodiversity, sustainability and ecosystem services.” As well as supporting the outcomes of the SDGs, improving animal health and welfare, which is a key tenant of agroecology, can support environmental and climate protection aims, particularly when farms have lower densities of animals.
Grass-based and mixed-farm systems, which are less dependent on additional feed, have better capacities for carbon sequestration. Well-managed grazing can improve soil organic carbon and nitrogen content, and therefore partially offset net greenhouse gas emissions. Other options to promote carbon sequestration in livestock systems include restoration of degraded grazing land with the introduction of silvopastoral and other agroforestry systems, which have the potential to deliver better animal welfare conditions as they are conducive to natural behaviours such as grazing and rooting.

Maladaptive climate change responses such as switching from ruminants (i.e. cattle, goats and sheep) to monogastric species (i.e. chickens and pigs) in intensified production systems negatively impacts the environment through the generation of high levels of air, soil and water pollution – and these systems are intrinsically detrimental to animal welfare. Substantial emissions reductions can be achieved by adapting current systems, to lower stocking densities and in general reducing the total number of animals reared, rather than requiring a further shift to industrialised farming.

Climate change mitigation can be achieved through basic husbandry and welfare changes. Extending dairy cow lifetime is an example of such an approach. Cows can easily live for up to 15 years or longer, but on most intensive indoor dairy production facilities the lifespan of a cow is typically closer to six years and they often suffer from poor health. Improved longevity would reduce the total lifetime emissions of dairy cows when accounting for the resources needed for rearing replacement animals. Both lameness and mastitis, which can be reduced through welfare measures like improved housing, reduce milk output, which leads to an increase of greenhouse gas emissions per litre of milk produced. Together with longevity, an extended lactation can have an impact on emission of greenhouse gas by reducing the calvings which leads to a reduced number in beef cattle herds.

Increased stress provoked by negative handling can also reduce milk and meat production. Improvements in welfare, for example through reducing social stress, can directly contribute to greater feed intake in cattle and improved feed efficiency in pigs thereby improving production rates and can also be considered as a measure to mitigate greenhouse gas emissions.
WORKING ANIMALS – INVISIBLE ALLIES IN FIGHTING CLIMATE CHANGE

An estimated 200 million working equidae worldwide support hundreds of millions of people, many of which are in low to middle income countries. Floodings, extreme weather conditions or fires in low-income countries remain underreported, but this is where people depend on working equidae for their livelihoods, water access, transport or health.

The interlink between working equidae and climate change stretches across the world with horses, mules and donkeys used in sustainable cities, farming, rewilding or forestry in order to reduce carbon footprint and improve biodiversity. There again their hard work and resilience can be taken for granted and their welfare be put aside, that is why it is crucial to recognise these human-animal relationships.

The welfare of working equidae play a role for SDGs 1, 2, 3, 4, 5, 6, 7, 8, 11 and 13 which remind us again how widespread these relationships are.
RECOMMENDATIONS

- Recognise the interconnectedness between animal welfare and reaching the SDGs, and mainstream the protection of animals into sustainability governance.
- Redirect public subsidies, investments and incentives to help farmers transition from intensive animal agriculture to agroecology.
- Reflect the need for food system transition in Nationally Determined Contributions (NDCs) so that they include ambitious pathways and targets for sustainable production and sustainable consumption of animal products.
- Transition away from intensive aquaculture systems and limit the number of wild fish caught for aquaculture.
- Broaden the understanding of ‘One Health’ so that the concept clearly recognises animal health and welfare not only for its benefits to human health and sustainability but also supports animal welfare as an important end in itself.

Global North

- Adopt public procurement policies based on minimum standards that respect high animal welfare criteria and that specify the serving of a certain portion of plant-based protein per week.
- Set clear targets across the food chain to reduce meat and dairy consumption in line with WHO dietary guidelines and planetary boundaries i.e. EAT-Lancet Planetary Health Diet.
- Support and invest in plant-based food products and cellular agriculture.

International development finance institutions (DFIs)

- Recognise the link between sustainability and animal welfare in their Policy and Standards, and implement the criteria for improved project evaluation in conjunction with policy developments across the world such as WOAH’s Terrestrial and Aquatic Animal Health Codes, the FARMS Initiative, the Business Benchmark on Farmed Animal Welfare (BBFAW), the Better Chicken Commitment, and the Coller FAIRR Protein Producer Index.


38 Better Chicken Commitment. “The Better Chicken Commitment is the leading set of standards of broiler welfare driving the food industry towards higher welfare practices”. https://betterchickencommitment.com

Eurogroup for Animals
Rue Ducale 29 – 1000 Brussels, Belgium
news@eurogroupforanimals.org
eurogroupforanimals.org

Word Federation for Animals
5 Chestnut Square, Boston, Massachusetts, USA
secretariat@wfa.org
wfa.org

Aquatic Life Institute
99 Wall Street #344 – New York, NY 10005
contact@ali.fish
ali.fish

Compassion in World Farming International
River Court, Mill Lane, Godalming, Surrey GU7 1EZ, UK
ciwf.org/contact-us
ciwf.org

FOUR PAWS International
VIER PFOTEN International – gemeinnützige Privatstiftung
Linke Wienzeile 236, 1150 Vienna, Austria
office@four-paws.org
four-paws.org

World Animal Protection
5th floor, 222 Gray’s Inn Road, London WC1X 8HB, UK
info@worldanimalprotection.org
worldanimalprotection.org