

A UN GLOBAL AGREEMENT ON FOOD SYSTEMS TRANSFORMATION

THE THREAT

The world is reaching a tipping point. Since 1960 the global population has doubled while at the same time food production has more than tripled', primarily through increased intensification of the global food system. However, the way we produce our food is threatening our very survival by contributing to a number of accelerating global emergencies, including:

Driving wildlife to extinction

Food production is the biggest driver of wildlife loss around the world. The 2019 Global Assessment Report on Biodiversity and Ecosystem Services² has determined that “around 25 percent of animal and plant species are threatened with extinction, many within decades, unless action is taken to reduce the intensity of the drivers of biodiversity loss.” The same report notes that “for terrestrial and freshwater ecosystems, land use change has had the largest relative negative impact on nature since 1970” with agricultural expansion, particularly to sustain industrial livestock systems, identified as the most widespread driver of land-use change.

Putting climate targets out of reach

Without urgent action to phase out industrial farming, we will be unable to reach climate targets. Livestock farming produces more greenhouse gases (GHGs) than the direct emissions of all the world’s planes, trains and cars combined³. The livestock sector alone accounts for at least 16.5 percent of the world’s GHG emissions each year⁴ with the vast majority attributable to industrial production of meat and dairy, according to the Food and Agriculture Organization (FAO)⁵. The Intergovernmental Panel for Climate Change’s (IPCC) 2019 Special Report on Climate Change and Land⁶ and the EAT-Lancet Commission⁷ predicted that livestock’s share of global emissions will at least double by 2050 threatening the feasibility of global climate targets.

² The global assessment report on Biodiversity and Ecosystem Services, IPBES (2019), https://ipbes.net/sites/default/files/2020-02/ipbes_global_assessment_report_summary_for_policymakers_en.pdf

³ FAO. 2022. GLEAM v3 Dashboard. In: Shiny Apps. Cited [accessed on 30/01/2023]. https://foodandagricultureorganization.shinyapps.io/GLEAMV3_Public/ (for direct emissions from livestock) & IEA, Global CO2 emissions in transport by mode in the Sustainable Development Scenario, 2000-2070, IEA, Paris <https://www.iea.org/data-and-statistics/charts/global-co2-emissions-in-transport-by-mode-in-the-sustainable-development-scenario-2000-2070>, IEA. Licence: CC BY 4.0 (for direct emissions from planes, trains and cars)

⁴ Twine, R. Emissions from Animal Agriculture—16.5% Is the New Minimum Figure. Sustainability 2021, 13, 6276. <https://doi.org/10.3390/su13116276>

⁵ Key facts and figures, FAO, <https://www.fao.org/news/story/en/item/197623/icode/>

⁶ Climate Change and Land, Intergovernmental Panel on Climate Change (IPCC), 2019, <https://www.ipcc.ch/srccl/>

⁷ Food in the Anthropocene, The EAT-Lancet Commission on Healthy Diets from Sustainable Food Systems”, Lancet 393 (10170): 447–92.

Contributing to major global health crises

Industrial agriculture also plays a significant role in contributing to major global health crises. The overuse of antibiotics contributes to antimicrobial resistance⁸ and factory farming is a risk factor for the emergence of new diseases that infect humans⁹. Pandemics, such as COVID-19, are a predictable outcome of how we source, grow, trade and consume animals. The overuse of antibiotics in industrial livestock systems - to try to maintain animal health in unhygienic and overcrowded factory farms and to promote growth - is now leading to the emergence of disease pathogens that are resistant to antibiotics as well as the human immune system¹⁰. It is clear that human and animal health are intrinsically linked so unless we act to improve the health and wellbeing of farmed animals, our own health will continue to suffer.

Causing immense animal cruelty

Industrial animal agriculture is the biggest cause of animal cruelty on the planet. Most of the 92 billion land animals suffer in factory farms every year. They are often reared in cages, crates, or other confined spaces or overcrowded conditions. They are bred to grow too fast or to be so productive that their health and welfare suffers. In some cases, they are kept in huge overcrowded and barren outdoor feedlots where production and profit come before their health and wellbeing. Many of the estimated 124 billion fish live in underwater factory farms.

THE SOLUTION

Developing our food systems for a growing global population in a way that works for people, animals and our planet is still possible, but it will take a wholesale transformation of our global food production and consumption.

This must include:

- 1)** a large-scale change away from conventional monoculture crop production and industrial livestock rearing;
- 2)** better land use, including through reducing deforestation, rewilding depleted soils and restoring degraded land; and
- 3)** a significant shift to predominantly plant-rich diets and alternative protein sources.

According to the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES)¹¹, *"feeding the world in a sustainable manner, especially in the context of climate change and population growth, entails food systems that ensure adaptive capacity, minimize environmental impacts, eliminate hunger, and contribute to human health and animal welfare"*.

We must aim to produce food in ways that are high welfare, climate- and nature-positive. Available options include practices that safeguard soils and biodiversity and rely on the principles of organic agriculture, agroforestry, agroecology and other high welfare regenerative practices.

⁸ T. P. Van Boeckel et al., *Science* 365, eaaw1944 (2019). DOI: 10.1126/science.aaw1944

⁹ Preventing the next pandemic – Zoonotic diseases and how to break the chain of transmission, UNEP, https://www.unep.org/resources/report/preventing-future-zoonotic-disease-outbreaks-protecting-environment-animals-and?_ga=2.124957066.1437215242.1674825720-1376692244.1622442586

¹⁰ Jangir et al. *eLife* 2023;12:e84395. DOI: <https://doi.org/10.7554/eLife.84395>, in: Use of antibiotics in farming endangering human immune system, *Guardian*, <https://www.theguardian.com/society/2023/apr/25/use-of-antibiotics-in-farming-endangering-human-immune-system>

¹¹ See footnote 2

A fair and just transition of this kind, if sizeable and consistent, can deliver a global food system that produces enough food while protecting the sustainability of our planet and the wellbeing of people and animals.

WHAT'S THE BEST WAY TO ACHIEVE THIS?

Positive signs of change can already be seen in the global food system through advances in technology and innovation, changes in individual habits, policy shifts in some countries, and commitments from corporates to change.

At an international level, the need for change in agriculture and food consumption is acknowledged in UN forums on food security, climate change, biodiversity, health and the Sustainable Development Agenda. However, urgent action is needed and the fragmentation of efforts across these platforms is slowing down progress towards a true and just transformation of the global food system.

To achieve policy coherence and deliver crucial outcomes to alleviate the threat to people, animals and the planet, the global community must go further and faster.

The best way to achieve this is through a dedicated ***UN forum on food and an overarching United Nations Global Agreement on food systems transformation.*** Such an Agreement should acknowledge food's central role, move agriculture away from industrial livestock production and recognise high welfare practices as an essential solution towards resilient and nature-positive food systems.

THE TIME IS NOW

To achieve this, all stakeholders – the UN system, governments, business, finance, academia and civil society – must work in partnership to deliver a just and true global food system transformation.

For the sake of tomorrow, we must act now to ensure we create a world where food is produced in high welfare, climate- and nature-positive systems that benefit the health and wellbeing of people, animals and our planet.