



WFA SUBMISSION ON WORKSHOP

“Systemic and holistic approaches to climate action on agriculture, food systems, and food security” under the Sharm el-Sheikh joint work on climate action on agriculture & food security

Submitted by the World Federation for Animals (WFA) on behalf of [77 organisations](#)

Introduction

1. The World Federation for Animals (WFA) welcomes the emphasis on **systemic and holistic approaches to climate action** in agriculture, food systems, and food security. Addressing climate change in agriculture requires integrated solutions that **consider biodiversity loss, land use, emissions, pollution, and food security together**.
2. **Animal welfare is a key component of sustainable food systems** and must be **integrated into** systemic climate action strategies. Industrial animal agriculture is a major driver of the planetary crisis, while low-input, high-welfare diversified farming systems and plant-rich diets offer biodiversity and climate-positive solutions that enhance mitigation and adaptation.
3. To be effective, the **workshop should be action-oriented**, taking stock of successful **policy measures** that align food production with environmental, health, and ethical goals while ensuring food security and nutrition for vulnerable populations. This submission provides key recommendations to guide the workshop discussions and outcomes.
4. We recommend inviting recognised **experts in sustainable food systems as speakers** to ensure an evidence-based and solution-driven discussion. The panel should be geographically representative and inclusive, featuring voices from the Global South, farmers, scientists, and policymakers. It should reflect both **scientific and traditional knowledge** systems, ensuring a holistic and contextually relevant approach to climate action in agriculture and food systems.

1. Holistic approaches to climate action in agriculture and food systems

Holistic climate action in agriculture must address **environmental and socio-economic dimensions** simultaneously. Siloed interventions that mitigate emissions at the expense of biodiversity, food security, animal welfare, public health, or livelihoods must be avoided. A systemic approach should:

- Integrate climate adaptation and mitigation measures that recognise **interlinkages between food security, biodiversity, and climate resilience**. Recommendations should consider the potential adverse effects that some climate solutions can have on biodiversity, public health, animal welfare, and livelihoods, especially of smallholder farmers.
- Promote policies and **multifunctional solutions** that minimise trade-offs and maximise co-benefits across sectors.

2. The role of animal welfare in climate-resilient food systems

Industrial animal agriculture contributes significantly to climate change and food insecurity by:

- **Driving land-use change**¹ (e.g. deforestation for feed production).
- **Consuming disproportionate resources** (e.g., 36-40% of global crop calories are used as animal feed instead of direct human consumption).²
- **Causing biodiversity loss**³ (e.g., habitat destruction from feed crop expansion and overgrazing, leading to declines in wildlife populations)
- **Producing high levels of pollution** (e.g. manure runoff, antibiotic resistance, and methane and nitrous oxide emissions).⁴
- **Increasing health risks** (e.g., overconsumption of animal-sourced foods causing non-communicable diseases in high-consuming countries, antimicrobial resistance (AMR)⁵ due to excessive antibiotic use and zoonotic disease emergence⁶ from habitat loss and high-density animal farming).

Instead, peer-reviewed research shows a strong link between improving animal welfare and achieving the Sustainable Development Goals,⁷ such as climate action, zero hunger, clean water, good health and well-being, and life below water and land.

Shifting towards **sustainable food systems** that prioritise **plant-rich diets and high animal welfare and nature-positive farming** is a systemic, holistic approach to climate action.⁸ This transition:

- **Enhances food security** by improving food system efficiency.
- **Mitigates climate change** by reducing emissions, improving soil health and restoring carbon sinks.
- **Supports biodiversity protection** by reducing land-use pressure and habitat destruction.
- **Reduces pollution** by minimising nutrient runoff, antibiotic overuse, and water contamination.
- **Lowers public health risks** by reducing the spread of zoonotic diseases, limiting AMR, and improving diets.
- **Strengthens climate adaptation** by promoting diversified, resilient agricultural practices suited to changing environmental conditions.

Therefore, **workshop discussions and outcomes should highlight how improving animal welfare—alongside a shift toward more plant-rich diets—can drive systemic change in food systems and climate change mitigation and adaptation.**

¹ Ritchie, H., & Roser, M. (2024). Half of the world's habitable land is used for agriculture. Our World in Data. Retrieved from <https://ourworldindata.org/>

² Cassidy, E. S., West, P. C., Gerber, J. S., & Foley, J. A. (2013). Redefining agricultural yields: From tonnes to people nourished per hectare. *Environmental Research Letters*, 8(4), 044044. <https://doi.org/10.1088/1748-9326/8/4/044044>

³ Sánchez-Bayo, F., & Wyckhuys, K. A. G. (2019). Worldwide decline of the entomofauna: A review of its drivers. *Biological Conservation*, 232, 8-27. <https://doi.org/10.1016/j.biocon.2019.01.020>

⁴ Martínez J, Dabert P, Barrington S, Burton C. Livestock waste treatment systems for environmental quality, food safety, and sustainability. *Bioresour Technol*. 2009 Nov;100(22):5527-36. doi: 10.1016/j.biortech.2009.02.038. Epub 2009 Apr 14. PMID: 19369065.

⁵ Zhang T, Nickerson R, Zhang W, Peng X, Shang Y, Zhou Y, Luo Q, Wen G, Cheng Z. The impacts of animal agriculture on One Health-Bacterial zoonosis, antimicrobial resistance, and beyond. *One Health*. 2024 May 8;18:100748. doi: 10.1016/j.onehlt.2024.100748. PMID: 38774301; PMCID: PMC11107239.

⁶ Hayek, M. N. (2022). The infectious disease trap of animal agriculture. *Science Advances*, 8, eadd6681. DOI:10.1126/sciadv.add6681

⁷ Keeling, L., Tunón, H., Olmos Antillón, G., Berg, C., Jones, M., Stuardo, L., Swanson, J., Wallenbeck, A., Winckler, C., & Blokhuys, H. (2019). Animal Welfare and the United Nations Sustainable Development Goals. *Frontiers in Veterinary Science*, 6, 485284. <https://doi.org/10.3389/fvets.2019.00336>

⁸ World Federation for Animals. (2023) Unveiling the Nexus "The Interdependence of Animal Welfare, Environment & Sustainable Development" <https://wfa.org/wp-content/uploads/2023/03/Unveiling-the-Nexus-The-Interdependence-of-Animal-Welfare-Environment-Sustainable-Development.pdf>

3. An action-oriented approach for the workshop

The workshop should result in a **summary report** that captures key discussions, policy recommendations, and successful case studies. This report should serve as a reference for countries to integrate the insights into their national strategies.

To ensure a robust and inclusive dialogue, **accredited observers, including civil society organizations** and experts, should be able to actively **participate in the workshop**, contributing their knowledge and perspectives to the discussions.

The workshop should spotlight **practical, scalable policy solutions**. Sharing **successful case studies** will enable governments to integrate proven approaches into their national and local plans. This may include sharing successful real-world examples of the following:

3.1 Advancing sustainable terrestrial agriculture

- **Promotion of sustainable agricultural practices** based on agroecological and other nature-positive farming models that improve animal welfare, soil health, and reduce habitat destruction.
- **Agroforestry and silvopasture** as integrated solutions for biodiversity conservation and climate resilience.
- **Mixed farming systems** that enhance nutrient cycling and soil health.
- **Programs** that incentivise sustainable food production practices, such as payments for ecosystem services, and the production of sustainable commodities, e.g. unprocessed fruits and vegetables.
- **Research and market development** for plant-based proteins and other alternative protein sources, such as cell-cultured meat, and promote their market availability and affordability.
- **Trade restrictions** on food and agricultural products that are linked to deforestation and other harms to ecosystems.

3.2 Transitioning to sustainable aquatic food systems

Strengthen aquaculture regulations:

- **Low-impact aquaculture** (e.g., seaweed and shellfish farming) that enhances carbon sequestration and contributes to food security while reducing environmental pressures.
- **Strengthened regulations** to mitigate risks associated with high-intensity aquaculture, including disease outbreaks, escapees impacting wild populations, and poor welfare conditions.
- **Use of alternative feeds** that do not rely on wild fish populations to reduce the demand for fishmeal and fish oil to the minimum extent possible.
- **Mandatory welfare standards** in aquaculture to ensure humane handling, transportation, and slaughter practices as well as species-specific welfare considerations.
- **Guidelines to minimise aquaculture's impact on surrounding ecosystems**, including preventing nutrient pollution, managing effluents, and ensuring that the introduction of non-native species does not disrupt local biodiversity.
- **Integration of aquatic food systems into national adaptation plans** to address their vulnerability to climate change impacts such as ocean acidification, warming waters, and harmful algal blooms.

3.3 Enforcing sustainable fishing regulations

- **Prevent overfishing** by fishing below the maximum sustainable yield.
- **Implement binding commitments on bycatch mitigation**, including mandatory gear modifications, time-area closures, and other measures to protect sensitive species.
- **Support recovery of overfished populations** through no-take zones, seasonal closures, and habitat restoration projects.
- **Humane fishing practices** (e.g., low-impact gear, gentle handling, and humane slaughter methods for wild-caught fish).

3.3 Shifting towards sustainable diets

- **Public awareness campaigns** on the environmental impact of food choices.
- **Enabling food environments** with clear labelling, advertising regulations (in particular advertising to children), and consumer incentives for sustainable food choices.
- **National dietary guidelines** that promote healthy and sustainable food choices, such as a shift towards plant-rich diets, that benefit both health and the environment.⁹ This should consider national and regional contexts.
- **Institutional food programs** (e.g. schools, hospitals, government facilities) to serve healthy, sustainable, plant-based meals in line with the planetary boundaries.
- **Sustainable public procurement policies** requiring public institutions to include plant-based and alternative protein options in their menus to align with the planetary boundaries.
- **Fiscal policies** (e.g., VAT reduction on fruits, vegetables, and legumes) to make healthy, sustainable choices more affordable and attractive.

4. Suggested speakers

- **Dr. Agnese Balzani**, Global Animal Welfare Advisor, World Animal Protection; Experienced researcher in the field of One Welfare and Agroecology
- **Million Belay**, General Coordinator, Alliance for Food Sovereignty in Africa (AFSA)
- **Lasse Bruun**, Director of Climate and Food, UN Foundation
- **Tara Garnett**, Director TABLE, University of Oxford
- **Philip Lybery**, Member Food Systems Advisory Board of the UN Food Systems Hub, and Global Chief Executive Officer of Compassion in World Farming International (official 'Champion' for the 2021 Food Systems Summit).
- **Noga Kronfeld-Schor**, previously Chief Scientist Ministry of Environment Israel
- **Joseph Poore**, Director, Oxford Martin Programme on Food Sustainability, University of Oxford
- **Esther Penunia**, Secretary General, Asian Farmers' Association (ASA)
- **Cleo Verkuil**, Senior Scientist Climate & One Health Policy, Stockholm Environment Institute (SEI)

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⁹IPCC AR6 WGII (2022), Chapter 5