Common Principles and Actions for Sustainable Livestock Production

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Across geographies, species and systems, the global livestock community is united by a shared commitment to continuous improvement and sustainable production. Farms have made significant efforts to adopt new practices in areas like nutrition, health, and genetics. As a result, farmers are producing more food, while reducing the emissions and natural resources required by each animal. From smallholder to large-scale production, farmers work to nourish communities, care for animals, and reduce environmental impacts, which supports resilient livelihoods, better animal health, and food for a growing global population.

While progress has accelerated, more will be needed as populations grow and climates change. The livestock sector is committed to continuing this sustainable livestock transformation, which will differ between types of livestock farming and regions across the world. These principles reflect the values that guide our common agenda.



Sustainability means delivering for both people and planet.

Environmental, economic, and social goals are interconnected and equally essential. 'Triple win' solutions that strengthen environmental stewardship, support farmer livelihoods, and improve food security must be the foundation. Climate action cannot succeed if farms are failing, and a food system is not sustainable if it leaves people hungry. Lasting progress depends on solutions that deliver across all three pillars. It's why the UN Sustainable Development Goals (SDGs) acknowledges the interconnectivity of the global drive towards more sustainable societies.



Livestock production is part of the foundation of sustainable food systems.

More than 1 billion people rely upon livestock for their livelihoods. Milk and dairy products, meat, and eggs play an essential role in nourishing people throughout their life, especially those vulnerable to malnutrition. Sustainable production means ensuring these foods are available, affordable, and safe, and those producing them can earn a meaningful living. This is particularly important in light of existing hunger crises, including the nearly 700 million who went hungry last year, and a growing population with an expanding middle class.²

Livestock also contributes to a more circular, resource-efficient food system. Farm animals convert inedible biomass such as crop residues, grasses and seeds into high quality nutrition for people and return nutrients to the soil through manure. By-products such as wool, hides and skins provide natural resources for other sectors, while grazing animals enable food production on lands that cannot be used for crops. Our world relies upon livestock to deliver high-quality nutrition, support a resilient farm economy and reduce waste within our food systems.



Healthy animals are essential to sustainable food systems.

Livestock health is critical for food safety, farm productivity, and climate resilience. Healthy livestock grow more efficiently, require fewer resources, and produce lower emissions per unit of food. Good animal care supports farmer livelihoods and a safe, affordable supply of milk and dairy products, meat and eggs. Improving animal health through disease prevention, early detection and treatment of illness alongside access to veterinary care is central to achieving environmental and social goals. Emerging innovations that directly reduce methane production, such as specialty feed ingredients, can play a critical role further reducing livestock's environmental footprint. Yet today, only 0.01–0.02% of climate finance goes to livestock health, underscoring the need to align investment with impact potential.³ Policies should work closely with farmers and the wider livestock sector to improve animal health and strengthen access to essential products like vaccines, diagnostics, parasiticides, and quality feed.



There is no one-size-fits-all. Solutions must reflect local realities.

Livestock systems are shaped by the land, people, and purpose they serve. A variety of cultural, geographic and economic factors influence farming methods, leading to systems that rightfully differ across every continent. Sustainability strategies must account for this diversity by prioritising locally designed and implemented solutions. While the path may differ, the destination is the same: a livestock sector that delivers lasting value for people and planet. Policies must be outcomesfocused and practice-agnostic as this provides space for innovation and local solutions.



Progress depends on continuous improvement, innovation, and shared knowledge.

The livestock sector is constantly evolving through science, technology, and experience. This continual improvement is why production in many regions has become more efficient, producing more food with fewer emissions and less land use. Innovation, whether in genetics, nutrition, digital tools, or animal health, enables better delivery of economic, environmental and social sustainability. Reducing barriers to accessing new technologies and improving knowledge sharing helps to accelerate progress.



We cannot manage what we do not measure.

Sustainable progress also depends upon better data. Livestock provide numerous essential ecosystem services that are often unaccounted for, such as nutrient upcycling, enhancing soil carbon, managing landscapes and protecting biodiversity. Critically important datasets such as animal disease levels often have significant gaps or are outdated, and some priority areas lack agreed-upon metrics and indicators altogether. There is an urgent need for greater investment in better understanding and quantifying the impacts of livestock on landscapes and food systems to guide evidence-based policies.

Conclusion – Support the farmers at the heart of our food systems

Farmers around the world work hard to produce safe, nutritious food for the global population. They possess essential knowledge and skills to manage livestock in a way that balances productivity with environmental stewardship. Efforts to improve food systems must lead with a farmer-centric approach that recognizes their role as the primary stewards of land, livestock and ecosystems, directly influencing sustainability, food security and livelihoods. When these foundations are in place, farmers can deliver lasting improvements in hunger, animal welfare, and environmental care.

Across the livestock sector, we are committed to this work. We look forward to building solutions alongside governments, international organizations like FAO and WOAH, and all partners working toward a common goal: a sustainable food system that delivers for animals, people, and the planet.

Key Data on Livestock Contributions

Livestock systems shape global food systems, support livelihoods, and influence environmental outcomes. The data below illustrate their role across these three interconnected areas while underscoring the importance of continued progress and innovation.



Economies and societies

- 1.3 billion people rely on livestock for their livelihoods globally, and the sector contributes 40% of agricultural GDP.⁴
- Rural women represent 2/3rds of the world's low-income livestock keepers and those who access and control livestock improve the health, education and food security of their households.⁵



Environment and circularity

- Livestock contributes 12% of the world's GHG emissions, and this can be reduced by 55% in 2050 through greater adoption of existing technologies in animal and feed management.⁶
- 86% of the global livestock feed intake is made of resources not edible to humans such as grasses and forage.⁷
- 30% of livestock feed comes from human food waste and crop by-products that would otherwise go to landfills.⁸



Food and nutrition security

- 34% of the global protein supply comes from livestock and billions depend on animalsourced foods for vital nutrients like vitamin B₁₂, iron, and zinc.⁶
- Animal-sourced foods 'contribute to healthy diets of the life course' providing 'macro-and micronutrients of specific significance to maintain important health functions' according to the United Nations Food and Agriculture Organisation.⁹
- 8.2% of the global population, or 673 million people, experienced hunger¹⁰ last year, while
 more than half the global population suffer from at least one micronutrient deficiency.
 Commonly lacking nutrients include iron, zinc, calcium, iodine, and vitamins A & B12,
 which are found in animal-sourced foods.
- Animal-sourced protein is high-quality because it provides the essential amino acids required by the human body and is readily available for internal absorption and utilization.¹¹ This makes milk and dairy products, meat and eggs effective tools to address malnutrition, which currently contributes to 23.2% of children under 5 experiencing stunting and 6.6% experiencing wasting, and costs the world US\$3 trillion per year.^{12,13}
- Children who regularly consume milk and dairy products, meat and eggs perform better in cognitive, physical and social tests while displaying higher levels of academic performance.^{14, 15, 16}

Sector Contributions

The following contributions highlight how each participating organization is supporting sustainable livestock transformation and production. These examples illustrate the actions and contributions made to deliver on the principles outlined above.

HealthforAnimals - The Global Animal Health Association

Animal health can be a driving force behind more sustainable livestock systems. Healthy animals grow more efficiently, need fewer natural resources, and ultimately produce fewer emissions. Preventing and managing animal disease is central to building resilient, productive farms that can deliver food security and environmental benefits.



Technologies like vaccines, diagnostics, and parasite control are at the heart of sustainable livestock transformation and production. Vaccines avoid disease outbreaks, allowing farmers to increase production without expanding livestock populations Diagnostics enable earlier, more targeted treatment, that avoids widespread outbreaks. Parasite control helps animals better convert feed into weight and milk, which directly reduces the emissions intensity of production.

Studies around the world continue to reinforce these economic, environmental, and social benefits. Disease outbreaks are <u>linked with</u> rising food prices, while every two cattle vaccinated <u>is associated</u> with one person avoiding hunger. A 1% reduction in global livestock disease rates <u>could boost</u> meat and dairy farmer revenues by over \$14 billion. And according to the FAO, improved animal health alongside innovations in genetics and rumen manipulation <u>could reduce</u> total livestock emissions by 23%. It's why a recent international research consortium <u>called</u> animal health a "rare win-win in the search for a sustainable planetary future."

Learn more in the following publications:

- Animal Health and Sustainability: A Global Data Analysis
- How to Advance NDCs and Climate Strategies through Animal Health A Step by Step Guide
- Financing for Animal Health: A Gap in the Sustainability Agenda

International Meat Secretariat (IMS) – representing the global meat and livestock sectors

IMS and its members are committed to a sustainable supply of safe, high quality and nutrient dense protein to feed a growing world population. We champion the sectors role in maintaining and protecting the natural environment through the use of sustainable production practice and continuous improvement, actively engaging with key policy setting organisations to support the wider dialogue.



With a network of experts across the membership base, IMS channels its efforts to provide science and evidence-based information while bringing together industry to facilitate the development of the sectors and promote open trade. Central to this is the health and welfare of livestock, including disease prevention and control which mitigates risk, protects against loss and underpins the viability of the sectors.

IMS members contribute and support the objectives of economic development, climate change mitigation and food security through the increased productivity of the sectors and the effective use of natural resources.

International Feed Industry Federation (IFIF)

As the global voice of the global animal feed industry, representing 80% of the global feed production worldwide, IFIF supports sustainable livestock transformation by advancing science-based, efficient, and responsible animal nutrition. Nutrition is central to sustainable livestock systems - it enables healthier animals, improves resource use efficiency, and reduces environmental impacts.



IFIF members contribute through innovation in precision nutrition, feed formulation, and specialty ingredients that enhance system circularity and reduce emissions, including methane and nitrogen. Improved nutrition not only boosts feed conversion and animal health, but also helps lower the environmental footprint of animal-source foods.

Feed plays a critical role in circular agriculture. The livestock sector transforms food processing by-products and co-products, which are unsuitable for human consumption, into high-quality animal feed- reducing waste and contributing to food system efficiency. These practices return nutrients to soil through manure, supporting crop production and replacing synthetic fertilizers.

IFIF also advances feed safety, capacity building, and regulatory convergence worldwide, ensuring that animal nutrition contributes to both environmental and public health goals. Our collaboration with global organizations like FAO and WOAH helps align practices and standards in support of the UN Sustainable Development Goals (SDGs).

By fostering innovation, knowledge-sharing, and responsible practices, IFIF is committed to a livestock sector that supports a sustainable future for people, animals, and the planet.

World Farmers' Organization

As farmers' representatives worldwide, we are committed to ensuring livestock farming thrives as a cornerstone of sustainable development to meet global food security and nutrition needs while addressing environmental, economic, and social challenges, aligned with the Sustainable Development Goals (SDGs) and the 2014 Rome Declaration on Nutrition.



Livestock is fundamentally important to global food security, providing essential micro and macronutrients, supporting livelihoods, and contributing to rural economies. With the world's population projected to reach 9.2 billion by 2050, the rising demand for animal-sourced nutrient-rich foods underscores the need for sustainable growth in livestock production. This growth must prioritize resource efficiency, resilience, and social equity, as outlined in WFO's livestock policy. Critically, farmers must be at the heart of conversations about their farms and livelihoods. Policies and innovations must reflect their realities, ensuring economic viability and respect for local conditions.

We emphasize that no single farming system is superior; diverse systems—ranging from small-scale extensive to intensive specialized production—are vital to meet varied global needs. Each system plays a unique role in maintaining cultural landscapes, biodiversity, and food security. The WFO advocates for a One Health and One Welfare approach to address biosecurity, animal health, and welfare challenges.

The WFO calls for inclusive dialogue, ensuring farmers' organisations are fully consulted in shaping sustainable livestock policies. WFO collects and share best practices and success stories such as:

- <u>Climakers</u> example and experiences from A Farmers Driven Climate Change Agenda
- Agmission Connect farmers and researchers, aiming to generate and disseminate scientific-based reports and practical insights

Global Dairy Platform (GDP)

For almost two decades, GDP has brought together dairy companies, associations, scientific bodies and other partners that collaborate pre-competitively to build on the dairy sector's holistic story – sharing evidence on dairy's role in the diet; showing the sector's commitment to responsible food production; and leading research around the socio-economic impact of the sector.



GDP drives the dairy sector's flagship environmental sustainability program, Pathways to Dairy Net Zero, which has led progress in developed countries and emerging economies alike. GDP also chairs of the Dairy Sustainability Framework, which tracks, monitors and reports on 11 sustainability criteria for more than 50% of the formal milk worldwide.

GDP's recent efforts in nutrition science include a leadership role on a multi-year study that proved the need for a new way to measure protein quality, properly showing the superior strength of animal protein. GDP also partnered with multiple global organizations on a study published last year that showed, based on data from 187 countries, the critical role the dairy sector plays in rural development at the socio-economic impact level (e.g. poverty alleviation, employment generation, affordability to high value nutrients).

Together, GDP and its members aim to demonstrate dairy's contribution to a sustainable global food system, healthy diets and sustainable livelihoods.

Learn more in the following publications:

- Dietary Protein for Global Human Health
- Why Investment in Dairy is Critical to Nutrition-Focused Progress
- Pathways to Dairy Net Zero: A Platform for Action
- <u>Dairy Sustainability Framework Annual Reports</u>

International Poultry Council

The International Poultry Council, representing the entire global poultry meat supply chain, and its members place contributing to a globally sustainable food secure world at the heart of their mission.

The production of quality foods, rich in protein, macronutrients, and micronutrients, and accessible to all, goes hand in hand with environmental, social, and economic sustainability in the poultry – broiler, turkey and duck – supply chain. Indeed, in addition to its essential contribution to livelihoods, food security, and community economies, poultry meat is among the most sustainable foods in the world, especially when measured against nutrient density.

Poultry producers are committed to increasing the sustainability of their production by developing, disseminating, and using tools and guidelines, promoting the adoption of programs that ensure animal welfare and health, and encouraging the development and use of innovative technologies and practices that minimize the environmental impact of the poultry meat sector, as stated in the <u>Sao Paulo Declaration on Poultry Meat Sector Sustainable Development</u>.

As evidence of this, IPC, the first global association to do so, has developed <u>Global Antimicrobial Use Stewardship</u> <u>Principles</u> and Best Practices (published jointly with WOAH) on how to avoid the need for their use, yet used properly if needed. These documents formed the basis of the recently concluded private sector <u>TRANSFORM project</u>, whose global impact has been recognized and praised by multiple stakeholders, both institutional and private, being also selected by Fortune for its 2024 "Changing the World" list.

World Egg Organisation (WEO)

WEO represents egg farmers across the world, who play a pivotal role in supporting sustainable food systems while providing high-quality, accessible protein to global populations. WEO and its members are committed to continuous improvement, innovation, and knowledge-sharing, to ensure eggs are available, affordable, and sustainably produced.



We champion the efficient use of resources, such as water and feed, the reduction of greenhouse gas emissions, and the most sustainable use of manures. By showcasing exemplary models, WEO encourages evidence-based solutions such as circular farming systems, effective waste management, and sustainable poultry management.

WEO promotes a 'One Health' approach, proactively collaborating with global organisations - including WHO, FAO and WOAH – as well as leading industry experts, researchers, and producers. By connecting these stakeholders, and providing a platform to share experiences and expertize, we aim to ensure sustainable solutions and policies reflect on-the-ground realities.

We recognize animal health as an essential factor in a sustainable future and connect global experts to consider the egg industry's role in preventing and controlling animal disease, particularly avian influenza.

Eggs play a crucial role in nourishing people throughout their lives, and the egg industry is a significant source of income for rural populations worldwide. In line with the UN Sustainable Development Goals (SDGs), WEO strives to meet global food security and nutrition needs, while also addressing environmental, economic, and social challenges. By uniting stakeholders and advocating for environmental solutions, WEO continues to drive positive change that benefits people, animals and planet.

Learn more: https://www.worldeggorganisation.com/our-work/sustainability/

Global Roundtable for Sustainable Beef

The Global Roundtable for Sustainable Beef (GRSB) has based our work on five foundational principles since our organization began in 2014. Our multistakeholder members – which includes producers and processors,



input providers and retailers, NGOs and academia, and more – agreed on principles and criteria for sustainable beef. Our three global goals, launched in 2021, added to these principles to contribute to our mission to advance, support, and communicate continuous improvement in sustainability of the global beef value chain through leadership, science, and multi-stakeholder engagement and collaboration.

The members of GRSB play a vital role in promoting sustainable diets while addressing key global challenges such as nutrition, health, and environmental stewardship. Beef not only provides high-quality nutrition essential for human health but also offers significant socio-economic benefits, especially in low- and middle-income countries. By harnessing cattle's ability to convert inedible forages into nutrient-dense food, we can effectively help address dietary deficiencies and enhance food security for vulnerable populations.

Ultimately, the path toward a sustainable beef industry is a shared journey that demands inclusivity, innovation, and the resolve to create a brighter future for the planet and its people. By encouraging collaboration between producers, businesses, consumers, civil society, and governmental bodies, we can ensure the beef industry remains a cornerstone of nutrition and sustainability fulfilling the global commitment to a healthier world.

GRSB publishes an <u>annual report</u> and a biennial <u>sustainability report</u>. See also our Carbon Footprint Guideline for the beef industry in <u>English</u> and <u>Spanish</u>, with <u>fact sheet</u> and <u>FAQ</u>, as well as our joint report with HealthforAnimals on the role of <u>Animal Health in Sustainable Production</u>.

World Renderers Organization - The Role of the Rendering Sector in Global Sustainability



The rendering sector plays a vital and irreplaceable role in advancing the sustainability of global livestock production. Every day, rendering provides

a safe, correct, and sustainable destination for animal by-products that are not suitable for human consumption. Instead of becoming waste, these materials are responsibly processed through scientifically controlled methods, ensuring biosecurity while creating valuable resources.

Rendering is a cornerstone of the circular bioeconomy, enabling the upcycling of millions of tonnes of raw materials from slaughterhouses, meat processing plants, and other sectors into safe and high-quality protein meals and rendered fats for animal feed, pet food, fertilizers, and renewable fuels. This process not only prevents the environmental and sanitary risks associated with improper disposal but also recovers essential nutrients, reducing the need for finite natural resources.

By transforming what would otherwise be discarded into safe and functional products, rendering reduces greenhouse gas emissions, supports soil fertility, and lessens pressure on land and water use. In doing so, it significantly contributes to lowering the overall environmental footprint of livestock production.

As an essential partner in the global agri-food chain, the rendering industry embodies the principles of sustainable production: minimizing waste, maximizing resource efficiency, and supporting climate goals. Through innovation, compliance, and collaboration, rendering stands as a proven solution for a safer, more resilient, and sustainable future.

International Wool Textile Organisation

As science evolves, we've come to realize the full impact of small ruminants on our environment. A major paradigm shift is occurring which recognizes that grazing ruminants are critical for the long-term health of grassland ecosystems and soil health, while delivering healthy, nutrient dense diets.



Currently, none of the fibre or food footprinting methodologies account for the positive impacts of grazing animals, such as supporting biodiversity, regenerative practices, carbon capture and sequestration and the many positive socio-economic impacts of agricultural communities around the world. The impact accounting system should follow science and measure full impacts, including carbon sequestration, enabling our food and clothing retail partners to make informed purchasing decisions while supporting urgently needed global decarbonization.

IWTO was established in 1930 as the global authority for standards in the wool textile industry, and with a focus on scientific evidence to substantiate the claims we make about wool. Our members promote restorative animal husbandry that leads to the healing of the planet while producing quality natural fibres and food. IWTO members represent 27 countries and all parts of the wool pipeline, from farm to fashion. Through research, education, advocacy and knowledge sharing, IWTO endeavours to ensure a sustainable future for the global wool industry.

Endnotes

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