

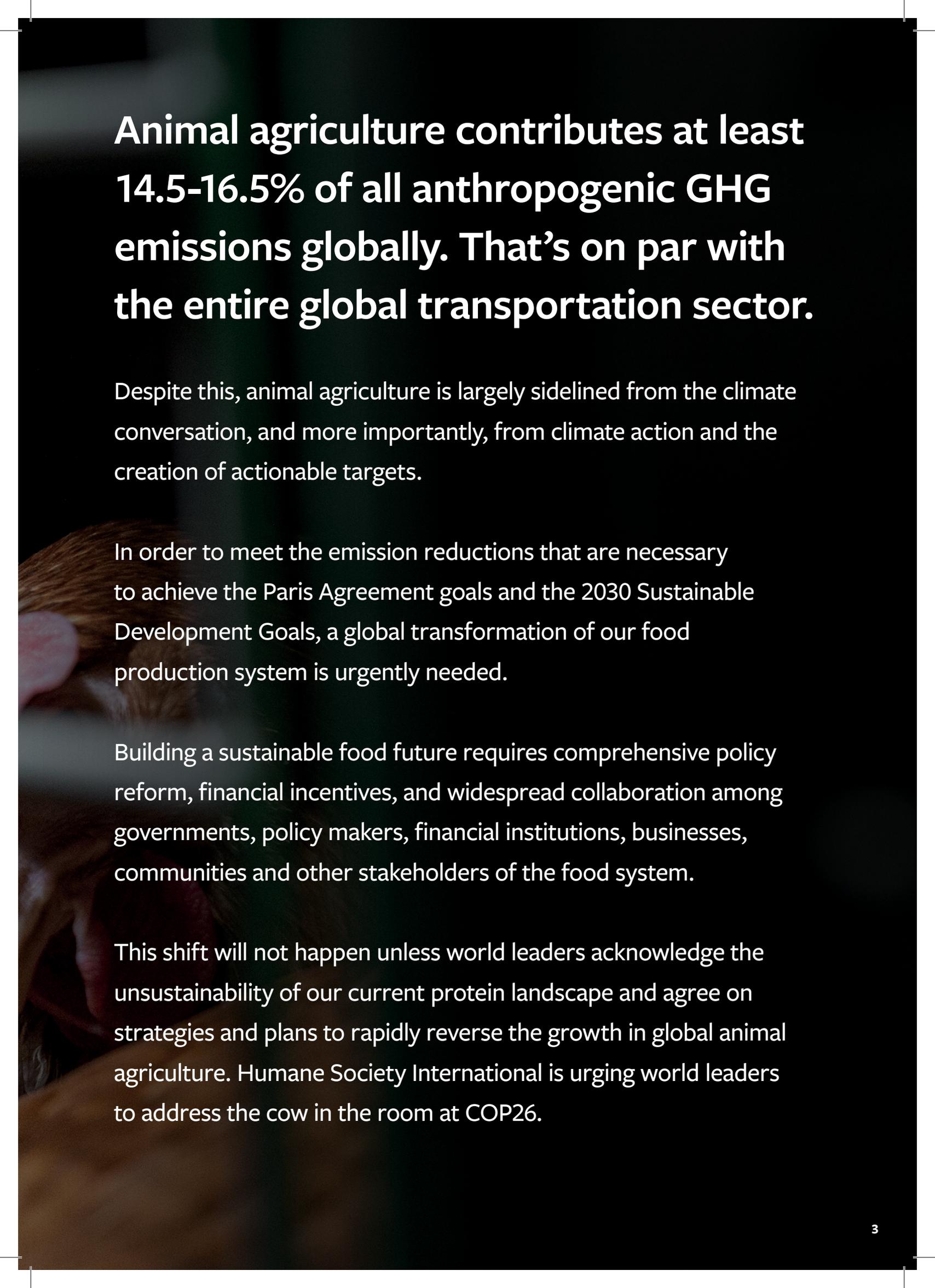


**HUMANE SOCIETY
INTERNATIONAL**

**It's Time to Talk About
The Cow in the Room**







Animal agriculture contributes at least 14.5-16.5% of all anthropogenic GHG emissions globally. That's on par with the entire global transportation sector.

Despite this, animal agriculture is largely sidelined from the climate conversation, and more importantly, from climate action and the creation of actionable targets.

In order to meet the emission reductions that are necessary to achieve the Paris Agreement goals and the 2030 Sustainable Development Goals, a global transformation of our food production system is urgently needed.

Building a sustainable food future requires comprehensive policy reform, financial incentives, and widespread collaboration among governments, policy makers, financial institutions, businesses, communities and other stakeholders of the food system.

This shift will not happen unless world leaders acknowledge the unsustainability of our current protein landscape and agree on strategies and plans to rapidly reverse the growth in global animal agriculture. Humane Society International is urging world leaders to address the cow in the room at COP26.



Animal agriculture's impacts on land use, greenhouse gas emissions, biodiversity, public health and food security are immense and left unchecked will hamper our progress in meeting the Sustainable Development Goals (SDGs), the Paris Agreement, Convention on Biological Diversity and other critical international targets.

The animal agriculture sector is responsible for at least 14.5–16.5% of human-induced greenhouse gas emissions, putting meat, egg and dairy production on par with all forms of transportation globally combined. However, while the goals outlined in the climate talks prioritize enhanced investment in renewable energy and transformation in the transport sector as tactics to secure global net zero, action to transform our food systems and address climate-damaging livestock production has been relegated to the margins, ignoring the growing scientific evidence that animal agriculture must be central to all conversations concerning climate change. While many countries mention the agriculture sector in their Nationally Determined Contributions (NDCs), most mentions of livestock are in relation to increased production, intensification and/or technical “solutions”, the effectiveness of which remain in question. Very few countries set targets in relation to other stages of the food system where large emissions occur, such as diets and consumption habits.

Key Facts:

- The IPCC determined with high confidence that policies operating across the food system, including policies that influence dietary choices, would enable more sustainable land-use management; result in enhanced food security and low emissions trajectories; contribute to climate change adaptation and mitigation; and improve public health.¹
- Business-as-usual growth scenarios for the animal agriculture industry project that within ten years, the livestock sector will account for almost half (49%) of the world's emissions budget for 1.5°C by 2030.²
- Research indicates that even with the **immediate cessation of emissions from fossil fuels**, current trends in world food production would **make it impossible to limit warming to the 1.5°C target** and make it difficult to realize the 2°C target.³ A transition to the production of more food crops and a shift away from industrial animal agriculture must be made if we intend to meet the steep and rapid reductions in emissions necessary to achieve the goals of the Paris Agreement.



A global transformation of our food production system and policies as well as consumption habits is imperative for human and planetary health.

Reducing food and agriculture emissions to help meet internationally agreed upon climate targets requires comprehensive policy reform, financial incentives, and widespread collaboration among policymakers, financial institutions, businesses, researchers, civil society organizations, communities and other stakeholders of the global food system.

Policies working across the food system — including shifting dietary choices and reducing food loss and waste — improve land-use management, food security and the ability to reduce emissions. Sustainable food policies can also increase climate resilience, help eradicate poverty, improve public health and protect biodiversity.

HSI calls on COP Parties and delegates to support the following goals and concrete actions within the framework of official negotiations, dialogues and initiatives to achieve them:

1. Goal: The UNFCCC must acknowledge animal agriculture as one of the largest contributors to climate change in the food and agriculture sector and provide technical assistance for parties to integrate food and agriculture into NDCs, with a focus on addressing meat and dairy consumption and production.

Action: The Parties should agree on an extension and revision of the **Koronivia Joint Work on Agriculture (KJWA) Roadmap** at COP26 to include discussions on plant-based food and farming systems. Future KJWA sessions and workshops should consider the environmental, nutritional, social and economic benefits of such systems; increase technical capacity and foster awareness building; improve farmers' access to financing schemes and mechanisms, including national programmes and initiatives that provide financial incentives; and deliver national agriculture and food policies, amongst others.

2. Goal: Global climate and development policies must work together to promote sustainable diets and systems of food production to achieve accelerated emissions reductions and the SDGs.

Action: Through the **Race to Zero Breakthrough initiative**, the COP26 Presidency should, in collaboration with the UNFCCC, the UN High-Level Climate Action Champions and others, secure swift and concrete commitments from state and non-state actors to deliver the roadmap in the Climate Action Pathway on Land Use 2021 and achieve 50% global plant-based consumption by 2050. This should include creating national guidelines for sustainable and healthy diets that recognize the links among dietary patterns, environmental impact and food security, and encouraging individuals and institutions to shift toward diets higher in plant-based foods and lower in animal-based foods.



3. Goal: Governments must take bold steps to internalize the costs of livestock production, including on the global climate, and end tax and other incentives for growing feed crops.

Action: The COP26 Presidency and its partners should accelerate a transition to sustainable food and agriculture systems by encouraging countries and other stakeholders to endorse the **Policy Action Agenda for a Just Transition to Sustainable Food and Agriculture**. In particular, this requires governments to identify and remove or redirect subsidies and fiscal policies for practices that threaten the Paris Agreement and that have negative impacts on forests, other ecosystems, soils, water and overall resilience to the effects of global warming. Shifting subsidies and financial incentives from industrialised livestock production to sustainable plant-based agriculture should be a priority. In addition, public policies should be oriented to the achievement of nutrition and sustainability goals, including shifting to more plant-based diets.

In conjunction with shifting financial incentives, the COP26 Presidency, in collaboration with the UK Foreign, Commonwealth and Development Office, should endeavour to “close the innovation gap” in plant-based farming and food production. To this end, the **Global Action Agenda for Innovation in Agriculture** should encourage state and non-state actors to incentivise investment in the development of alternatives to animal-based protein, including plant-based proteins and cellular meat, and to create a regulatory environment to support such innovation.

4. Goal: National governments and international meeting organizers must ensure interdepartmental dialogues between governmental departments to mitigate contradictory policies (including Agriculture, Environment, Climate, Forests and Health/Nutrition) to ensure policies are aligned and not being jeopardized by measures or regulations taken in other departments. In addition, departments should be aligned on public education campaigns to raise awareness of the climate consequences of meat and other animal-based foods production and consumption and inform people about the health and other co-benefits of plant-centered diets.

Action: In the **Forest, Agriculture and Commodity Trade (FACT) Dialogue**, and in similar discussions, the Parties must formally recognise the contribution of the intensive livestock industry and the production, consumption and trade in animal-based foods to climate change and deforestation. Animal-based commodities, including beef, should feature prominently on the **FACT Roadmap**. A clear and robust agreement must be sought, especially from the highest producer, exporter and consumer countries, to reduce the environmental impact of livestock production by supporting a just transition towards diversified, sustainable plant-based food production, consumption and markets. There must be a mechanism in place to hold governments accountable.

5. Goal: Governments use their own procurement policies to demonstrate and encourage private sector adoption of low GHG pathways. Governments are often the largest buyers of food products, for example for schools, state institutions like hospitals and government ministries, and militaries, and should lead the way in transforming national and global food-supply chains and priorities.

Action: Guided by the targets and actions laid out in the Climate Action Pathway on Land Use 2021, governments should amend government procurement priorities to encourage and demonstrate lower GHG pathways within the public sector by decreasing animal-based food procurement and increasing procurement of plant-based foods.



What are the benefits of reducing livestock numbers?

Answer: Global livestock numbers need to fall dramatically as the current rate of animal production is wholly unsustainable. Over 88 billion land animals are reared, raised and slaughtered globally for food, compared to a global population of approximately 7.8 billion.

There are many reasons why we should be reducing the number of livestock including the risk of future pandemics, climate change, biodiversity loss, animal welfare, and harm to human health.

Livestock farming and meat consumption have been found to contribute to infectious disease threats. The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) has found that the intensification of livestock farming and the rising demand for meat consumption were linked to increased risks of disease emergence, and recommends “[p]romoting a transition to healthier and more sustainable and diverse diets, including responsible meat consumption” as well as “taxes or levies on meat consumption, production, livestock production or other form of consumption” in order to reduce pandemic risk.⁴

Why is methane important to climate change if it is impermanent, unlike carbon, and how can reducing meat and dairy help tackle climate change?

Answer: While it is true that methane has a shorter life in the atmosphere, the potency of this greenhouse gas means that it cannot be ignored from emission reduction strategies.

The latest report from the IPCC found that there has been faster growth of atmospheric concentrations of methane over the last six years from both fossil fuels and agriculture and that significantly more methane has been emitted from enteric fermentation and manure than from oil and gas in the past two decades, “mainly due to the increase in global total animal numbers.”⁵ With an approximated 32% of agriculture methane emissions due to livestock, addressing global livestock numbers represents a critical strategy to reduce methane emissions.

According to the UNEP Global Methane Assessment, “Healthy diets might achieve reductions in methane emissions in the range of 15–30 Mt/yr, with additional climate benefits from reductions in carbon dioxide and nitrous oxide”. The same report states that “[b]ehavioural changes, reducing food loss and waste, improving livestock management and shifting to healthier diets that at the global level include reduced consumption of ruminant-based foods, have the potential to provide up to 65–80 Mt/yr of additional methane emissions mitigation...widespread adoption of such measures alongside targeted controls could bring anthropogenic methane emissions in line with those in 1.5C scenarios.”⁶

The reduction in ruminant production therefore has the potential to yield particularly fast reductions in global temperatures in the short-term, buying time for more difficult decarbonization transitions.



What about technical innovations to reduce emissions on farm, such as innovations in breeding to develop more efficient, productive and resilient crops and livestock, as well as more efficient feeding strategies for livestock?

Answer: Technical innovations and modified practices are a start, but simply not enough on their own. They must be combined with a reduction in the number of livestock if we are to meet the steep and rapid greenhouse gas emissions reductions needed to achieve the Paris Agreement goals. Methane reduction technologies are limited when it comes to how they can be used. Although the use of these additives may help to reduce enteric methane emissions from farm animals such as cattle, these and other technical “solutions” serve to maintain the status quo of large-scale industrialized factory farming, rather than to engender the needed systemic change in our food system and diets. What is more, continued breeding for greater efficiency has led to some of the most detrimental, unintended side-effects on the health and welfare of the animals. For example, the physiological demand of greater milk productivity is associated with lameness, mastitis (painful udder infections) and metabolic diseases such as ketosis and laminitis of dairy cows.⁷

Can gene editing animals provide a long-term solution?

Answer: Gene editing animals is just one more temporary, stop-gap measure. Rather than seeking to maintain or further intensify the status quo of large-scale industrialized livestock production, the focus should be on addressing the problem at its source: the unsustainable number of animals raised and slaughtered for food. Reducing the number of animals and shifting our food system to a more sustainable, plant-centric system should be the key mitigation strategy.

What about farmers and their livelihoods?

Answer: We all rely on farmers, and that is why there is an urgent need for a just transition to a more sustainable food system, and that includes making it a fairer system for farmers. Livelihoods that depend on livestock systems are becoming less secure as a result of climate change and extreme weather events, so enabling and supporting farmers to transition to climate-resilient, sustainable plant-based food production is key to future-proofing our food and farming systems.

It is also important to note that the vast majority of the meat produced comes from intensive animal agriculture, or factory farms, a system that exploits the planet, animals and people.

What about food security and ensuring adequate nutrition?

Answer: Animal products generally represent a highly inefficient and wasteful source of nourishment when plant-based food options are available. The farm animal production sector is the single largest anthropogenic user of land, with meat, egg, dairy and aquaculture production systems using approximately 83% of the world's farmland while providing just 37% of the world's protein and 18% of calories.⁸

The global food system is under increasing pressure due to shocks caused by adverse environmental events (for example, storms, temperature extremes, flooding and drought) as well as the global population rise and increasing demand for animal products in the developing world. All of these impacts reduce food availability and increase food price which, in turn, decreases food accessibility and ultimately leads to food insecurity. Plant-based diets require far less land and other finite resources. Shifting diets away from meat, and towards plant sources of protein, such as legumes, is an effective way of increasing food security.

Research confirms that reducing meat consumption can alleviate the environmental impact of our food system while also providing adequate nutrition. The global adoption of a low-meat diet that meets nutritional recommendations for fruits, vegetables and caloric requirements is estimated to reduce food-related GHGs by almost 50% and premature mortality by nearly 20%.⁹

What about land grazing animals?

Answer: At present, approximately 83% of the world's farmland is used to support meat, egg, dairy and aquaculture production. The expansion of pasture for grazing cattle and feed crops into natural forests contributes to forest loss and greenhouse gas emissions from land use change, as well as habitat loss and, concurrently, biodiversity loss.

The Chatham House report *Food System Impacts on Biodiversity Loss* reveals our global food system to be the primary driver of biodiversity loss, with agriculture alone being an identified threat to 24,000 of the 28,000 species (86%) at risk of extinction.¹⁰ The report calls for an urgent reform of food systems, including a shift in global dietary patterns towards more plant-centric diets. Halting land clearances for livestock grazing and livestock food crops would allow us to focus on rewilding areas to restore wildlife and capture carbon.





What about the economy?

Answer: Policies that encourage dietary changes towards more plant-centric diets would benefit the economy, ultimately enhancing adaptive capacity. A joint study by the International Labour Organisation and the Inter-American Development Bank revealed that a transition to a net-zero emission economy, driven primarily by a transition from meat-heavy diets to more plant-based diets, would result in the net creation of **15 million more jobs than under a business-as-usual scenario, and would reduce global agricultural greenhouse gas emissions by 17 per cent.**¹¹

Wasn't this issue discussed at the UN Food Systems Summit? Why do we need to address it here?

Answer: As the COP26 statement on the Global Action Agenda for Innovation in Agriculture notes, "As one of the largest greenhouse gas emitting sectors of our global economy, efforts to reach the Paris Climate Agreement must put the transformation of global food systems at the heart of change." Animal agriculture is a leading driver of climate change, accounting for at least 14.5%-16.5% of global emissions, and this figure is only set to increase. It is therefore imperative that we address such a huge contributor to climate change along with the other leading drivers such as fossil fuels and transport. An increasing amount of scientific evidence has made it clear that action to transform our food systems and address climate-damaging livestock production must be central to all conversations concerning climate change.

Can we reduce beef and dairy but keep eating poultry, pork, seafood and eggs?

Answer: While poultry, pork, seafood and egg production generally have a smaller impact on climate change than beef and lamb, in most cases the carbon footprint is still significantly higher than that of plant-based whole foods, due in no small part to the embedded emissions and environmental costs of animal feed. They also have broader impacts on the planet beyond the emissions they produce, including biodiversity loss, water pollution and land degradation. Beyond this, intensively farmed animal products also pose risks to human health, whether that be through zoonotic diseases, the misuse of antibiotics, or higher risks of noncommunicable diseases such as heart disease, cancer, type 2 diabetes, obesity and more.

Dietary shifts could contribute up to one-fifth of the mitigation needed to meet the Paris below 2°C target. A reduction in animal agriculture must be part of our mitigation strategy for climate change. Failure to reduce the emissions from the livestock sector will place a heavier burden of emission reductions on other sectors, reducing the possibility of meeting the Paris targets.



**HUMANE SOCIETY
INTERNATIONAL**



5 Underwood Street, London, N1 7LY, United Kingdom
Telephone **020 7490 5288** | Email info@hsiuk.org
Charity number: 1098925

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