

Principles and rationale behind the FARMS Initiative's Responsible Minimum Standards for the Protein Shift (RMS)

The world faces unprecedented and interconnected challenges: it is on a pathway of devastating climate change, biodiversity loss, environmental degradation and public health risks. In turn, these challenges will have enormous repercussions for food security, migration, political stability and material prosperity, in short, for the global ecological, social and economic order as we know it.

The burden of animal agriculture

Globally, more than 94.9 billion terrestrial animals are kept and killed annually to produce meat, dairy and eggs.¹ Unfortunately, these animals often suffer in horrible conditions even though many viable, more humane, alternatives exist.

Aside from causing immense animal suffering globally, animal agriculture is a primary driver of climate change, environmental degradation and public health challenges. These negative impacts lead to material and risk return implications for financial institutions.

Animal agriculture is responsible for at least 16.5% of human-induced greenhouse gas emissions, on par with all forms of transportation combined.² Further, business-as-usual growth scenarios for the animal agriculture industry project that by 2030, the livestock sector will account for almost half (49%) of the world's emissions budget for 1.5°C.³ Agriculture occupies approximately 37% of the world's land surface and around 80% of this land is dedicated to livestock production, either for grazing or feed.^{4,5} Despite this vast land use, livestock production contributes only 18% of the world's calories and 37% of its protein.⁶ The negative impacts of livestock production extend beyond emissions and land conversion.

Animal agriculture has a large impact on biodiversity loss.⁷ In the past half-century, the conversion of natural habitats into cropland or pasture has become the dominant driver of habitat loss in terrestrial and freshwater systems, whereas in marine environments the primary driver is direct exploitation, particularly fishing.⁸ In fact, almost 90% of global



deforestation can be attributed to agricultural expansion with cropland expansion accounting for almost 50% and livestock grazing for almost 39% of that total.⁹

The destruction of ecosystems for animal production systems, the large number of animals with homogeneous genetics, the use of antibiotics and pesticides, and the contribution to unhealthy diets all pose significant public health risks.^{10,11,12,13,14,15} Health risks include the rise of antimicrobial resistance and an increased risk of zoonotic pandemics.^{16,17}

The need for a protein shift

Meeting the Paris Agreement targets requires a significant transformation of the global food system. A 2024 Harvard-led survey revealed that most experts agree that the global livestock sector must reduce emissions by 61% by 2036 to align with Paris goals. Experts emphasize that reducing livestock product consumption is key, while moderate contributions can come from cutting the number of high-GHG animals, technological advancements, improved manure management and soil carbon sequestration. Notably, most experts dismiss livestock production intensification as a viable solution for achieving GHG reduction targets.¹⁸

Conversely, a shift to plant-centered diets offers significant benefits. This protein transition could free up 3.1 billion hectares of land¹⁹—an area larger than China, the USA, and Brazil combined—enabling large-scale restoration of nature, biodiversity, and enhanced carbon sequestration. Additionally, innovative protein production methods like precision fermentation could lead to even greater climate and land use gains.²⁰ Health benefits can also be substantial. As the IPCC notes, "Food systems that emphasize healthy, plant-centered diets reduce emissions in the agricultural sector while helping in the fight against malnutrition."²¹ The IPCC determined with high confidence that policies operating across the food system, including policies that influence dietary choices, would allow for more sustainable land-use management, result in greater food security and low emissions trajectories, contribute to climate change adaptation and mitigation, and improve public health.²²

Plant-centered diets

To meet these challenges, the EAT-Lancet Commission has proposed a sustainable and healthy diet compatible with planetary boundaries. It emphasizes a plant-based diet with a high intake of fruits, vegetables, whole grains, legumes, nuts, and unsaturated oils. The diet recommends moderate consumption of dairy, fish, and poultry, while limiting red meat, processed foods, and added sugars.²³ As of 2022, 37 countries include

sustainability recommendations in their dietary guidelines, 62% of which advocate for reducing animal foods.²⁴

The protein shift

Transition researchers have focused on making the protein transition a reality by developing various models to understand and facilitate these shifts. By and large, a common insight is that a new economy needs to be built while the old economy is dismantled. This is a phased process in which different actors have distinct roles—governments, corporations, knowledge institutes, civil society organizations (CSOs), citizens, and, of course, financial institutions.²⁵

The protein shift needs to be responsive to wide differences between and within countries, including excessive overconsumption of animal protein, food and nutrition security, income and more. A long-term global goal should be to increase the availability, accessibility and affordability of nutritious plant-based foods.

The role of financial institutions

To support the protein transition, financial institutions need to reallocate capital from large-scale animal agriculture toward more sustainable food system models, particularly in developed economies. Additionally, financial institutions can drive companies to be more ambitious by engaging with the companies that they finance and invest in. In short, financial institutions should:

- Exclude companies and practices that resist and hamper the protein transition.
- Engage with companies that can support, and become part of, the protein transition.
- Integrate public health, environmental and social risks into financial decision making.
- Finance and/or invest in companies and their respective supply chains that support the protein transition.

Financial institutions should avoid financing and investing in large-scale animal agriculture companies. Should financing already be in place, active engagement should be pursued. It's important to note the limited capacity for engagement. Capacity should be allocated toward companies with real potential to become part of the transition, rather than wasted on companies unwilling or unable to change their business models. Additionally, if financial institutions are supporting smallholder animal agriculture and

supply chains, animal welfare should be integrated into the financing process and the **Responsible Minimum Standards** should be referenced as best practice.

Furthermore, financial institutions should avoid investing in schemes or technologies that may slightly improve certain metrics but ultimately entrench unsustainable systems, hindering systemic change. For example, the industrial production of insects for animal feed.

The Protein Shift RMS

The Protein Shift RMS provides basic criteria for financial institutions to adopt in their policies and apply to the companies that they finance/invest in to advance the protein transition. These criteria are not intended to be exhaustive, nor do they guarantee sufficient ambition to meet the challenges described above, but they do provide a minimum level of responsibility that every financial institution could and should adopt.

Examples of good practice

- The Netherlands biggest supermarket Albert Heijn has set the objective to achieve 60% plant-based protein by 2030 (44% in 2023) and monitors and reports annually on progress towards this target.
- UK based Premier Foods' Enriching Life Plan includes “more than tripling their plant-based sales to support the nation’s shift towards plant-based diets and contributing to a healthier planet by achieving net zero carbon emissions by 2040, halving food waste and eliminating deforestation across the entire supply chain.”
- InterContinental Hotels Group (IHG) Greater China, Dossen Hotel Group, and Orange Hotels have announced plans to “significantly increase” plant-based menus. Under the ‘Lifestyle of Health and Sustainability (LOHAS) brand concept,’ Orange Hotels plans to make 70 percent of its menus plant-based by 2025.

¹ Food and Agriculture Organization of the UN. FAOSTAT Database. Crops and livestock products. License: CC BY-NC-SA 3.0 IGO. Extracted from: www.fao.org/faostat/en/#data/QCL.

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- ⁶ Poore, J., and Nemecek, T. (2018). Reducing food's environmental impacts through producers and consumers. *Science*, 360(6392), 987–992. <https://doi.org/10.1126/science.aag0216>.
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