

CLIMATE MISALIGNMENT:

How Development Bank Investments in Industrial Livestock
Are at Odds With Their Paris Agreement Commitments

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 **STOP
FINANCING
FACTORY
FARMING**

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The Stop Financing Factory Farming Campaign works in partnership with locally affected communities and organizations to shift development finance away from industrial livestock production towards healthier, more humane and sustainable food systems. The campaign's global Steering Committee includes: the Bank Information Center, Friends of the Earth U.S., Feedback Global, the Global Forest Coalition, International Accountability Project, Sinergia Animal, and World Animal Protection. The campaign has more than 30 organizational members and partners globally.

Executive Summary

During the last several years, including at the November 2021 [Finance in Common](#) Summit, the world's public development banks committed to shifting their investment strategies and activities to align with and support the objectives of the Paris Agreement.¹ Despite this commitment, multilateral development banks (MDBs) continue to invest in the global expansion of industrial livestock production, or “factory farming”, notwithstanding the [United Nations Environment Program's](#) and other [climate experts'](#) assessments that absolute reductions in GHG emissions from livestock production are necessary to limit global warming to 1.5°C or “well below” 2°C, as the Paris Agreement requires.²

According to [research](#) by World Animal Protection, leading MDBs including the European Bank for Reconstruction and Development (EBRD), European Investment Bank (EIB), IDB Invest (Inter-American Development Bank), and the International Finance Corporation (IFC, World Bank Group) invested \$4.6B in the sector between 2010 and 2021.³ EBRD and IFC were the largest investors in private sector industrial operations, [deploying \\$2.6B](#) to help extend the global reach of some of the world's largest meat and dairy producers, including [Smithfield](#) and [Danone](#).⁴

Despite the incompatibility of factory farming's global expansion with keeping global warming to Paris-aligned levels, some MDBs have dramatically ramped up their investment in industrial animal agriculture, including feed production. For example, between 2018 and 2021, IDB Invest invested ~\$500M in operations across Latin America and the Caribbean after investing just ~\$15M in the sector between 2011 and 2017.⁵ Since 2021, MDB investments in factory farming have continued across Africa, Asia, Eastern Europe, and Central and Latin America and included support for regional and global agribusiness giants including [PRONACA](#) (Ecuador/IDB Invest and IFC), [Louis Dreyfus Company](#) (Brazil, IFC) and [CMI Alimentos](#) (Central America/IDB Invest).⁶ Each is briefly profiled in this report.

Shrinking Industrial Livestock Production is Necessary to Meet Paris Climate Targets

The science is clear. To keep Paris-aligned GHG reduction targets within reach, global production and consumption of industrially produced meat and dairy must decline. Recent estimates of the sector's contributions to global GHG emissions range from [11.2%](#) to [19.6%](#); estimates are far higher when emissions related to foregone carbon absorption resulting from using land for grazing and animal feed.⁷ The sector also accounts for [one third](#) of anthropogenic methane (CH₄) emissions.⁸ **Because CH₄ has 81.2 times the global warming potential (GWP) of CO₂ over a 20-year timeframe, reductions from industrial livestock production are particularly critical for meeting the goal of reducing global GHG emissions by 45% by 2030 to limit global warming to 1.5°C.**⁹

A 2020 [Science study](#) warns that even if fossil fuel emissions were immediately halted, livestock emissions could make it impossible to limit warming to 1.5°C and difficult to limit it to “well below” 2°C.¹⁰ While industrial meat and dairy production and consumption [must decrease](#) in higher-income countries, several studies, including a 2022 [report](#) by the Inter-American Development Bank (IDB), have shown that production and consumption can and must also diminish in regions including [China](#) and [Latin America](#), where banks are currently supporting the expansion of factory farming.¹¹

Livestock production can play a role in meeting the nutritional and economic needs of the populations whom development banks serve. However, the [decades-long industrialization](#) and globalization of the sector has driven the overconsumption of animal-based foods in higher-income countries while [exacerbating food insecurity](#) among populations in lower and middle-income countries (LMICs) who should be the beneficiaries of development banks' support.¹²

Multilateral Development Banks Misclassify Industrial Livestock as Paris-Aligned

Since 2021, the World Bank and other leading MDBs have published Paris Agreement alignment methodologies, including the [Joint MDB Assessment Framework](#) for Paris Alignment for Direct Investment Operations, the [EBRD Methodology](#) to determine the Paris Agreement alignment of EBRD investments, and the [IDB Group Paris Alignment Implementation Approach](#). While each of the frameworks refers to at least some industrial livestock operations as “high-emitting”, none excludes investments in expanding the sector on the basis that emissions from livestock production must significantly shrink to achieve Paris-aligned global GHG reductions.

Our analysis of published MDB Paris alignment methodologies indicates these are flawed in the following ways:

- While MDB support of industrial livestock operations may involve some limited GHG mitigation requirements, no MDB currently requires clients in the sector to undertake **either comprehensive (Scope 1–3) GHG reporting or commit to absolute GHG reduction targets** (or Paris-aligned targets).
- **Investments in cattle and other “high-emitting” sector operations (e.g., non-ruminants with non-negligible GHG emissions) may still be labeled as Paris-aligned** “with the exception of operations that expand and promote expansion into areas of high carbon stocks or high biodiversity areas”, presumably via deforestation. Given that deforestation is just one of many climate-related impacts of livestock operations, the failure of MDBs to require time-bound GHG reduction targets from livestock value chains (including methane-generating animals, manure “management” systems, and fossil fuel-intensive feed production) is a serious concern.¹³
- All published methodologies are based on alignment with Nationally Determined Contributions (NDCs), **yet only ~40% of countries have incorporated livestock-specific GHG reduction measures into their NDCs.**¹⁴

According to the Joint MDB and EBRD Paris alignment frameworks, non-ruminant operations with “negligible” emissions are classified as “universally” aligned. Yet in both frameworks, the term “negligible” is undefined. Whatever that definition may involve, the reality is that *all* industrial non-ruminant operations involve significant GHG emissions, including methane associated with manure management systems, N₂O emissions from fertilizer application for feed production, and CO₂ emissions from energy use for irrigation, pesticide and fertilizer production, processing, transportation, and refrigeration.¹⁵ Industrial livestock production (inclusive of feed) is also a leading cause of deforestation worldwide and the single largest driver of land conversion in Latin America.¹⁶

- **In every global region, large-scale, industrial livestock value chain operations—from feed production to animal feeding operations to processing facilities—are inherently highly vulnerable to climate change and its ancillary impacts.** These include heat stress, rapid disease spread, and water shortages. While both the EBRD Paris alignment framework and the World Bank’s Agriculture and Food Sector Note on Applying the World Bank Group Paris Alignment Methodology acknowledge some of these adaptation vulnerabilities, none of the published Paris alignment frameworks excludes industrial livestock operations from Paris-alignment on the basis of intensifying vulnerability to the impacts of climate change.

MDBs Should Stop Financing the Global Expansion of Factory Farming

To support the goals of the [Paris Agreement](#)—including “increasing the ability to adapt to the adverse impacts of climate change and foster climate resilience and low greenhouse gas emissions development, in a manner that does not threaten food production”—all public development banks must confront the necessity of *reducing*, not increasing, industrial livestock production.¹⁷ While discussions among [industry representatives](#), [policymakers](#), and [leading MDBs](#) about the climate-related impacts of industrial livestock operations have centered on strategies designed to enhance the “sustainability” of industrial livestock operations by

reducing the GHG emission *intensity* (GHG emissions per kilogram of meat, dairy, or eggs), such strategies will not suffice for meeting Paris-aligned climate targets.¹⁸ Data show that even the most ambitious scenarios for reducing livestock emissions via intensity reductions (lowering CO₂ eq per kg or liter of meat or milk) are insufficient to meet critical climate targets.¹⁹

Where livestock production can improve nutrition, food security, and livelihoods, MDBs should, in consultation with local communities, support diversified, agroecological, mixed crop and livestock and plant-based systems that not only deliver climate and biodiversity-related benefits but also support small-scale farmers who are the [backbone](#) of community food sovereignty and food security.²⁰ Providing such support would also enable MDBs to better meet their pledges to align their investments and activities with the UN Sustainable Development Goals (SDGs).

With just over six years left to avoid the most catastrophic effects of climate change and sufficiently address the concurrent factory farming-driven crises of [deforestation](#), [biodiversity loss](#), and the [overuse](#) and [pollution of the planet's air, land, and water](#), we are calling on the world's leading MDBs to acknowledge the need to shrink—not expand—the global industrial livestock sector.²¹ Instead, these institutions should leverage their political, economic, and intellectual heft to transform the global food system into one that can sustainably address global food security.

As an important first step, MDBs should add all industrial livestock activities, including feed production, to the list of activities they consider universally not aligned with the goals of the Paris Agreement. In addition, MDBs' agriculture-related development, project finance, and advisory services should:

1 Stop supporting the expansion of industrial livestock production. Instead, MDBs should facilitate the transition of GHG-intensive and otherwise environmentally destructive industrial farming systems to climate-impact mitigating and adaptive agroecological systems. These systems should prioritize the production of crops for human consumption and integrate livestock only where such integration can deliver ecological and social benefits and effectively address—rather than exacerbate—food insecurity and gender inequalities.

2 Strengthen mitigation requirements for all animal agriculture investments, including requirements for mandatory Scope 1–3 reporting and science-based, time-bound absolute emissions reduction targets that align with global targets. Mitigation measures that focus on GHG intensity-reducing technologies should not allow for absolute emission increases, nor should they be permitted if they lead to other negative impacts (e.g., increased water pollution or diminished animal welfare).

3 Strengthen adaptation requirements. At a minimum, “Paris-aligned” labeling should require all borrowers to demonstrate how their operations reduce the risks associated with extreme weather events. These include mass pollution, the increased spread of disease associated with global warming, and reliance on brittle supply chains, interruptions of which can cause severe food insecurity among vulnerable populations.

4 Acknowledge the need for and support critical demand-side shifts, including the convergence of global diets toward reduced levels of meat and dairy consumption, by refraining from making investments in livestock and feed operations that serve over-consuming regions including the EU, US, and parts of [South America](#), and by supporting policies, projects and initiatives that promote more sustainable, plant-forward diets.²²

5 Work with governments in countries with significant industrial livestock production to ensure that NDCs encompass absolute GHG reductions from the sector.

6 With active community participation and consent, support small- and mid-scale agroecological production systems, including diversified, mixed crop and livestock systems, silvopasture, agroforestry, and managed grazing. MDBs should direct their support toward an enabling environment that promotes smallholders' traditional and collective rights to seeds, livestock breeds, territories, and local and indigenous forms of production. These institutions should also seek efficient ways to guarantee access to land and technical support for women and other marginalized groups.

Endnotes

- 1 Finance in Common. (2020). "Joint Declaration of All Public Development Banks in the World". Paris. <https://financeincommon.org/sites/default/files/2020-11/FiCS%20-%20Joint%20Declaration%20of%20all%20Public%20Development%20Banks.pdf>.
- 2 The interchangeable terms "factory farming" and "industrial livestock production" refer to animal breeding, rearing, slaughtering, processing, and/or feed operations involved in the mass production of meat, dairy and eggs. Typically controlled by multinational corporations, this production involves breeding and/or rearing between hundreds and thousands of animals in concentrated feeding operations (mostly chickens, dairy cows, and pigs), feedlots (beef cows), or extensive, controlled grazing systems (beef cows) that are vertically integrated into international value chains. "MDBs" refers to leading development banks, including ADB, EBRD, IDB Invest, IFC, and the World Bank. Sources: United Nations Environment Programme (UNEP, 2022). Emissions Gap Report 2022: The Closing Window. Climate crisis calls for rapid transformation of societies. <https://www.unep.org/emissions-gap-report-2022>; Harwatt, H. (2019). Including animal to plant protein shifts in climate change mitigation policy: a proposed three-step strategy. Climate Policy, 19:5, 533-541, DOI: 10.1080/14693062.2018.1528965.
- 3 These figures do not include financing that went to smallholder livestock farmers and pastoralists or feed production and infrastructure that supports the industrial livestock sector. Source: World Animal Protection. (2021). IFI Industrial Livestock Investments. https://docs.google.com/document/d/1dPwot3xkSw7HV5LdSI5e9q8sgWITg5F9QG2q0N_WA/edit.
- 4 Wasley, A., Heal, A. (2020). Revealed: development banks funding industrial livestock farms around the world. The Guardian. <https://www.theguardian.com/environment/2020/jul/02/revealed-development-banks-funding-industrial-livestock-farms-around-the-world>; IFC. (2015). IFC Supports Sustainable Food Production with Loan to Smithfield Romania. <https://pressroom.ifc.org/all/pages/PressDetail.aspx?ID=17990>. EBRD. (2010). Danone CIS. [https://www.ebrd.com/work-with-us/projects/psd/danone-cis-\(f.-project-neva\).html](https://www.ebrd.com/work-with-us/projects/psd/danone-cis-(f.-project-neva).html).
- 5 World Animal Protection. (2021). IFI Industrial Livestock Investments. https://docs.google.com/document/d/1dPwot3xkSw7HV5LdSI5e9q8sgWITg5F9QG2q0N_WA/edit.
- 6 IDB Invest. (2020). PRONACA II. <https://idbinvest.org/en/projects/pronaca-ii>; IFC. (2021). PRONACA Covid. <https://disclosures.ifc.org/project-detail/SII/41934/pronaca-covid>; IFC. (2022). LDC BRASIL. <https://disclosures.ifc.org/project-detail/SII/44281/ldc-brasil>; IDB Invest. (2022). CMI Alimentos Global. <https://www.idbinvest.org/en/projects/cmi-alimentos-iii>.
- 7 Food and Agriculture Organizations of the United Nations. (FAO, 2022). Global Livestock Environmental Assessment Model (GLEAM) 3.0. https://foodandagricultureorganization.shinyapps.io/GLEAMV3_Public/; IPCC. (2014). Agriculture, Forestry and Other Land Use (AFOLU). In: Climate Change 2014: Mitigation of Climate Change. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. https://www.ipcc.ch/site/assets/uploads/2018/02/ipcc_wg3_ar5_chapter11.pdf; Twine, Richard, "Emissions from Animal Agriculture—16.5% Is the New Minimum Figure," Sustainability 2021, 13(11), 6276. <https://www.mdpi.com/2071-1050/13/11/6276>; The Breakthrough Institute. (2023). Livestock Don't Contribute 14.5% of Global Greenhouse Gas Emissions. <https://thebreakthrough.org/issues/food-agriculture-environment/livestock-dont-contribute-14-5-of-global-greenhouse-gas-emissions#fn-1>; Xu, X., Sharma, P., et al. (2021). Global greenhouse gas emissions from animal-based foods are twice those of plant-based foods. Nature Food. V. 2, pp. 724-732. DOI: <https://doi.org/10.1038/s43016-021-00358-x>. Note: 19.6% estimate based 7,318 ± 1,675 TgCO₂e/yr-1 food system emissions, 57% of which originate in animal-based foods.
- 8 UNEP. (2022). Emissions Gap Report 2022: The Closing Window. Climate crisis calls for rapid transformation of societies. <https://www.unep.org/resources/emissions-gap-report-2022>.
- 9 Intergovernmental Panel on Climate Change. (2021). Chapter 07 The Earth's Energy Budget, Climate Feedbacks and Climate Sensitivity – Supplementary material, in Climate Change 2021: The Physical Science Basis, Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_Chapter07_SM.pdf.
- 10 IPCC. (2014). Agriculture, Forestry and Other Land Use (AFOLU). In: Climate Change 2014: Mitigation of Climate Change. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. https://www.ipcc.ch/site/assets/uploads/2018/02/ipcc_wg3_ar5_chapter11.pdf; Twine, Richard, "Emissions from Animal Agriculture—16.5% Is the New Minimum Figure," Sustainability 2021, 13(11), 6276.
- 11 Parlasca, M., Qiam, M. (2022). Meat Consumption and Sustainability. Annual Review of Resource Economics. <https://www.annualreviews.org/doi/pdf/10.1146/annurev-re-source-111820-032340>; Shimokawa, S. (2015). Sustainable meat consumption in China. Journal of Integrative Agriculture. v. 14. DOI: 10.1016/S2095-3119(14)60986-2; Dumas, P., Wirsenius, S., et al. (2022). Inter-American Development Bank (IDB). Options to achieve net-zero emissions from agriculture and land use changes in Latin America and the Caribbean. <https://shs.hal.science/halshs-03760573/document>.
- 12 UNEP. (2020). 10 things you should know about industrial farming. <https://www.unep.org/news-and-stories/story/10-things-you-should-know-about-industrial-farming>; Compassion in World Farming. (2023). Factory Farming: Who Benefits? – How a Ruinous System is Kept Afloat.
- 13 Gerber, P. J., Steinfeld, H., et al. (2013). Tackling Climate Change Through Livestock. <https://www.fao.org/3/i3437e/i3437e.pdf>.
- 14 Consultative Group on International Agricultural Research (CGIAR). (2022). Info note: Livestock management ambition in the new and updated nationally determined contributions: 2020-2022. <https://cgspace.cgiar.org/bitstream/handle/10568/115885/CCAFS%20Info%20Note%20Livestock%202021%20NDCs.pdf>; Farm Animal Investment Risk and Return (FAIRR). (2022). Nationally Determined Contributions Still Lack Ambition on Agriculture. <https://www.fairr.org/article/nationally-determined-contributions-lack-ambition-on-agriculture/#:~:text=7%20of%20countries%20updated%20their,of%20these%20updates%20mention%20livestock>.
- 15 Goodland, R., and Anhang, J. (2009). Livestock and Climate Change. World Watch. <https://awellfedworld.org/wp-content/uploads/Livestock-Climate-Change-Anhang-Goodland.pdf>; FAO. (2006). Livestock's Long Shadow: Environmental Issues and Options. <http://www.fao.org/3/a0701e/a0701e.pdf>; FAO. (2013). Tackling Climate Change Through Livestock. <http://www.fao.org/3/i3437e/i3437e.pdf>.
- 16 Ritchie, H. (2021). Cutting down forests: what are the drivers of deforestation? Our World in Data (OWID). <https://ourworldindata.org/what-are-drivers-deforestation>; Skidmore, M., et al. (2021). Cattle ranchers and deforestation in the Brazilian Amazon: Production, location, and policies. Global Environmental Change. V. 68. DOI: <https://doi.org/10.1016/j.gloenvcha.2021.102280>. <https://www.sciencedirect.com/science/article/pii/S0959378021000595>.
- 17 United Nations Framework on Climate Change. (UNFCCC, 2015). Paris Agreement. https://unfccc.int/sites/default/files/english_paris_agreement.pdf.
- 18 Fry, J., Neff, R., Martin, B., et al. (2016). John Hopkins Center for a Livable Future. A Response to Dr. Frank Mitloehner's White Paper, 'Livestock's Contributions to Climate Change: Facts and Fiction.' <https://clf.jhsph.edu/sites/default/files/2019-04/frank-mitloehner-white-paper-letter.pdf>; Collaboration Platform on Agriculture. (2022). USDA-DG AGRI Virtual Event on Strategies to Reduce GHG Emissions from Livestock. <https://www.fas.usda.gov/sites/default/files/2022-12/CPA%202022%20Livestock%20Summary.pdf>; IFC. (2022). IFC Practices for Sustainable Investment in Private Sector Livestock Operations. https://www.ifc.org/wps/wcm/connect/industry_ext_content/ifc_external_corporate_site/agribusiness/priorities/sustainable+livestock/practices-for-sustainable-investment-in-private-sector-livestock-operations.
- 19 Kim, B., et al. (2015). The importance of reducing animal product consumption and wasted food in mitigating catastrophic climate change. Johns Hopkins Center for a Livable Future Report prepared for United Nations Conference of the Parties 21 (COP21); Bajželj B, et al. (2014). Importance of food-demand management for climate mitigation. Nature Climate Change. V. 4(10), pp. 924-929. DOI:10.1038/nclimate2353; FAO. (2013). Tackling Climate Change Through Livestock: A Global Assessment of Emission and Mitigation Opportunities. <https://www.fao.org/3/i3437e/i3437e.pdf>.
- 20 Manmeet, K. (2021). Smallholder farmers: the backbone of food security. World Food Programme (WFP). <https://www.wfp.org/publications/smallholder-farmers-backbone-food-security>.
- 21 FAO. (2022). Global Livestock Environmental Assessment Model (GLEAM) 3.0. https://foodandagricultureorganization.shinyapps.io/GLEAMV3_Public/; Ritchie, Hannah. (2021). "Cutting Down Forests: what are the drivers of deforestation?". Our World in Data. <https://ourworldindata.org/what-are-drivers-deforestation>; Benton, T. et al. (2021). February. "Food System impacts on biodiversity loss". Chatham House. https://www.chathamhouse.org/sites/default/files/2021-02/2021-02-03-food-system-biodiversity-loss-benton-et-al_0.pdf; FAO. (2019). Water use in livestock production systems and supply chains: Guidelines for assessment (Version 1). Livestock Environmental Assessment and Performance (LEAP) Partnership. <https://www.fao.org/partnerships/leap/publications/en/>; Animal Legal Defense Fund. (2021). "Urging the EPA to Regulate Factory Farms' Air Pollution". <https://aldf.org/case/urging-the-environmental-protection-agency-to-stop-giving-factory-farms-a-free-pass-on-air-pollution/>; FAO. (2006). "Livestock's Long Shadow". Livestock, Environment, and Development (LEAD) Initiative. <https://www.fao.org/3/a0701e/a0701e.pdf>; Grùère, G., Shigemitsu, M. (2021). Measuring progress in agricultural water management: Challenges and practical options. OECD Food, Agriculture and Fisheries Papers. No. 162. <https://doi.org/10.1787/52b4db7e-en>.
- 22 Dumas, P., Wirsenius, S., et al. (2022). Inter-American Development Bank. Options to achieve net-zero emissions from agriculture and land use changes in Latin America and the Caribbean. <https://shs.hal.science/halshs-03760573/document>.