Climate Finance Roadmap

For Livestock in Latin America and the Caribbean

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CLIC

CLIMATE POLICY INITIATIVE

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ABOUT CPI & CLIC

Climate Policy Initiative (CPI) is an analysis and advisory organization with deep expertise in finance and policy. Our mission is to help governments, businesses, and financial institutions drive economic growth while addressing climate change. CPI has seven offices around the world in Brazil, India, Indonesia, South Africa, the UK, and the US. The ClimateShot Investor Coalition (CLIC) is a global coalition working to accelerate and scale finance for low-carbon, climate-resilient, and nature-positive agriculture and food systems globally. CPI is the Secretariat of CLIC.

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RELATED CPI WORKS
Blended Finance Playbook for Agrifood Systems (2025)
Landscape of Climate Finance for Agrifood Systems (2025)
Climate Finance Roadmaps (2024)
The Triple Gap in Finance for Agrifood Systems (2024)
The Climate Finance Gap for Small-Scale Agrifood Systems (2023)
Landscape of Climate Finance for Agriculture, Forestry, Other Land Uses, and Fisheries (2022)
Sustainable Finance Flows to India's Agriculture Sector (2025)
Landscape of Climate Finance for Land Use in Brazil 2021–2023 (2024)

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DEFINITIONS

Concessional capital refers to funding provided at terms more favorable than market rates, such as low-interest loans or grants, which can reduce the cost of capital for private co-investors in a transaction (CPI 2024f).

Credit guarantees are commitments by a third party to cover a portion or all of a loan's repayment in case of borrower default. They reduce the lender's risk, encouraging lending to sectors or borrowers that might otherwise be deemed too risky (Ledwell 2024).

First-loss capital is a form of investment where certain investors agree to absorb initial losses, providing a cushion that protects other investors. This structure is designed to attract additional investment by reducing perceived risk (Investing for Good 2024).

Foreign exchange (FX) hedging tools are financial instruments used to protect against currency risk arising from fluctuations in exchange rates.

Natural capital accounting is a method of calculating the value of natural resources and ecosystem services, integrating them into national accounts. This approach helps in understanding the economic contribution of natural assets (World Bank 2025).

Outcome-based financing ties the disbursement of funds to the achievement of specific, measurable outcomes. This approach ensures that funding is contingent upon delivering predefined results, promoting accountability and effectiveness (World Bank 2023).

Patient capital is capital with longer repayment periods that allow private investors with shorter-term commitments to invest by aligning investment timelines (CPI 2024f).

Refinancing mechanisms refer to the strategic replacement or restructuring of existing financial commitments to secure more favorable terms, access additional capital, or provide exits for certain investors (WEF 2018).

Tiered capital structures involve layering different types of capital (e.g., grants, concessional debt, commercial debt) to align with varying risk-return profiles of investors. This approach is commonly used to attract private investment by mitigating risks (Investing for Good 2024).

Value chain anchored lending is a financing model in which loans to producers (e.g., farmers or livestock keepers) are secured and structured around their relationships within the commodity value chain. For this, the loan repayments are often deducted directly from payments made by buyers to producers, lowering default risk (Max Mattern and Rossana Ramirez n.d.).

EXECUTIVE SUMMARY

Sustainable livestock systems require actionable climate finance roadmaps to enable more actors to invest effectively and at a greater scale, particularly in emerging markets. CLIC estimates that less than USD 240 million in climate finance goes to global livestock systems, resulting in a USD 181 billion funding gap. The underfunding of livestock systems, which comprise <0.01% of total funding for agrifood systems, is outsized even in the context of the trillion-dollar funding gap to agrifood systems. Agrifood systems received short of USD 100 billion in climate finance in 2021/22, less than 10% of the USD 1.1 trillion required annually until 2030 to reduce emissions and build resilience (CLIC 2025).

This roadmap focuses on livestock systems in Latin America and the Caribbean (LAC) and aims to leverage this sector's outsized potential for climate mitigation and resilience. Despite being responsible for both millions of rural livelihoods and over half of greenhouse gas (GHG) emissions in the region, LAC livestock systems receive little to no climate investment, presenting untapped opportunities for action. Sustainable practices can strengthen resilience both at the producer level, by reducing exposure to climate shocks and market volatility, and at the system level, by improving nature outcomes more widely.

Realizing the mitigation and adaptation potential of the livestock sector in LAC will help sustain it as a key source of livelihoods and food security. The region hosts 28% of global animal production, producing 23% of the world's beef and 21% of its poultry (FAO 2024). In response to expected growth in both global population and income, food production is projected to rise by almost a third by 2050, with some emerging markets and developing economies (EMDEs) expected to double their food production (USDA 2025). By the end of the decade, demand for animal protein is forecasted to increase by 20% from 2020 levels. As meat consumption is unlikely to fall, at least in the near term, measures to reduce emissions in the sector must be deployed.

Unlocking livestock systems' climate and development benefits requires overcoming longstanding challenges. Existing livestock practices are often misaligned with climate and biodiversity goals, often favoring intensive production or fragmented, short-term projects. We define sustainable livestock practices as those that optimize environmental protection, animal welfare, and socioeconomic outcomes, while minimizing GHG emissions, soil degradation, and water pollution (see Box 1).

Instruments to finance climate-smart and nature-positive practices in this complex and localized space are lacking. Private investment is especially limited due to misaligned project investment profiles and investor risk and return needs. Appropriate derisking mechanisms, innovative financing tools, and enabling policies can dramatically advance action.

CLIC has used CPI's new [Climate Finance Roadmaps](#) framework, released in 2024, to chart a path to scaling sustainable investment for livestock systems in LAC. This first pilot of the framework sheds light on factors that create misalignment between investor preferences and climate investment needs. The roadmap exercise then identifies opportunities for strategic intervention, indicating where policy and financial tools could be used most effectively to unlock further investment. It also explores the roles that private and public actors can play to address these barriers, including through enabling activities and capacity building.

KEY FINDINGS

INVESTMENT BARRIERS AND RISKS

Understanding barriers to sustainable investment is key to developing strategies to close climate finance gaps. We map out six factors that impact finance providers in the region: governance, financing, physical climate, market, infrastructure, and nature risks. Alongside these, we also analyse the usual investment horizon, average ticket size, and returns of livestock-related investments, to better understand the sector's potential and constraints. Some of these risks and attributes have long hindered development finance for agriculture, such as underdeveloped financial markets and small project sizes. Others are more specific to climate finance, including limited technical capacity to estimate and monitor climate impacts, and misaligned climate risk perceptions.

Public investors are currently best suited to make climate investments across livestock systems in all LAC markets, given their higher risk tolerance and development focus. Given the limited availability of public climate funding, especially amid recent significant decreases in public development finance, barriers need to be addressed to enable more private investors to enter the market. The public sector must both help derisk investments and create an enabling environment that facilitates the deployment of capital towards climate- and nature-positive practices for smallholder farmers.

Barriers related to governance and physical climate risks are particularly acute, with a general mismatch in risk-return profiles in LAC climate livestock investments, especially in small farms. Private funders are better placed to invest in large farms in Brazil and Mexico, which generally have lower physical climate, infrastructure, and governance risks, and optimal ticket sizes. The following broad barriers to investment were observed across the LAC region:

- **Increasing frequency of physical climate risks intensified by El Niño:** Limited capacity to mitigate heat stress, declining forage quality and quantity, and insufficient irrigation and water storage may start threatening the long-term viability of small farms. While large farms have better infrastructure and climate-controlled facilities, limited livestock insurance across all LAC markets and farm types exacerbates vulnerability to physical climate risk.

- **High governance risks:** Several LAC countries pose high governance and regulatory risks for investors due to frequent policy shifts, inconsistent land tenure systems, and weak institutional capacities. Corruption and security challenges can raise transaction costs and reduce profits. Public subsidies for the agriculture and livestock sector also tend to distort markets in the region.

- **Macroeconomic instability, currency fluctuations, and financing risks**: Currency volatility and inflation erode profitability and the predictability of returns, hindering both domestic and international investors from financing sustainable agriculture initiatives. This has most affected Argentina, where the peso lost two-thirds of its value between 2018 and early 2020, with inflation hovering around 30%.

- **Geopolitical headwinds heightening market risks:** While LAC livestock producers have benefited from strong global demand and integration into international supply chains, headwinds in global trade threaten to disrupt this. This would particularly affect Mexico, which directs approximately 89% of its agricultural exports to the US. The US' imposition of additional tariffs on farm products could make Mexican livestock products less competitive, resulting in decreased

demand and further deterring investment. Additionally, changing supply chain regulations, such as the EU Deforestation Regulation, will increase trade transaction costs for farmers.

Recognizing and addressing these constraints is key to designing targeted interventions that bridge the agrifood climate funding gap. Understanding risks and investor preferences helps to align capital with feasible opportunities. While many of the above risks broadly apply to general finance for livestock systems, they are often exacerbated for climate investments, which often aim to deploy newer practices, with more precise reporting requirements and implementation challenges requiring innovative business models.

FINANCIAL AND POLICY SOLUTIONS

To bridge the investment gap, ecosystem-wide changes are needed to improve policy and regulatory stability, enhance institutional capacity, and scale financial derisking tools. We model two indicative scenarios to explore how different interventions could drive such change: one including improved finance strategies (IFS), and another including both improved finance and policy strategies (IFPS). By examining the impact various financial mechanisms and policies have on investor alignment, we devised recommendations for key actors, as presented in Table E.S. 1.

Targeted financial tools, such as the use of guarantees in blended finance structures, can reduce governance and financing risks, especially for large farms in Brazil and Argentina. However, even with such interventions, small farms in all examined markets remain reliant on public funding, highlighting the need for policy and institutional reforms to address structural risks, rather than solely relying on concessional capital to catalyze private investment. Additionally, while localized solutions can create lasting change, instruments should be designed with both the flexibility to adapt to local circumstances and be grounded in replicable frameworks. Furthermore, pairing targeted policy solutions, such as the mainstreaming of extension and technical assistance, with improved financial instrument design can further reduce risks and strengthen investor alignment, particularly for small farms.

The solutions highlighted in these scenarios will not reach their full potential without enhanced ambition and willingness from private investors and policymakers. Investors must look beyond short-term returns and actively engage with blended structures and long-term risk mitigation strategies, leveraging existing evidence on what works. At the same time, the public sector must create an enabling environment, going beyond existing structures and approaches. Building institutional capacity, strengthening governance mechanisms, and creating political incentives that prioritize sustainable development outcomes for the livestock sector are all required to address systemic issues in the sector. Without this dual commitment, interventions risk remaining fragmented and insufficient.

The upcoming COP 30 conference in Brazil presents a major opportunity to further center sustainable livestock systems within the climate and nature agenda for Latin America and the Caribbean. This COP can serve as a platform to elevate successful policy innovations, signal serious political commitment, and attract catalytic blended finance for transformative change across the region. Elevating livestock systems at COP through new Nationally Determined Contributions (NDC), investment roadmaps, and regional partnerships, can help unlock the financial and policy support needed to transition the sector.

Table E.S.1: Recommendations to advance climate investment in livestock in LAC

Financial Solutions	Policy Solutions

Action area	Public levers	Private levers

1. Implement blended finance approaches	• Governments can establish tiered capital structures with **concessional first-loss** positions to facilitate finance deployment to livestock farmers.
	• Development finance institutions (BNDES) and multilateral development banks can offer **concessional guarantee facilities** for livestock investments.
		• **Outcome-based financing mechanisms** tied to relevant metrics (e.g., increased productivity per animal, animal health improvements, silvopastoral practice implementation).
		• **Technical assistance facilities** alongside investment vehicles that provide:
		  • For large-scale systems, methane reduction through genetics and additives, and on deforestation-free approaches.
		  • For small-scale systems, animal health and productivity improvements, and support in deploying on-farm climate and nature positive practices (e.g., silvopastoral systems).

2. Develop derisking tools	• **Credit guarantees** and **first-loss capital** to improve financing possibilities for livestock farmers. Incentivize local financial institutions to extend credit to small- and medium-scale producers. • **Patient capital** with 5-10 year repayment time frames to allow livestock farmers to financially benefit from the practices they implement (e.g., increases productivity from silvopastoral systems). • Expand access to **FX hedging tools** and **local currency credit facilities** tailored for livestock farmers to reduce exposure to currency volatility, especially for feed, veterinary inputs, and debt servicing. Support intermediaries that can aggregate demand and offer cost-effective hedging solutions at the farm level.	• **Insurance products** for climate-related livestock risks (e.g., pests and diseases risks linked to poor feed and water quality/availability due to climate hazards).
3. Establish supportive regulatory environments	• Adopt standardized **climate reporting requirements** to streamline livestock investment assessments and improve comparability. • Embed **natural capital accounting** into livestock-related policies and planning to capture ecosystem impacts and benefits. • Align **procurement, certification, and trade policies** to reward sustainable livestock practices and incentivize market access. • Support research that measures the impact of livestock measures on methane released and/or carbon sequestered, to facilitate the deployment of the most effective climate and nature-positive practices.	

Action area	Public levers	Private levers
4. Promote diverse and inclusive financial service providers	• Combine **policy mandates with origination incentives** to help offset lender costs and perceived risks, stimulating credit flow. • Incentivize local lenders to consider **credit for livestock farmers** to increase the overall size of the lender universe (e.g., through fiscal incentives provided to FI revenues stemming from agriculture loans). • **Refinancing mechanisms** to allow early-stage investors to exit investments.	• Design **financing products** aligned with livestock farmers' seasonal cash flows to improve repayment capacity and reduce default risk. • Offer **livestock-specific loans** with flexible terms that reflect biological production cycles and market volatility. • Invest in **digital financial services** tailored for remote livestock producers to expand access to credit, payments, and financial literacy tools. • Support **value chain anchored lending models** where producers receive credit tied to a value chain and buyer companies (e.g., dairy sellers) deduct loan repayments directly from payments to producers, to derisk investments and facilitate credit access for ranchers.
5. Reduce information asymmetries and transaction costs	• Develop **case studies** of successful financing mechanisms (e.g., in the state of California). • Work with potential credit providers to help them understand climate and nature risk and mainstream those concepts in their agricultural portfolios.	• Develop **livestock investment performance databases** to improve risk assessment, benchmark returns, and attract more capital to the sector. • Support **investor knowledge platforms** and **peer-learning networks** to share best practices and derisk livestock investments through collective insights.
6. Improve data availability and quality	• Implement **integrated satellite systems** for livestock monitoring, climate projections, and land administration. • Standardize **climate risk assessment tools** and establish **open-access climate data platforms**.	• Create **integrated databases** with financial and environmental information. • Support **producer-level data collection systems** to improve data quality.
7. Create strategic public-private partnerships	• **Joint financing facilities** for public infrastructure that enable ranchers to access intermediaries and markets better. • Launch **research consortia** for climate-smart livestock practices that go beyond methane to focus on areas such as, carbon sequestration potential in pastures, water pollution, and deforestation. • Invest in **physical connectivity infrastructure** (e.g., roads, rail, ports).	• Establish **shared extension service delivery models** through PPPs to lower costs and expand technical reach to livestock farmers. • Support **value chain partnerships** between farmers and intermediaries to derisk credit provision and formalize access to finance for livestock farmers.

CONTENTS

1. INTRODUCTION

Agrifood systems require actionable roadmaps to guide key actors to deploy climate finance more effectively. Global climate flows for these systems—reaching almost USD 100 billion in 2021/22 (CLIC 2025)—are dwarfed by the investment needs. Global agrifood systems require USD 1.1 trillion annually until 2030 to get on track for meeting emissions reduction and climate resilience targets (CPI & FAO 2024). To help address such gaps, a new climate finance roadmap framework from Climate Policy Initiative (CPI 2024a) was developed to highlight existing investment barriers, ways in which financial tools can bypass them, and the potential for enabling activities such as policy making and capacity building.

CLIC has applied this framework to explore ways to unlock climate finance for livestock systems in Latin America and the Caribbean (LAC), which are highly vulnerable to climate change. These systems support millions of livelihoods in the region and are particularly vital in LAC's emerging markets and developing economies (EMDEs). In addition to food and income, livestock systems provide fertilizer, draft power, and resilience benefits such as improved soil health and income diversification in the face of climate variability (LD4D 2024).

This report explores why livestock systems in LAC receive little to no climate finance flows and are especially neglected in proportion to their GHG reduction potential, as well as their vulnerability to climate hazards. It also sets out options for finance providers and public actors to create a better enabling environment, which can unlock new finance flows for these practices.

Box 1. Defining agrifood systems, livestock systems, and sustainable livestock practices

Agrifood systems are the processes and actors that convert natural resources and the environment into benefits and costs for humans through agricultural production and agro-industries (Campanhola and Pandey 2019). A full definition can be found in CLIC's Landscape of Climate Finance for Agrifood Systems (CLIC 2025). The scope of this report excludes the role of agrifood intermediaries, such as meatpackers and traders that buy livestock as part of their supply chains. CLIC will look to analyze supply chain agrifood climate finance in future work.

Livestock systems include terrestrial, domesticated animals raised in agricultural settings to produce commodities such as meat, milk, eggs, and hides (FAO 2018). We define sustainable livestock practices as those that optimize environmental protection, mitigate climate impacts, animal welfare, and socioeconomic outcomes, while minimizing GHG emissions, soil degradation, and water pollution (FAO 2023).

Sustainable livestock practices include five broad investable categories: agroforestry/silvopastoralism[1], sustainable feed production, agriculture extension, manure management, and grasslands management. These sustainable interventions categories were built by leveraging sources such as previous CPI work on sustainable livestock practices (FAIRR 2025) and wider literature. Section 6 provides more details on these practices and enablers, and examples of market-rate and below-market-rate opportunities across these five categories.

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1   Silvopastoral systems are a subset of agroforestry systems, defined as the integration of trees and shrubs in pastures with animals for economic, ecological and social sustainability.

Livestock systems account for about 15% of global GHG emissions (FAO 2017) and over half (52%) of emissions within agrifood systems (Figure 1) and require additional research to help finance a mitigation path for the sector. Livestock manure management and enteric fermentation are significant producers of methane, a gas with a global warming potential 27 times that of CO_2 over 100 years (GHG Protocol 2024). Other livestock-related activities driving GHGs include deforestation, soil degradation, feed production, transportation, and packaging.

Figure 1: Livestock and agriculture emissions as a share of global emissions
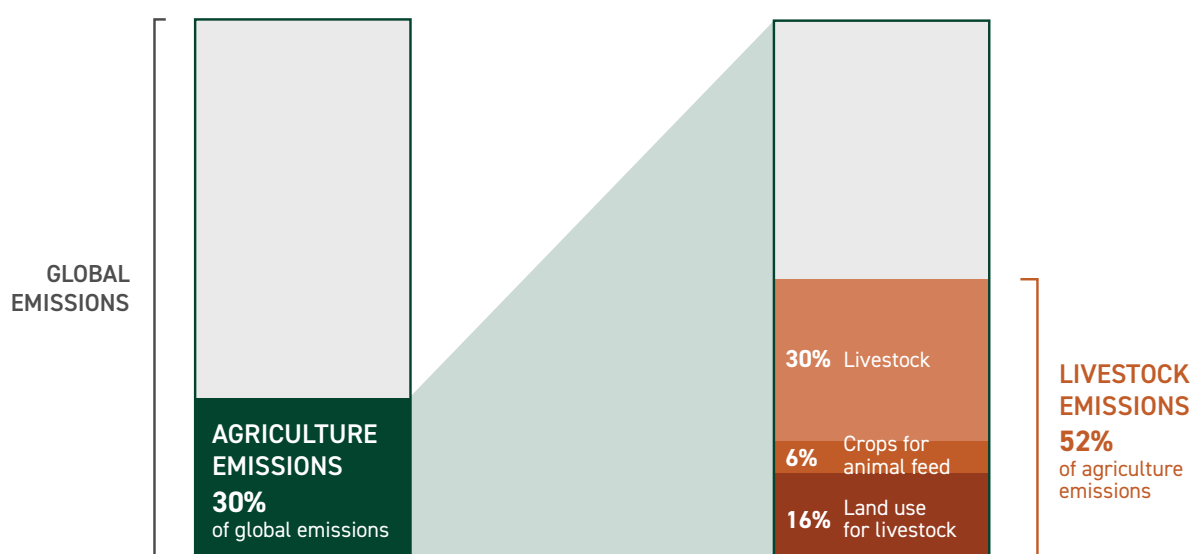
Source: *CPI analysis based on Poore and Nemecek (2018)*

In Latin America and the Caribbean (LAC), Agriculture, Forestry, and Land Use Change account for 54% of emissions (Figure 2). Within AFOLU, livestock systems are responsible for approximately half of these emissions, or 28% of total regional emissions (World Bank et al. 2022). Livestock emissions stem from two primary sources: 53% comes from enteric fermentation, manure management, and land degradation; and 47% from further land use conversion. With cattle ranching accounting for 72% of Brazil's deforestation and 11% across Argentina and Paraguay, the region holds great potential for livestock-related climate and nature-positive action (Ritchie 2021, El País 2022). Restoring pasturelands would significantly support climate mitigation and biodiversity.

Figure 2: Share of emissions in LAC, by sector, 2021

| 1.4% |
| 2.2% |

| 29.4% | 24.5% | 12.6% | 6.7% | 6.4% | 6.4% | 5.6% | 4.9% | | |

Land-use Change and Forestry

Agriculture

Transportation

Fugitive Emissions

Waste

Electricity / Heat

Manufacturing / Construction

Industrial Processes

Buildings

Other Fuel Combustion
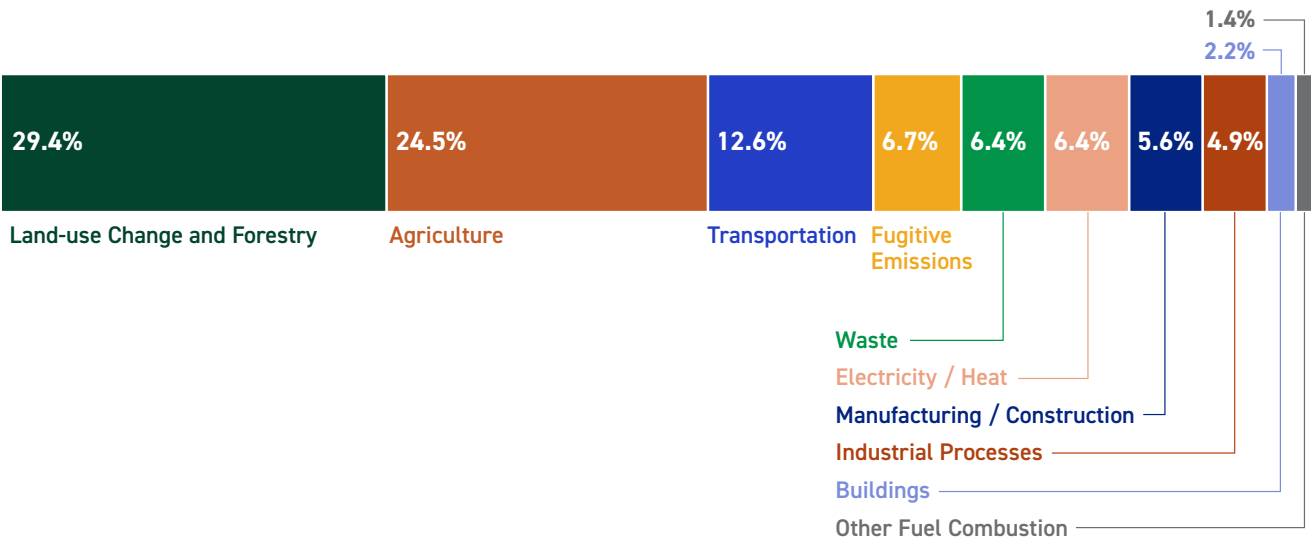
Source: *Climate Watch (2021)*

Sustainable livestock systems are shockingly underfunded despite their critical role in enabling climate mitigation and adaptation, protecting nature, and supporting rural livelihoods. CLIC estimates that less than USD 240 million or less than 0.01% of global climate finance goes to global livestock systems currently, resulting in a USD 181 billion funding gap (Figure 3).[2] The funding shortfall is primarily due to sustainability risks (such as methane emissions, animal welfare issues, and health concerns), limited capacity for capital deployment, a lack of awareness and know-how surrounding sustainable practices, as well as fragmented policy environments.

Figure 3: Estimated annual climate finance needs, flows, and gaps for the global livestock sector
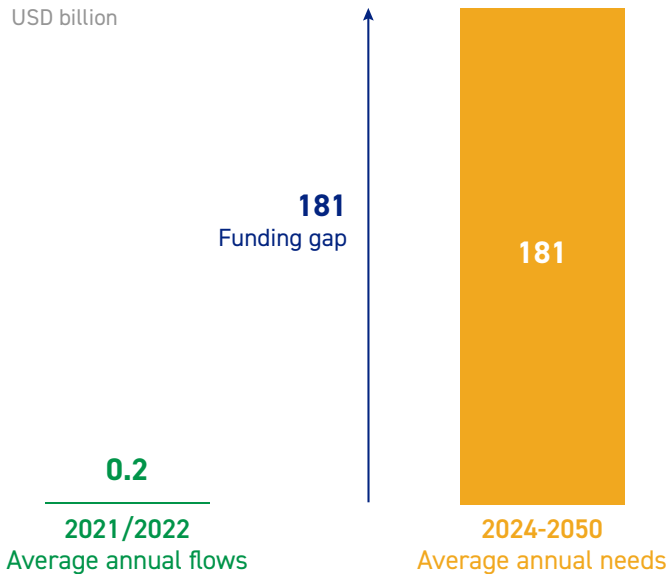
USD billion

181
Funding gap

181

0.2

2021/2022
Average annual flows

2024-2050
Average annual needs

Source: *Adapted from FAIRR (2025) and CLIC & FAO (2024). This is a conservative estimate of climate finance for the livestock sector, acknowledging limitations in data collection and reporting.*

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2   Figure 2 presents a conservative estimate of climate finance for the livestock sector, acknowledging limitations in data collection and reporting.

Finance flows for sustainable livestock are extremely limited in LAC, averaging USD 100 million a year across 2021/22, though data gaps limit analysis (Figure 4). With a funding gap of USD 23.2-25.2 billion, estimated flows must increase up to 255 times for a transition to sustainable livestock systems in the region. Limited public government spending, as well as data gaps in the private sector make this a likely underestimate of the finance being deployed. However, we still see a significant gap by 2030 by calibrating data with CPI's Brazil landscape (see Annex 7).

Figure 4: Estimated annual climate finance needs, flows, and gaps for the LAC livestock sector

USD billion

23.2 to 25.2
Finance gap

25.3

Estimated missing flows

2
0.1

2021/2022
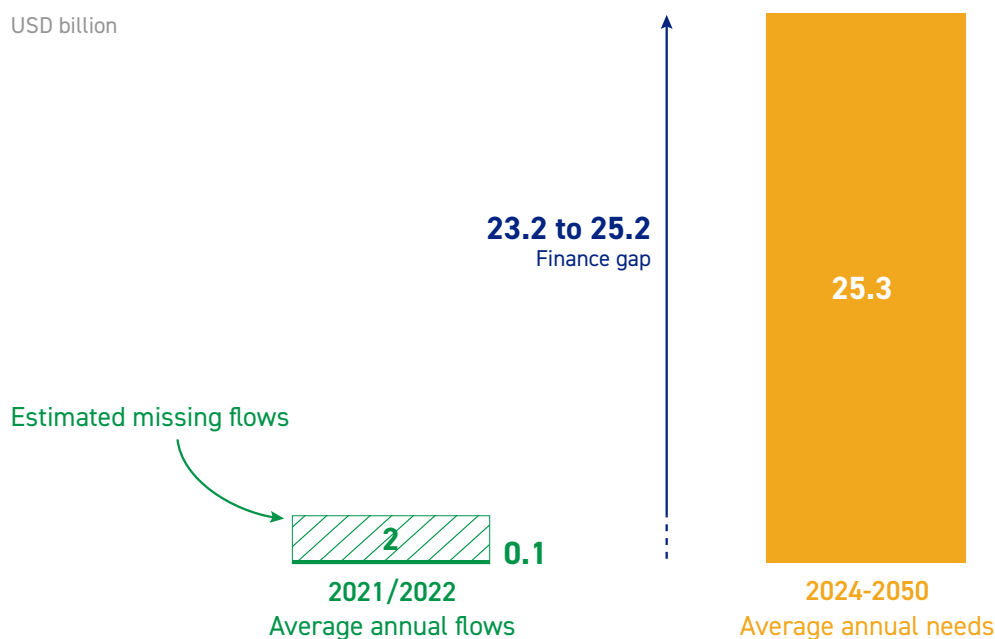Average annual flows

2024-2050
Average annual needs

Source: *Adapted from FAIRR (2025) and CLIC & FAO (2024). This is a conservative estimate of climate finance for the livestock sector, acknowledging limitations in data collection and reporting.*

Current livestock investments support both intensive and extensive production systems, which contribute significantly to deforestation and biodiversity loss. Livestock grazing drives around 40% of global forest loss, and up to 75% in South America (FAO 2020). Intensive cattle and non-ruminant systems also contribute indirectly to deforestation through their demand for feed. Despite this, financial flows continue to favor these systems, raising concerns for both climate and biodiversity goals (FAIRR 2025).

Interventions aiming to deal with these issues remain fragmented and project-based, leading to only marginal benefits. In Latin America, climate-related livestock initiatives often lack continuity and fail to build on previous efforts. New projects frequently overlook existing structures and lessons learned, which reduces efficiency and limits long-term impact. Greater transparency in regulation and stronger safeguards against corporate interference in the livestock sector could help shift incentives. This could unlock more innovative and climate-aligned financial products for livestock farmers (ISF 2025).

Moreover, current financing instruments are unsuited to funding complex, localized, and nascent sustainable livestock systems. Smallholder farmers face structural barriers to finance, such as a lack of collateral and widespread risk aversion among banks. Existing financial products typically

feature mismatches in loan size, tenure, and repayment schedules, making them ill-suited to the realities of livestock systems. Credit is also rarely paired with technical assistance (TA) to ensure effective implementation, and when it is, coordination is weak. This disconnect undermines efforts to ensure that loan recipients adopt sustainable practices. There is an urgent need for tailored approaches such as results-based financing, revenue-sharing models, and long-term concessional loans to address this misalignment. Just as critically, finance must be integrated with high-quality TA, so that producers can implement sustainability improvements that qualify them for these specialized loan products.

While these localized solutions can create lasting change, climate finance cannot solely rely on bespoke transactions. Despite their effectiveness, there is a need to move beyond purely innovative or highly customized deals, which can be resource-intensive and difficult to replicate. To close the financing gap, the livestock sector must prioritize the development of adaptable financial models that retain flexibility for local conditions but are grounded in replicable frameworks. These models could integrate both tailored credit and technical assistance in a way that can be scaled across regions and producer types.

Achieving this requires a coherent and forward-looking strategy that improves the enabling environment. We leverage the [CPI Climate Finance Roadmaps Framework](#) (CPI 2024a) (Figure 5) to yield high-level insights on the roles that private and public actors can play to address key barriers to sustainable investment in the LAC livestock sector. The report is shaped around the following sections:

- **Section 2** defines the scope of analysis and methodology used;

- **Section 3** assesses investment risks and barriers, investor preferences and characteristics, and the suitability of private and public investors for the sector;

- **Section 4** identifies financial and policy solutions to address investment risk and barriers and unlock investment for the sector in the future;

- **Section 5** models the impact these interventions could have on the future investor and capital mix by enabling greater investor alignment;

- **Section 6** provides insights on what investment opportunities in sustainable livestock systems can look like, both at market and below market rates;

- **Sections 7 and 8** conclude the analysis and provide a set of recommendations for public and private actors to effectively and efficiently enhance investment in the sector moving forward.

2. METHODS AND SCOPE OF ANALYSIS

2.1 METHODS

This analysis draws upon [CPI's Climate Finance Roadmap Framework](#), with adaptations due to data limitations and to accommodate the idiosyncrasies of the LAC region and its livestock sector. This process maps the main barriers to climate finance for LAC livestock systems, based on a matching exercise of investment characteristics and investor preferences. After setting the scope of markets examined, we assess investment risks and attributes against investor preferences, assigning a "suitability score" to map the level of alignment between the two dimensions. This mapping exercise highlights key barriers for investors across the markets analyzed, enabling us to pinpoint the most promising solutions to overcome them. Finally, we develop three future scenarios to explore the different capital and investor mixes that these solutions could enable. The steps of analysis are outlined in Figure 5.

Figure 5: The climate finance roadmap framework
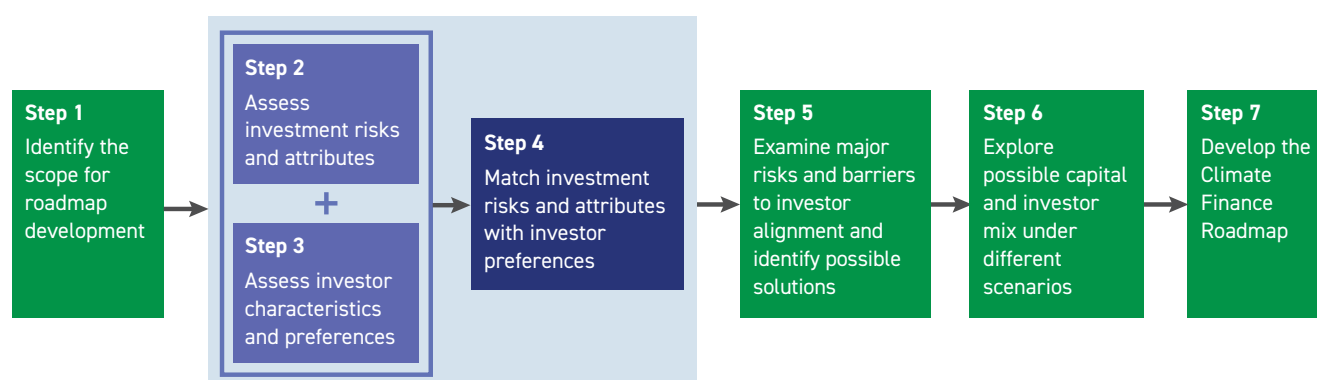
Source: *CLIC, adapted from (CPI 2024a)*

2.1 SCOPE OF ANALYSIS

To facilitate our analysis, we categorize LAC livestock systems into seven markets based on geography and farm size. Given the region's enormous landmass, varied topography, and rich biodiversity, its countries have some of the world's most diverse and complex farming systems (FAO and World Bank 2001). Our four geographical areas for analysis, in order of market size, are Brazil, Argentina, Mexico, and "other countries in LAC". These geographical groupings aim to account for divergences in market size, production focus (import or export), and the size of their domestic livestock sectors.

We further consider variation in farm size, splitting our geographical groups into small-scale and large-scale farms. Breaking down our regions by farm size is crucial, as the investment needs and possibilities for these farm types are significantly different. For example, Brazil's large farms are

split between 2.5 million farms under 10 hectares (occupying 50% of farmland) and 50,000 farms of 1,000 hectares or more (occupying 48% of farmland) (IBGE 2017). To simplify the analysis, we excluded large farms in countries such as Colombia, Uruguay, Chile, and others in the region, as their share of regional meat production is relatively lower than that of Brazil, Argentina, and Mexico, which collectively account for up to 80% of meat production in the region.

The resulting seven markets are shown in Table 1, and farm characteristics and sub-regional differences are further explored in Annex 6.

Table 1: Categories of analysis

Geographical groups	Brazil	Argentina	Mexico	Rest of LAC
Farm size	Small farms Large farms			Small farms

While we cannot account for each country's specificity in this analysis, we strove for a balance between breadth and depth of insight in this report. We provide an example of the state of the enabling environment for sustainable livestock practices in Brazil, highlighting the unique challenges and solutions being deployed at the national level in the region (see Box 2). These idiosyncrasies reflect the complex policy, financial, and agricultural landscapes that exist in each of the countries in the region.

Box 2: The livestock sector in Brazil

As Brazil's meat production continues to rise, the country is focused on boosting productivity and promoting integrated agriculture systems, while also recovering degraded pasturelands. Brazil alone accounts for half of LAC meat output, with beef production recently surpassing 10 million slaughtered head in a single quarter in 2024 (Mann 2024). This growth signals a rise in methane emissions and additional pressure on biomes.

Brazil's farming landscape is highly diverse. In the south, agriculture is more consolidated and structured. Smallholders often operate through cooperatives, have greater access to credit, and benefit from more established infrastructure and technical support. By contrast, farmers in the northeast tend to face greater exposure to climate risks, are generally less integrated in formal markets, and often lack access to credit and institutional support.

In addition, large commercial farms dominate Brazil's agricultural output. While these operations are typically better equipped to adopt new technologies, comply with environmental regulations, and secure financing, they also contribute disproportionately to land use change and associated environmental pressures.

Brazil has a relatively strict policy environment for agrifood systems to achieve zero deforestation by 2030 and reinforce the urgency of scaling up sustainable practices. The Forest Code, for instance, requires landowners to preserve a portion of native vegetation, with the percentage varying by biome.

However, applying these policies on the ground faces challenges, including illegal cattle ranching, unresolved land rights, weak enforcement, and strong lobbying interests (CPI 2021) In the Amazon, land grabbing to expand ranching is a major deforestation driver (CPI 2021), with large government operations targeting illegal cattle farms in recent years.

To address these issues, Brazil's National Agriculture Plan (Plano Safra) includes the ABC+ Program, which aims to reduce livestock emissions through climate-smart agricultural practices. The government also launched the National Program for the Conversion of Degraded Pastures (PNCPD) in 2023, which aims to transform low-productivity pastures into sustainable agricultural and forestry systems. Early evidence of the impact of these plans is mixed (see Box 4), highlighting challenges for the successful financing and implementation of sustainable agriculture practices.

3. INVESTMENT RISKS AND INVESTOR PREFERENCES

3.1 INVESTMENT RISKS AND ATTRIBUTES

Understanding the barriers to climate finance is key to developing strategies to close the investment gap. Many of these barriers have long affected development finance for agriculture, such as underdeveloped financial markets and small project sizes. Others are more specific to climate finance, including limited technical capacity to develop and monitor climate impacts, and misaligned climate risk perceptions (CLIC 2025).

Based on a literature review and expert feedback, we identified six main risk categories affecting sustainable investments in LAC livestock systems (see Table 2). A full description of these categories is provided in Annex 1. These risks are generally applicable to investments in the sector, but are often exacerbated for sustainability investments, where reporting requirements are stricter.

Table 2: Investment risks of the LAC livestock sector

Risk	Examples of impact on the livestock sector
Governance	• **Political instability and weak rule of law** may affect the future value of all investments, reducing investor certainty. • **Unfavorable policies, laws, and regulations**, such as trade restrictions on livestock and related products, can reduce profitability and deter investment. • **Subsidies for unsustainable farming practices** and a lack of incentives for climate-smart solutions may drive investment to high-emission livestock systems. • **Unclear land tenure** can lead to illegal deforestation, land grabbing, and internal population displacements. It can also disincentivize farmers from investing in climate solutions on their land. • **A lack of monitoring and oversight of on-farm practices** increases the risk that sustainable investments do not have the anticipated outcomes, which can deter investment.
Financing	• **Weak and underdeveloped financial systems**, especially in rural areas in LAC, limit refinancing and liquidity, while inadequate legal protections for lenders increase default risks. • **Local currency** fluctuations in countries like Argentina and Brazil can escalate repayment costs for foreign loans. • **Livestock revenue** is often seasonal and vulnerable to climate, disease, and price volatility, making income uncertain**.** This reduces investor confidence and increases reliance on concessional finance. Reticence in implementing new farming practices amongst farmers can also hamper expected revenue and impact.
Physical climate	• **Rising temperatures** impact livestock productivity, altering feedstock quantity and quality, while heat stress directly affects animal health and disease outbreaks. These risks raise insurance costs and lower the creditworthiness of agribusinesses, making financing more difficult. • The increase in **frequency of climate-related hazards,** such as extreme weather events and changing rainfall patterns, threatens livestock health, productivity, and farmer livelihoods, increasing risk for investors.
Market	• The **size and projected growth** of the economy influence overall demand for livestock products and investment in the sector. Smaller economies and slow growth may limit market expansion and reduce investor confidence. • **Shifting consumer and market** (e.g. reduced meat and dairy consumption) and **trade dependencies** (e.g. Mexico's reliance on US markets) can increase exposure to market risks. • **Changing international market demands**, as supply chain regulations take place, could increase the scrutiny of livestock investments.

Risk	Examples of impact on the livestock sector
Infrastructure	• **Poor infrastructure** (e.g., unpaved roads, limited cold chains, and sparse slaughter or milk collection facilities) raises transaction costs and spoilage rates. • A **cumulation of infrastructure risks** might increase upfront costs and limit access to funding.
Nature	• **Deforestation, water scarcity, and soil degradation** may reduce livestock productivity and increase reliance on irrigation or purchased feedstock, ultimately leading to higher costs. • **Environmental risks** raise operational costs and increase investment requirements to maintain ecosystem services essential for livestock and agribusiness.

Source: *CPI analysis and expert interviews. Risk categories adjusted from CPI (2024a).*

Similarly, we analyze the attributes of various livestock-related investments to understand the sector's potential and constraints further. Investment attributes describe characteristics that influence the investment's attractiveness and investor appetite. We consider three relevant climate investment attributes: investment horizon, average ticket size, and returns (see Table 3). These attributes are specific to sustainable investments and highlight key barriers that investors face when considering sustainable investments in the livestock sector.

Table 3: Climate investment attributes of the LAC livestock sector

Attribute	Examples of impact on the livestock sector
Investment horizon	• **Long payback periods** for sustainable livestock investments, such as silvopastoral systems or genetic improvements, may not align with investor timelines that prioritize shorter-term returns. • **Climate adaptation investments** often require 5-10 years to demonstrate financial returns, creating mismatches with conventional financing terms. • Regenerative practices like soil carbon sequestration deliver benefits gradually over decades, requiring **patient capital** that many investors cannot provide.
Average ticket size	• **Small and medium-scale producers** dominate the sector but require financing below the minimum ticket size of many institutional investors and impact funds**.** • **Aggregation challenges** arise as institutional investors have large minimum investment costs or prefer larger investment sizes. Bundling many small loans increases transaction costs and complexity.
Returns	• **Perceived low returns** on sustainable livestock investments compared to sectors like renewable energy reduce investor interest despite significant climate mitigation potential. • **Return uncertainty** due to lengthy implementation periods for climate-smart practices creates challenges in financial modeling and investment decision-making. • **Limited monetization pathways for environmental benefits** (such as, carbon sequestration, biodiversity, water conservation, price premiums) reduce overall returns on sustainable livestock investments compared to conventional practices with externalized environmental costs.

Each investment risk and attribute has been assessed and scored through a literature review and expert consultations, with consideration of relevant indicators. Figure 6 shows the results of this analysis for the seven LAC markets, highlighting difference in risks across the region. Annex 1 provides more information on the relevance of those investment risks and attributes, how they are defined, and indicators used to analyze each.

Figure 6: Investment risks and attributes of the LAC livestock sector

Risk level	Very low	Low	Medium	High		Attributes	More commercial	Less commercial

	Brazil		Argentina		Mexico		LAC
Farm size:	Small	Large	Small	Large	Small	Large	Small
RISKS							
Governance	Med	Med	High	High	Med	Med	Med
Financing	Low	Very low	Med	Low	Med	Low	High
Physical climate	Med	Low	High	Med	High	Med	High
Market	Low	Low	Low	Low	Med	Med	Med
Infrastructure	Med	Low	Med	Low	Low	Very low	Med
Nature	Med	Low	Med	Low	Med	Low	Med
ATTRIBUTES							
Investment horizon (years)	10-15	5-10	10-15	5-10	10-15	5-10	10-15
Ticket size (USD million)	0-1	5-10	0-1	5-10	0-1	5-10	0-1
Return (%)	5-15	15-25	5-15	15-25	5-15	15-25	5-15

Large and small farms face differentiated challenges. Large farms generally have greater capacity to absorb and mitigate risks, while smallholder farmers often lack collateral beyond their animals and have limited experience with financial institutions (World Bank 2021). Small farms' financial constraints limit their investment in quality inputs, hindering their productivity and growth (World Bank 2021). While large farms are generally more commercially viable, their returns may still be too low to attract investment for sustainable practices, particularly in the absence of public support. Given their higher exposure to international markets, large farms also may face heightened market risks due to geopolitical instability, shifting trade relations, and fluctuations in global commodity prices (USDA 2019). The following broad risk trends were observed across the LAC region:

- **Increasing frequency of physical climate risks intensified by El Niño:** In 2024, severe drought in Mexico led to substantial livestock and agricultural losses (Caso 2024). Similarly, Argentina's 2018 drought resulted in a 0.8% reduction in GNP due to agriculture and livestock losses (Bert et al. n.d.). Small farms in the LAC region have limited capacity to mitigate heat stress, and face declining forage quality, and insufficient irrigation and water storage. Large farms have better infrastructure and climate-controlled facilities. The limited availability of livestock insurance compared to crop insurance across all markets and farm types exacerbates vulnerability to physical climate risk (IFAD 2022).

- **High governance risks:** Many LAC countries face high governance and regulatory risks due to frequent policy shifts, inconsistent land tenure, and weak institutional capacities. For example, corruption and security challenges raise transaction costs and reduce profits in Mexico. Public subsidies for the agriculture and livestock sector in Mexico and Argentina also tend to distort

markets, increasing governance risks (OECD 2023a).

- **Macroeconomic instability, currency fluctuations, and financing risks**: Currency volatility and inflation erode profitability and the predictability of returns, making it difficult for both domestic and international investors to justify financing sustainable agriculture initiatives. This has most affected Argentina, where the peso lost two-thirds of its value between 2018 and early 2020, with inflation hovering around 30% (World Bank 2022, 2024b).

- **Geopolitical headwinds heightening market risks:** Livestock producers in the LAC region have benefited from strong global demand and integration into international supply chains, though headwinds in global trade threaten to disrupt this. This would particularly affect Mexico, which directs approximately 89% of its agricultural exports to the US (IFPSRI 2025). US imposition of additional tariffs on agricultural products at the time of writing in May 2025 could make Mexican livestock products less competitive, resulting in decreased demand and further deterring investments (Galeana 2025).

While the identified investment risks and attributes paint a picture of the challenges associated with supplying capital to sustainable livestock projects in LAC, demand-side constraints must also be considered when designing financial instruments. For instance, cattle ranchers are often reluctant to implement sustainable silvopastoral practices due to high initial costs, limited technical knowledge, and insufficient national coordination. Carefully designed financial instruments, as well as increasing alignment between public policies and private capital, can steer investments to such underserved areas (see Box 3).

Box 3: Colombia Silvopastoralism SPV

The Global Innovation Lab for Climate Finance supported the development in 2024 of a special purpose vehicle (SPV for Silvopasture scaling) to promote a transition from conventional to sustainable ranching in Colombia (CPI 2024f). The instrument builds on over a decade of research on implementing silvo-pastoral systems across different ecosystems and farm types, with various climate, nature, and economic benefits (World Bank 2020a). Silvopastoral systems are agroforestry arrangements that combine trees, fodder, and grass for animal nutrition and other uses.

In Colombia, less than 25% of agricultural loans go to ranching (FINAGRO 2021). Development and commercial financial institutions have limited reach in remote areas with informal farming leading to significant distrust in banking among Colombian farmers (FINAGRO 2021).

To address this, the SPV directly finances the initial on-farm implementation of silvopastoral systems. Its profit-sharing approach ties repayments to productivity gains, using a model that ranchers are familiar with. Repayments have a one-year grace period to enable farmers to benefit from the productivity gains before repaying loans. The vehicle also supports the development of grouped carbon credit projects, improved climate resilience, productivity income for farmers, and fosters ecosystem health.

The SPV to date has raised USD 1.5 million for pre-operational expenses. While it is too early to judge success, its design highlights how it aims to deal with the key financial barriers faced by cattle farmers in a specific local context.

3.2   INVESTOR PREFERENCES AND CHARACTERISTICS

Investors' distinct preferences influence their ability and willingness to invest in specific regions and sectors, determining the landscape of available capital. We consider four preferences to build up our investor profiles: risk tolerance, preferred investment horizon, preferred ticket size, and return requirements (see Annex 2). We also consider qualitative factors such as investor objectives, regulatory mandates, preferred instruments, and available capital when assessing the likelihood of investing in sustainable livestock practices in LAC. Together, these preferences and factors affect the ability and willingness of investors to provide capital to specific projects and sectors. We map our assessment of risk tolerance and preferences for public investors (Figure 7) and for private investors (Figure 8). Further details on how risk tolerance and preferences were assessed can be found in Annex 2.

Public entities generally have higher risk tolerance than private investors. Governments and national and international DFIs are key investors in sustainable livestock systems due to their higher risk appetites and focus on promoting development and economic growth. Public actors provide the bulk of climate finance to the sustainable livestock sector, often through grants, subsidized credit (see Box 4), or blended finance mechanisms that derisk private participation (CLIC 2025). In some cases, DFIs and MDBs may also operate with commercial mandates to funnel capital toward development outcomes. Without such interventions, private capital remains limited for smallholder agriculture across the region.

Figure 7: Public investor risk tolerance and investment preferences within the LAC livestock sector

Risk level	Very low	Low	Medium	High		Attributes	More commercial	Less commercial

Public

PREFERENCES	Bilateral DFIs	Climate Funds	Export Credit Agencies	Governments	Multilateral DFIs	National DFIs	Sov. Wealth Funds
RISK TOLERANCE							
Governance	Med	Med	Med	High	Med	Med	Low
Financing	Med	High	High	High	Med	Med	Med
Physical climate	High	High	Med	High	Med	High	Med
Market	Med	Med	High	High	Med	Med	Med
Infrastructure	Med	Med	Med	High	Med	Med	Low
Nature	Med	High	Med	Med	Med	Med	Med
ATTRIBUTES							
Investment horizon (years)	5-15	5-20	1-10	10-30	5-20	5-15	10-20
Ticket size (USD million)	5-500	1-200	1	1-1000	1-300	1-1000	10-200
Return (%)	5-15	4-15	4-12	2-5	4-15	4-15	6-10

Private investors typically have a lower risk appetite. Commercial financial institutions, private equity (PE) firms, and venture capital (VC) investors have limited climate investment in LAC agrifood systems beyond some flows for large farms (New Climate Institute 2022). PE and VC firms have concentrated their investments in ag-tech, which accounted for 3% of all VC deals in the region (LAVCA 2023). Notably, some listed Brazilian soy and cattle companies have also attracted capital from public markets and asset managers (Tracxn 2025). With the right incentives and derisking strategies, private investors, particularly commercial financial institutions, can be encouraged to direct capital to the livestock sector.

Commercial lending is particularly scarce for small farms, due to high transaction costs, dispersed geographies, and limited collateral. These barriers further highlight the importance of concessional capital for the sector.

Figure 8: Private investor risk tolerance and investment preferences within the LAC livestock sector

Risk level	Very low	Low	Medium	High		Attributes	More commercial	Less commercial

Private

PREFERENCES	Asset Managers	Commercial FIs	Corporations	Endowments / Foundations	Insurance Companies	Pension Funds	Private Equity	Venture Capital
RISK TOLERANCE								
Governance	Low	Low	Med	Med	Low	Low	Low	Med
Financing	Low	Low	Med	Med	Low	Low	Low	High
Physical climate	Med	Med	Med	Med	Med	Med	Med	Med
Market	Low	Low	High	Med	Low	Low	Low	High
Infrastructure	Low	Med	Med	Med	Low	Low	Low	Low
Nature	Med	Med	Med	Med	Med	Med	Med	Med
ATTRIBUTES								
Investment horizon (years)	1-20	1-10	3-20	10-30	20-40	15-30	5-10	5-10
Ticket size (USD million)	5-200	1-300	1-300	1-50	20-200	20-200	10-200	0-200
Return (%)	4-12	5-15	7-15	5-7	3-5	5-8	15-25	15-35

Box 4: Rural Credit in Brazil

Rural credit is a key source of climate finance for agrifood systems in Brazil, averaging USD 9.9 billion of climate finance per year between 2019 and 2021 (CPI 2024e), 16% of the total volume of rural credit operations in the country during the period. Livestock-related activities are included within PRONAF and the RenovAgro (Low Carbon Agriculture) program, which provide credit lines for livestock farming. This finances farm production, investment, and trade, helping farmers to manage seasonal risks.

Policy is an important enabler of Brazil's rural credit. The Brazilian Agricultural Plan (Plano Safra) mandates public and private financial institutions to direct a portion of their funds to rural credit. This applies to commercial banks, credit cooperatives, and development banks, ensuring a flow of private funds to the sector. Funding allocations, credit conditions, and (subsidized) interest rates are set annually through the plan.

Better aligning agricultural finance, including for livestock, with climate action could enhance sustainability in Brazil. Current environmental incentives exist in programs like RENOVAGRO (formerly the ABC Program), which offer targeted credit for sustainable agriculture, recovery of degraded pastures, and integrated crop-livestock-forestry systems, encouraging private lenders to align with environmental priorities. This program has produced limited results: credit access has not significantly improved pasture quality or shifted land use, and in some cases, land conversion from native vegetation preceded credit disbursement, undermining the program's deforestation prevention goals (CPI 2024e). Strengthening systems for monitoring, technical assistance, and risk management could unlock more effective and scalable adoption of sustainable livestock practices (CPI 2024e).

3.3 INVESTOR SUITABILITY ASSESSMENT

Understanding both investment risks and investor preferences enables us to assess the suitability of different investor types in different markets. Each investor type was assessed on its suitability to provide financing in each market, considering investment risks and attributes as well as investor preferences and characteristics. Each investor market was assigned a suitability score between 1-4 (see Table 4), which produced the investor suitability matrix (see Figure 9)[3] . See Annex 3 for more details on the suitability scoring system and assessment.

Table 4: Investor suitability score

Rating	Description
4	**Good match:** Risks and attributes match the preferences of this investor type, indicating suitability to invest without any market interventions needed. This generally applies to investors with a higher risk tolerance than the market level.
3	**Suboptimal match:** The investor type is able and willing to invest despite some misalignment in risks and attributes. This generally applies to investors who have the means to invest in the region with some support, such as concessional finance and technical assistance.

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3   This analysis addresses broad categories, and as such, there may be exceptions to the findings presented. It should be understood as high-level analysis highlighting broad areas in need of improvement, rather than an exhaustive depiction of the current investment landscape.

Rating	Description
2	**Misaligned but addressable match:** Risks and attributes are misaligned with investor preferences, but policy and financial instruments have been used to solve the misalignment in other countries within LAC, but not necessarily in the country being examined.
1	**Misaligned but potentially addressable match:** Risks and attributes are misaligned with investor preferences, with only limited examples of successful developments in the region. Additional evidence of finance deployment and better policy levers are required.

Figure 9. Investor suitability matrix for climate investments in the LAC livestock sector

	Brazil		Argentina		Mexico		Rest of LAC
	Small Farms	Large Farms	Small Farms	Large Farms	Small Farms	Large Farms	Small Farms
PUBLIC							
Climate / Public Funds	4	4	2	2	4	4	4
DFIs (National)	4	4	2	2	4	4	3
DFIs (Multilateral)	4	4	2	2	3	4	3
DFIs (Bilateral)	3	4	2	2	3	4	3
Export Credit Agencies	4	3	2	2	3	3	3
Governments	4	3	4	3	4	3	4
Sovereign Wealth Funds	1	3	1	2	2	2	1
PRIVATE							
Asset Managers	1	3	1	2	2	2	1
Commercial Financial Institutions	3	3	2	2	2	2	2
Corporations	4	4	2	2	3	4	3
Endowments / Foundations	4	3	2	2	3	3	3
Insurance Companies	1	3	1	2	2	2	1
Pension Funds	1	3	1	2	2	2	1
Private Equity	1	3	1	2	2	2	1
Venture Capital	1	4	1	2	3	4	1

Scoring key: **4** Good match | **3** Suboptimal match | **2** Misaligned but addressable | **1** Misaligned but potentially addressable

Public investors received the highest matches across regions, highlighting the prevailing barriers to private climate investment across livestock systems in all LAC markets. Several "good" matches were found with public investors, especially in Brazil and Mexico. The large number of "misaligned but potentially addressable" matches points to opportunities for policy and financial instruments to catalyze finance from these investor types in different markets. Most public investors receive lower suitability scores for both small and large farms in Argentina due to the country's high governance risks. The country's high inflation and changes in export tax rates (OECD 2023b) demonstrate that only MDBs and local governments appear well-placed to invest.

Given the various investment barriers in the region, public investors are generally better suited than private investors to provide climate finance to LAC livestock systems, particularly for small farms. Development mandates and higher tolerance for physical climate, nature, and market risks make public investors best suited to climate investments in livestock in LAC, which they currently dominate. They are also generally the best suited to invest in small farms because of their willingness to finance smaller projects. Exceptions are national and bilateral DFIs and sovereign wealth funds (SWFs), the latter of which are particularly cautious about governance and physical climate risks and seek larger transactions and returns**.**

Perception of risks in the LAC livestock sector remains high, deterring private investment. Asset managers, PE firms, and commercial financial institutions' conservative risk appetites make them ill-suited to invest in small farms, which have higher physical climate, infrastructure, and financing risks. Considering the decline in overseas development assistance (ODA) and public development finance, the misalignment in private investor sustainability is concerning and highlights that barriers in the market need to be urgently addressed to ensure their participation in the market.

Lower risk tolerance, particularly for governance and physical climate risks, limits the alignment of private finance institutions and the deployment of private capital in the region. For example, Argentina's volatile agricultural policies, including high export taxes (up to 33% on crops like soybeans) and frequent tax fluctuations (5-7 times per year), have severely limited investment. Intermittent export bans on corn, wheat, and beef have further undermined investor confidence (World Bank 2024). In Mexico, physical climate risks such as increasingly frequent droughts and wildfires are affecting agriculture and livestock productivity (Caso 2024). In Uruguay, droughts in 2023 led to a 60% reduction in agricultural yields (Giuliano, Navia, and Ruberl 2024).

The attributes of LAC climate livestock investments do not match those sought by many private investors. Corporations and commercial banks typically target larger ticket sizes and shorter investment horizons than can be realized through these markets (Wheelhouse et al 2024). As a result, investment from these sources is limited, especially in small farms.

Corporations and VC funders are better placed to invest in large farms in Brazil and Mexico, which generally have lower physical climate, infrastructure, and financing risks, and optimal ticket sizes. For example, in Mexico, infrastructure is primarily designed to support export-oriented large-scale farms, where producers have adopted advanced technologies to mitigate key operational risks (Oxford Business Group 2019). Private investors are best suited to support the transition for highly developed farms in Brazil, Argentina, and Mexico, because they can leverage their existing infrastructure, market access, and financial resources to drive efficiency, innovation, and sustainability. Large corporations, including Cargill, Kraft Heinz, and Minerva Foods are already top investors in Brazilian agribusiness (Investor Relations n.d.; Mapa com FAQ n.d.).

Endowments, which have more moderate risk tolerances than other private actors, present better suitability scores across all markets. In most of LAC, including Brazil and Mexico, endowments are a "good" or "suboptimal" match; however, they are "misaligned but addressable" in Argentina, due to high governance and physical climate risks for small farms, resulting in low investment returns. Endowments are projected to provide nearly all tracked private finance in AFOLU (CPI 2024b).

Concessional capital can absorb early losses and provide risk mitigation tools that make these investments more attractive to commercial actors. For example, the IDH Farmfit Fund, a public-private impact fund for smallholder farmers, is supported by actors including banks, development banks, and FMCG companies, and uses guarantees and subordinated loans to combat risks in the smallholder value chains (Farmfit Fund n.d.).

4. FINANCIAL AND POLICY SOLUTIONS

Our investor suitability matrix highlights misalignments that can be addressed by targeted interventions to overcome investment barriers. These interventions aim to unlock capital from investors who are on the verge of being able and willing to deploy funds. A diversified investor mix with greater private participation can reduce the livestock sector's significant climate finance gap, helping to ensure long-term food security and livelihoods in the LAC region in the face of worsening climate hazards.

For both small and large farms, three major barriers inhibit investment in the region: high governance risk, small project ticket sizes, and low expected returns on investment. In many cases, these occur in tandem with other barriers, including physical climate risk and infrastructure risk, signifying the need to address investment barriers jointly. This requires clear policies, innovative financial instruments, and stronger supply chain commitments.

Coordinated solutions are required to address the interconnected nature and scale of risks in EMDEs. This includes efforts to reduce policy, regulatory, and capacity gaps in parallel with financial derisking tools to attract private investors (NGFS 2023). Policy interventions, such as targeted subsidies, regulatory incentives, and PPPs, can help realign investor interest with sustainable livestock financing needs (see Box 5).

This analysis helps pinpoint where targeted interventions are necessary to unlock additional financing. For example, in markets with high political and financial instability, targeted government guarantees and other credit enhancement instruments can help to mitigate risks that typically deter investors, such as private equity funds, pension funds, or asset managers (CPI 2024d). We focus our analysis broadly on two types of solutions: financing approaches and strategies, and policy solutions and enabling environment conditions, described below.

4.1 FINANCING APPROACHES AND STRATEGIES

The financing approaches strategies described below are the structuring tools to design blended finance instruments. These instruments include guarantees, design-stage grants, concessional loans or equity, and risk-sharing instruments such as government-subsidized insurance. They align risk-return profiles to attract private investors, mitigate transaction-specific barriers like high upfront costs or long payback periods, and operate within the boundaries of existing market conditions and policy frameworks.

Engagement with private investors through the catalytic use of concessional finance can help accelerate capital for livestock systems. Blended finance mechanisms typically involve three key investor types: institutional investors that provide large-scale capital and seek market-level returns within risk parameters; impact-driven investors, including DFIs and specialized impact funds that

balance financial returns with measurable development outcomes; and concessional investors such as, donor agencies, philanthropic organizations, and government funds, which provide catalytic capital on below-market terms to enable transformational projects in frontier markets (BII and BCG 2025). Blended finance can align public and private interests, making investments in areas like climate, infrastructure, or agriculture more viable and scalable.

To date, concessional capital has not adequately mobilized climate finance in the livestock sector. Globally, about 50% of tracked climate finance to agriculture is concessional. However, its strategic use to improve the risk-return profile of investments remains limited (CLIC & ISF Advisors 2025). This is primarily due to fragmented deployment approaches and insufficient coordination between donors and private investors.

Greater strategic alignment through coordinated blended finance structures and targeted technical assistance can better leverage concessional capital to crowd in private investment. Blended finance could also be increased to derisk climate investments for agriculture, which receives just 8% of total blended finance flows, far below sectors such as energy (Convergence 2024). Table 5 identifies financing approaches and strategies to increase catalytic finance for the sector and describes the barriers each can help address.

Table 5: Financing strategies to address investor misalignment in the LAC livestock sector

Financing approach or strategy	Potential impact	Barrier or risk addressed								
		Governance	Financing	Physical Climate	Market	Infrastructure	Nature	Investment horizon	Ticket size	Return
Patient capital	Capital with longer repayment periods can align investment timelines to incentivize private investors with shorter-term commitments (CPI 2024f).		■					■		
Refinancing mechanisms	Early-stage investors can exit their investments before project maturity, overcoming misalignments on investment timelines.		■					■		
Pooled investment vehicles	Bundling multiple projects into larger investment vehicles can create opportunities for small investment tickets among institutional investors (Attridge and Getzel 2025).								■	
Concessional capital	Low-interest loans, grants, or accepting below-market returns can reduce the cost of capital for private co-investors (CPI 2024g).	■	■							■
Credit enhancement mechanisms	By accepting more subordinated positions in the capital stack, first-loss capital can improve project risk profiles and investor confidence (IRENA 2020). Guarantees and insurance can also help address specific investment risks.	■	■	■			■	■		■
Expand access to hedging instruments	Instruments such as futures, contracts, and crop insurance, enable producers to manage the financial impact of price fluctuations better. Currency hedging instruments can reduce the impact of volatile foreign exchange rates when funding is provided in hard currencies. This fosters stability and predictability of returns, strengthening resilience to market volatility (NGFS 2023).		■	■	■		■			
Local currency bonds and risk-sharing facilities	Helps mitigate currency risks that discourage foreign investors from engaging in long-term agricultural projects. Reducing foreign exchange exposure can make investments more predictable and resilient.		■						■	

4.2   POLICY INTERVENTIONS AND ENABLING CONDITIONS

Policy interventions, such as targeted subsidies, regulatory incentives, and PPPs, can help align investor interest with sustainable livestock investment in the long term. Enabling environments for climate investment can be created by addressing barriers, providing clear regulatory frameworks, and offering financial incentives that make sustainable livestock practices more economically viable.

Currently, policy solutions in LAC encourage investment through various mechanisms, such as national target setting, private-public partnerships, and results-based payment schemes (see Box 5). While these policies and programs have successfully mobilized capital for pilot projects and early adopters, they often struggle with limited scale, fragmented implementation across government agencies, and insufficient coordination between environmental and agricultural policy objectives.

Most existing policies focus on large and medium producers, with fewer mechanisms specifically designed to address the needs of smallholders, who make up a significant portion of the sector (World Bank 2020b). Greater policy action is needed to address credit access, investment in technological innovation, and the lack of integrated financial support systems. Effective policy frameworks must bundle tailored technical assistance with financial products, ensuring that credit lines are accompanied by capacity building support that addresses the specific needs of different producer types and farm sizes.

Effective policy frameworks in LAC can catalyze private investment by reducing regulatory uncertainty, lowering transaction costs and investment risks, and ensuring long-term commitments to sustainability transitions in the livestock sector. Table 6 outlines policy interventions and enabling conditions to accelerate finance for livestock in LAC and describes the barriers each can help address.

Box 5: Examples of policy support for sustainable livestock investment in LAC

Insurance is key to Brazil's agribusiness sector, including livestock. SUSEP, Brazil's insurance supervisor, released climate-related standards in 2022, providing clarity for insurers on defining and validating index triggers, creating more certainty around payouts and compliance (Kennedys 2023). This was also followed by the country's first parametric climate insurance policy, developed by Newe Seguros as a public private partnership with the National Institute of Meteorology. This policy pays out to cocoa producers in Bahia when a rainfall threshold is exceeded (Kennedys 2023). Collaboration between insurers and the government is key, such as via the Rural Insurance Premium Subsidy Program managed by the Ministry of Agriculture, Livestock and Supply, through which the government partly covers insurance premiums.

Costa Rica's Payments for Ecosystem Services (PES) Program incentivizes conservation, reforestation, and sustainable land use. Funded mainly by a national fuel tax, the program uses satellite monitoring to ensure compliance and support sustainable practices (UNFCCC 2020). It has helped reduce deforestation by encouraging a shift from pasture-based livestock to forest regeneration (Cordoba and Sherman 2023). The PES program is central to Costa Rica's climate and land-use strategy. However, it is oversubscribed and underfunded. As Costa Rica decarbonizes, declining fuel tax revenues threaten program sustainability, prompting exploration of alternative funding sources, like tourism (Cordoba and Sherman 2023).

Table 6: Policy interventions and enabling conditions to address investor misalignment in the LAC livestock sector

Policy intervention or enabling condition	Potential impact	Barrier or risk addressed								
		Governance	Financing	Physical Climate	Market	Infrastructure	Nature	Investment horizon	Ticket size	Return
Environmental regulations through improved climate change monitoring systems	Mandate enhanced climate impact projections and monitoring to strengthen regulatory compliance, improve investment risk assessments, and inform evidence-based national climate policies and NDCs (Morris, Michael et al. 2020; NGFS 2023).			🟩			🟩			
Mandatory ESG standards and climate and nature safeguards	Implement comprehensive ESG requirements for livestock investments, including biodiversity protection measures and climate risk assessments. This can ensure sustainable practices while providing investors with standardized frameworks for evaluating and managing environmental and social risks.			🟩			🟩			
Policy frameworks for agricultural risk management and insurance	Establish transparent regulatory frameworks and information systems that enable insurance companies to operate effectively in agricultural markets, while building farmer awareness and capacity to understand and utilize risk-transfer products as essential business tools rather than additional costs (Morris, Michaelet al. 2020).		🟩	🟩			🟩			
Physical connectivity infrastructure investment	Invest strategically in road, rail, and port infrastructure to enhance the efficiency of supply chains by improving connectivity between food production zones and key markets (Morris, Michael et al. 2020).				🟩	🟩				
Rural digital infrastructure policies	Establish policies to expand internet access and digital connectivity in rural areas, enabling farmers to access data collection tools, automation technologies, and digital financial services that increase productivity and market access.			🟩	🟩	🟩				

| Policy intervention or enabling condition	Potential impact	Barrier or risk addressed								
		Governance	Financing	Physical Climate	Market	Infrastructure	Nature	Investment horizon	Ticket size	Return
Capacity building investment and policies	Develop domestic, nature-positive agri-logistics industries through targeted regulatory policies and strategic capacity building investments to increase the efficiency of food distribution (Ibid).	■	■	■						
Institutional reform policies	Introduce reforms targeting public oversight bodies, land administration authorities, financial regulators, and sanitary inspection agencies to strengthen governance in agriculture by reducing corruption, limiting discretionary power, and enhancing transparency in areas such as land access, subsidies, and food safety (OECD 2022; Sanguinetti 2019).	■								
Land administration system modernization	Adopt remote sensing tools and big data management to improve land tenure security and promote greater accountability in land transactions, enhancing investor confidence (Morris, Michael et al. 2020).	■			■	■				
Land reform policies	Facilitate land consolidation into economically viable holdings, improving investment attractiveness while reducing transaction-related inefficiencies. This can mitigate the risk of unclear property rights, administrative delays, and corruption.	■								
Natural capital accounting (NCA)	Include NCA in national and subnational budgets and planning to enable more sustainable management of environmental assets. This prevents further ecosystem degradation and reduces long-term exposure to nature-related risks (Power, Dunz, and Gavryliuk 2022). It also creates standardized metrics that enable investors to assess environmental risks and access green finance better.			■			■			

Policy intervention or enabling condition	Potential impact	Barrier or risk addressed								
		Governance	Financing	Physical Climate	Market	Infrastructure	Nature	Investment horizon	Ticket size	Return
Digital financial services expansion	Encourage PPPs to build digital infrastructure to improve financial service delivery and reduce transaction costs. This includes expanding mobile-based credit and payment solutions for SMEs, fintech innovations, loan disbursements, and risk evaluation for underserved sectors.		██							
Demand incentivization	Establishing green procurement policies, developing climate-labeled certification programs, and designing preferential trade agreements can stimulate demand for climate-friendly agricultural products. Larger, more predictable markets improve price stability, reduce risk, and enhance investment viability.	██			██					

5. SCENARIO MODELING: IMPACT ON CAPITAL AND INVESTOR MIX

This section assesses how the financial and policy solutions identified in Section 4 could address key barriers to investment in livestock in LAC, improve the suitability scores for some investors, and impact the future capital and investor mix in the region. To illustrate how the interventions could impact investor suitability and subsequently the capital and investor mix in the region, we consider three scenarios:

1. The **business-as-usual (BAU) scenario** assumes no interventions in the market, indicating that the future investor landscape will closely resemble the current one, including the share of public and private finance and catalytic capital. This scenario includes high reliance on public funding, particularly debt, with limited private engagement beyond corporations.

2. The **improved finance strategies (IFS) scenario** is based on the improvement of finance instrument design, leading to more strategic and catalytic deployment of public finance through the finance approaches and strategies described in Table 5. It assumes a greater share of concessional capital in the market, deployed with the intent to derisk and mobilize private capital. Under this scenario, the private sector is engaged through the increased use of blended, catalytic capital by impact-driven and concessional investors, which reduces investment risks to accelerate private investment.

3. The **improved finance and policy strategies (IFPS) scenario** includes the measures of the IFS scenario, as well as public policy reforms to address private sector barriers. In this scenario, both financial mechanisms (Table 5) and policy solutions (Table 6) are implemented. Under this scenario, investments are derisked using catalytic financial mechanisms, while policy interventions provide regulatory clarity and investment incentives, further engaging the private sector and unlocking a more diversified capital mix.

These scenarios do not attempt to forecast future capital deployment, but rather, illustrate what a sustainability-aligned future could look like for livestock systems in LAC. These scenarios highlight what is needed to fill in the climate finance gap and demonstrate the role that the roadmap framework can play in solving the issue (Figure 10). As with all scenario analyses, the value lies not in the individual outcomes but in the differences between them: the shifts that highlight where and how strategic interventions could drive greater impact. We provide an overview of high-level assumptions used for these scenarios (see Box 6) and a full breakdown of how all the scenarios were constructed (see Annex 5).

Figure 10: How the roadmap can address the climate finance gap in the LAC livestock sector
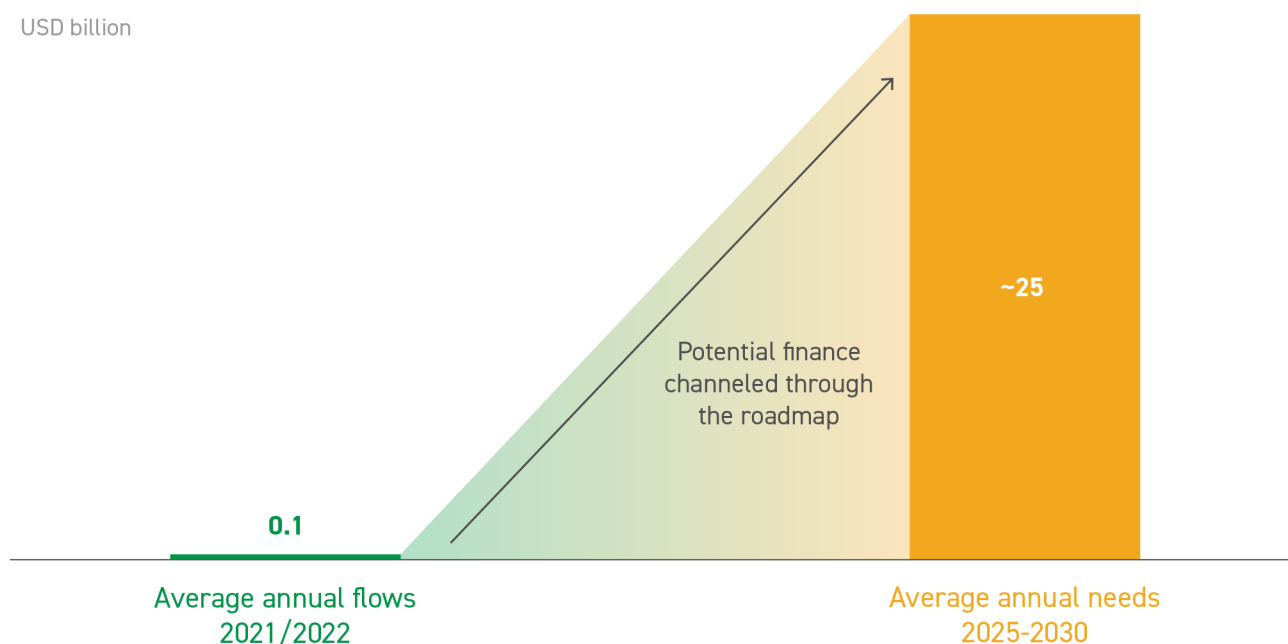
As things stand, a business-as-usual future is overwhelmingly insufficient to meet the staggering climate investment needs of LAC's livestock sector, which requires a yearly investment increase of 11-300 times. Critical and immediate changes are necessary to transform the climate finance landscape in the region and sector. Together, the IFS and IFPS scenarios highlight strategies for carving a better path forward to unlock capital and close the climate finance gap.

Livestock systems in all the markets analyzed currently rely heavily on public investment for both BAU activities and climate action. This is particularly true for small farms, which often exclusively receive public finance. Table 7 shows the shift in the private-public split for each market under our three scenarios. While identifying the ideal public-private and investor mix is beyond the scope of this assessment, the following scenarios illustrate that as catalytic public finance is deployed and policy solutions derisk investments, there may be more interest from private investors.

Table 7: Modeled capital mix (private-public split) under each scenario

		BAU scenario		Improved Finance Mechanism scenario		Improved Finance and Policy scenario	
		Public	Private	Public	Private	Public	Private
Brazil	Small	65-75%	25-35%	55-65%	35-45%	45-55%	45-55%
Brazil	Large	50-65%	35-50%	40-50%	50-60%	40-50%	50-60%
Argentina	Small	85-100%	0-15%	75-85%	15-25%	65-75%	23-35%
Argentina	Large	75-85%	15-25%	65-75%	25-35%	55-65%	35-45%
Mexico	Small	85-100%	0-15%	75-85%	15-25%	65-75%	25-35%
Mexico	Large	75-85%	15-25%	65-75%	25-35%	55-65%	35-45%
Rest of LAC	Small	85-100%	0-15%	75-85%	15-25%	65-75%	25-35%

Box 6: Assumptions behind scenario modeling

All data presented from our modeling is indicative, representing a range of possible futures. We make various assumptions to analyze the shifts away from BAU to scenarios where our recommended financing strategies and policy interventions unlock more diverse private investment:

Full implementation: Modeling under these scenarios assumes that relevant solutions are fully and successfully implemented wherever necessary across markets. Rather than predicting future actions in any given market, this aims to illustrate how targeted financial and policy solutions could address investment risks and investor misalignment to increase capital deployment in the sector.

Qualitative analysis: Our analysis is not based on specific scenario modeling frameworks (e.g., NGFS scenarios) and therefore does not align with a predefined climate outcome (e.g., a 1.5°C target by 2050).

5.1   BUSINESS-AS-USUAL (BAU) SCENARIO

If current investment trends prevail, livestock markets are likely to continue to rely heavily on public funding. Figure 11 highlights the expected capital in the markets analyzed under this scenario. Many investment risks and barriers persist, limiting private participation, particularly for small farms, which continue to rely primarily on investment from governments and DFIs.

Under this scenario, private capital, particularly private-sector equity, is limited, as is public equity. While commercial debt, both private and public, provides nearly all finance to large farms across LAC, small farms show greater reliance on concessional debt and grants. The overall lack of private participation indicates that barriers to investment persist, with a need for further investment derisking measures.

Figure 11: Capital mix for the LAC livestock sector under the BAU Scenario
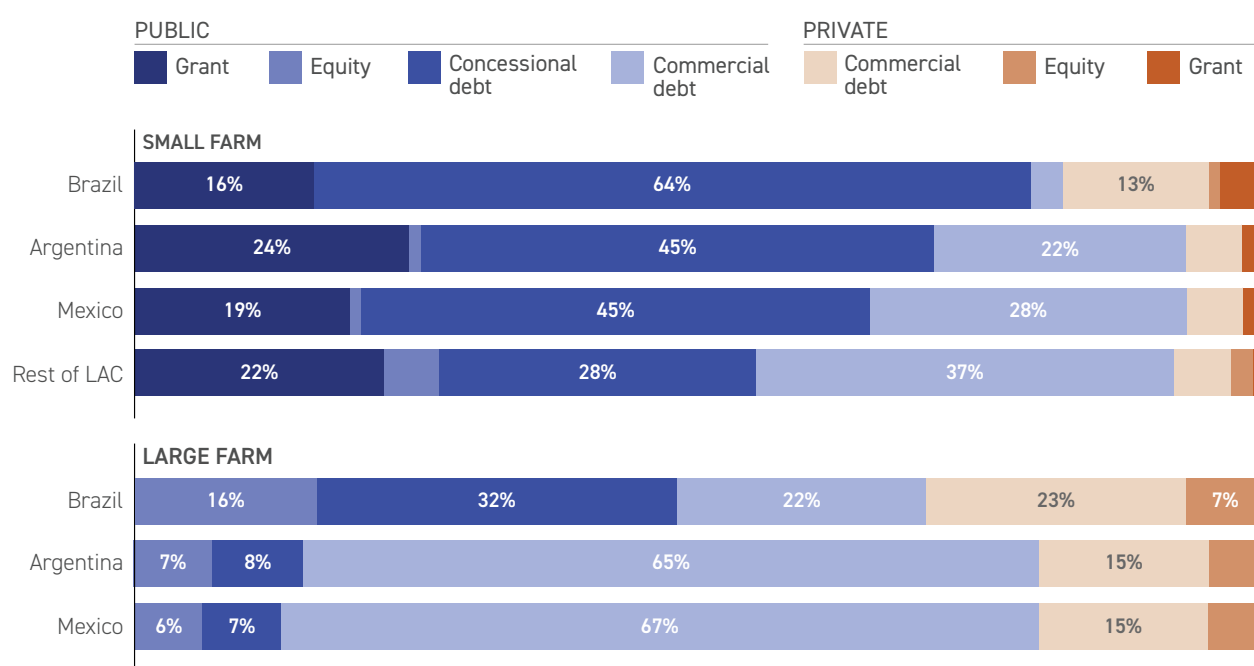
The ongoing reliance on public investment in a BAU scenario highlights the unsustainability and ineffectiveness of this approach to achieve climate finance goals, especially in the context of public funding cuts to development finance. The following two scenarios explore how financial and policy interventions and strategies could unlock more investment by diversifying the capital and investor mix.

5.2   IMPROVED FINANCE STRATEGIES (IFS) SCENARIO

Under the improved finance strategies (IFS) scenario, financial instruments are introduced to target and reduce governance and financing risks and align investment opportunities with investor preferences on time horizon, ticket size, and returns. It demonstrates how public investors can use innovative finance mechanisms to deploy capital more catalytically[4] and increase pathways for private investors to enter the market by demonstrating the viability of projects and reducing perceived risks (ISF 2025), particularly for large farm investors.

Leveraging more efficient ways to deploy capital towards smallholder farmers can significantly expand the universe of possible funders across the region. Figure 12 demonstrates the shift in the investor suitability matrix expected under the IFS scenario, highlighting which investors are best suited to invest. This assumes that the financing approaches and strategies identified in Table 5 are implemented. It is important to note that the table highlights the investment possibilities, i.e., who could be able and willing to invest in livestock in LAC**,** and not necessarily who should invest.

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4   Catalytic refers to the ability of an initial financing to attract additional investments, leading to a multiplier effect that creates greater positive impacts

Figure 12: Investor suitability matrix for the LAC livestock sector in the improved finance strategies scenario

	Brazil		Argentina		Mexico		Rest of LAC
	Small Farms	Large Farms	Small Farms	Large Farms	Small Farms	Large Farms	Small Farms
PUBLIC							
Climate / Public Funds	4	4	3 ↑	3 ↑	4	4	4
DFIs (National)	4	4	3 ↑	3 ↑	4	4	3
DFIs (Multilateral)	4	4	3 ↑	3 ↑	3	4	3
DFIs (Bilateral)	3	4	3 ↑	3	3	4	3
Export Credit Agencies	4	3	3 ↑	3 ↑	3	3	3
Governments	4	3	4	3	4	3	4
Sovereign Wealth Funds	1	3	1	3 ↑	3 ↑	3 ↑	1
PRIVATE							
Asset Managers	1	3	1	3 ↑	2	2	1
Commercial Financial Institutions	3	3	3 ↑	3 ↑	2	2	3 ↑
Corporations	4	4	3 ↑	3 ↑	3	4	3
Endowments / Foundations	4	3	3 ↑	3 ↑	3	3	3
Insurance Companies	1	3	1	3 ↑	2	2	1
Pension Funds	1	3	1	3 ↑	2	2	1
Private Equity	1	3	1	3 ↑	2	2	1
Venture Capital	1	4	1	3 ↑	3	4	1

↑ = improvement in score compared to baseline scenario

Scoring key: **4** Good match · **3** Suboptimal match · **2** Misaligned but addressable · **1** Misaligned but potentially addressable

The above matrix shows how targeted financial strategies and catalytic public finance can reduce governance and financing risks and improve investor alignment. For instance, the use of sovereign guarantees can reduce governance risks across the region, introducing new private investors, such as commercial financial institutions and insurance companies, to be more involved in large farm investment, particularly in Argentina.

Blended finance approaches can reduce barriers to investment by allowing public and private entities to co-invest while absorbing different levels of risk. The IFS scenario can reduce barriers for several public investors, particularly for Argentina's large farms. However, investor suitability, particularly for small farms, is still heavily weighted towards the public sector.

These strategies help align investments with investor preferences on project timelines, ticket sizes, and project return. By offering aggregation, refinancing options, and patient capital, they

further alleviate barriers for investors who prefer shorter project timelines, larger ticket sizes, or larger returns.

As public finance is deployed with greater intent to derisk and mobilize private capital, we assume a greater use of catalytic instruments such as public equity, concessional debt, and catalytic grants (Figure 13). Accompanying financing strategies with practical technical assistance is also crucial to increase institutional capacity and maximize the impact of catalytic capital. See Box 7 for more details on how technical assistance can be used to enhance the impact of innovative financial mechanisms.

Figure 13: Capital mix for the LAC livestock sector under the improved finance strategies scenario
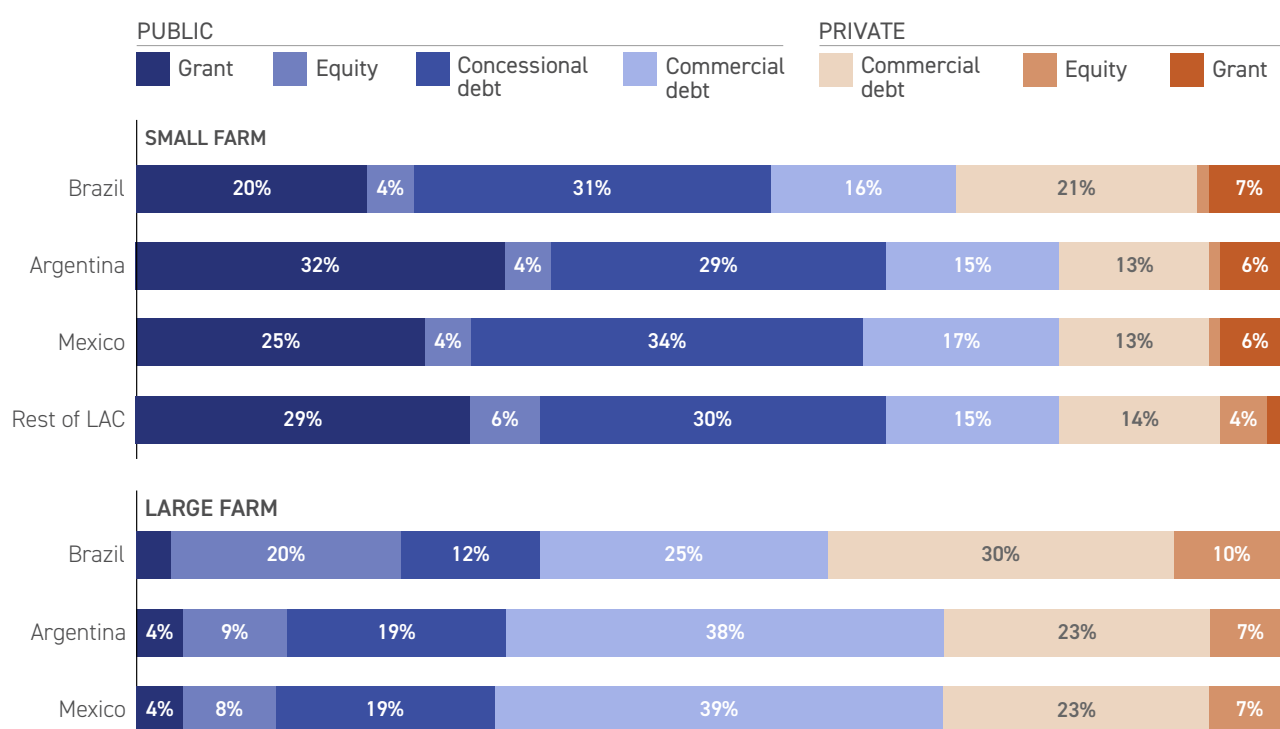
The IFS Scenario demonstrates that financial solutions alone cannot alleviate all investment barriers. While this scenario shows greater private participation than the BAU scenario, chronic barriers stemming from market, infrastructure, and physical climate risk still limit overall private investment, especially for small farms, which experience higher risk levels. Broader policy interventions are needed to target structural risks in the region that cannot be mitigated through transaction-level interventions.

To move towards such a scenario, concessional capital providers must move beyond increasing investment volumes to deploy capital more strategically and catalytically to ensure that their investments address market failures and crowd in additional private capital. Private investors, public financial institutions, and development partners must coordinate to establish appropriate capital structures, risk-sharing arrangements, and investment vehicles that align diverse investor requirements with livestock sector investment. To do so, financing approaches that address timeline mismatches, currency risks, scale constraints, and return expectations must be adopted.

Box 7: Technical assistance for financial mechanisms

Technical assistance (TA) is an essential complementary tool for financial mechanisms. TA refers to non-financial support, which is provided to strengthen the capacity and performance of both the providers and recipients of investment. Often, institutions or funds may not have the expertise to invest in climate solutions and may need support to develop climate-risk assessment frameworks, identify impact KPIs, or provide guidance to their portfolio companies on adopting climate-smart practices.

Similarly, agribusinesses and other producers face barriers to adopting climate-smart practices, such as high upfront costs, limited financial incentives, lack of awareness, and behavioral resistance. They require assistance to implement practices, measure impact, and scale adoption.

Climate transition in agrifood systems requires support beyond financial capital, demanding sustained capacity development and knowledge transfer over time. Research conducted in 2025 by ISF Advisors revealed that investors consistently identify TA as an essential mechanism for reducing investment risks, enhancing operational models, and building greater climate resilience within agricultural enterprises (Husar 2025). Agriculture is the second most frequent sector for technical assistance use, with 27% of transactions including a TA component (Convergence 2023).

CLIC's Blended Finance Playbook for Climate-Resilient Agrifood Systems identifies expanding technical assistance alongside climate innovation as a key "investment play" for concessional investors in the agrifood space. It emphasizes that concessional capital providers are well-positioned to expand TA provision at both the business and fund manager levels (CLIC 2025).

While TA budgets often remain limited and challenging to secure, they represent a powerful risk mitigation tool. By pairing TA with financial mechanisms, investors can address gaps in capacity and capital, creating a more robust ecosystem for climate finance.

5.3   IMPROVED FINANCE AND POLICY STRATEGIES (IFPS) SCENARIO

The improved finance and policy strategies (IFPS) scenario represents an optimal scenario where alignment amongst investors is maximized through both financial and policy solutions that create a stronger enabling environment. It demonstrates how a suite of solutions is needed to address chronic barriers to investment and bridge the climate finance gap. Figure 14 illustrates how introducing the policy solutions outlined in Table 6 to the IFS scenario can address additional market, infrastructure, and physical climate risks. Again, this table does not imply that all actors should and will invest, but rather an increased universe of opportunities for the sector.
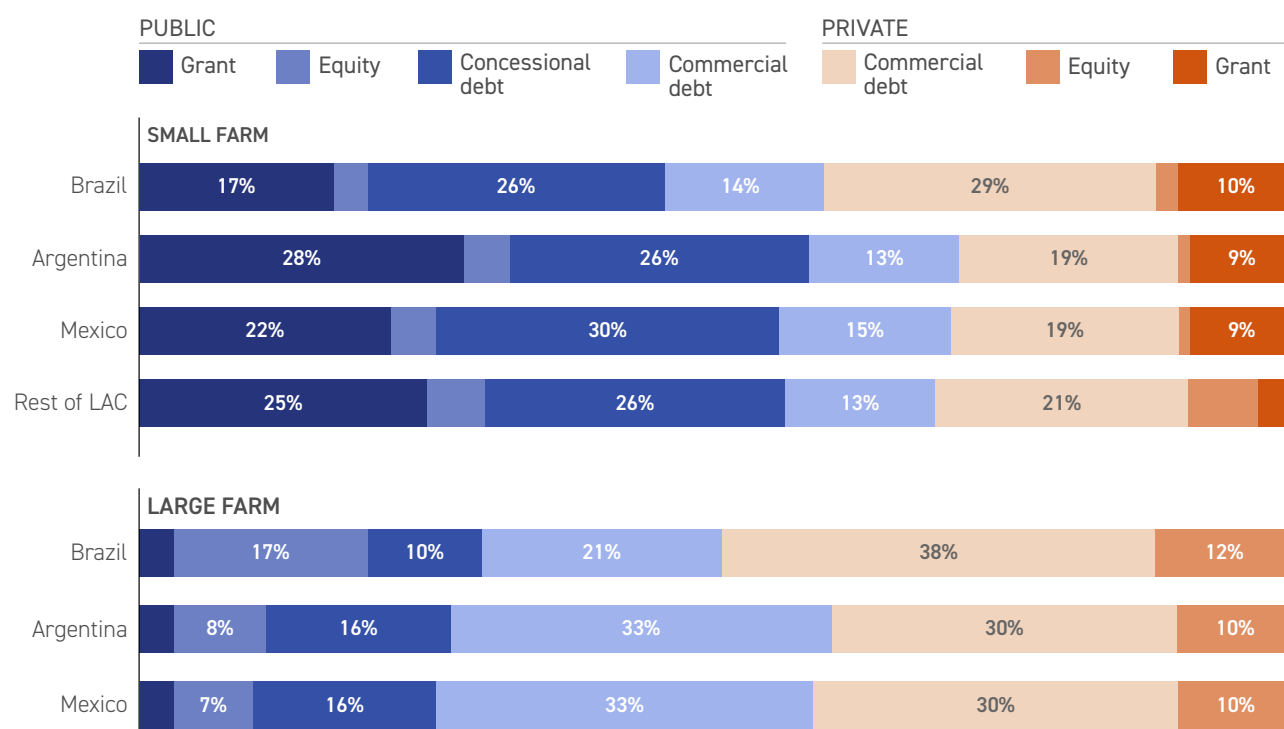
These policies can particularly improve private sector participation in the region's small farms, which are more exposed to climate risks. Improved monitoring, reporting, and verification (MRV), financial risk mechanisms, including parametric insurance, and hedging instruments, can help investors manage physical climate risk and other risks. Furthermore, policies promoting investment in infrastructure and digital services can enhance the attractiveness of investing in both

small and large farms in Mexico. However, physical climate and infrastructure risks in Argentina and Brazil may continue to pose challenges to small farm investment in these regions.

Figure 14: Investor suitability matrix for the LAC livestock sector in the improved finance and policy strategies scenario

	Brazil		Argentina		Mexico		Rest of LAC
	Small Farms	Large Farms	Small Farms	Large Farms	Small Farms	Large Farms	Small Farms
PUBLIC							
Climate / Public Funds	4	4	4 ↑	4 ↑	4	4	4
DFIs (National)	4	4	4 ↑	4 ↑	4	4	4 ↑
DFIs (Multilateral)	4	4	4 ↑	4 ↑	4 ↑	4	4 ↑
DFIs (Bilateral)	3	4	3 ↑	4 ↑	3	4	3
Export Credit Agencies	4	3	4 ↑	3 ↑	4 ↑	3	4 ↑
Governments	4	3	4	3	4	3	4
Sovereign Wealth Funds	2 ↑	3	2 ↑	3 ↑	3	3 ↑	2 ↑
PRIVATE							
Asset Managers	2 ↑	3	2 ↑	3 ↑	3 ↑	3 ↑	2 ↑
Commercial Financial Institutions	4 ↑	4 ↑	4 ↑	4 ↑	3	3	4
Corporations	4	4	4 ↑	4 ↑	4 ↑	4	4 ↑
Endowments / Foundations	4	3	4 ↑	3 ↑	4 ↑	3	4 ↑
Insurance Companies	2 ↑	3	2 ↑	3 ↑	3	3 ↑	2
Pension Funds	2 ↑	3	2 ↑	3 ↑	3	3 ↑	2 ↑
Private Equity	2 ↑	4	2 ↑	4 ↑	3 ↑	3	2 ↑
Venture Capital	2 ↑	4	2 ↑	4 ↑	4 ↑	4	2 ↑

↑ = improvement in score compared to baseline scenario

Scoring key: **4** Good match   **3** Suboptimal match   **2** Misaligned but addressable   **1** Misaligned but potentially addressable

Along with greater private investment, we expect to see a more diversified capital mix. As with the IFS Scenario, with public investors focusing on deploying finance in a way that catalyzes private investment, we expect to see increased public equity and more targeted use of concessional instruments such as grants and debt (Figure 15).

Figure 15: Capital mix for the LAC livestock sector under the improved finance and policy scenario

PUBLIC

■ Grant ■ Equity ■ Concessional debt ■ Commercial debt

PRIVATE

■ Commercial debt ■ Equity ■ Grant

SMALL FARM

	Grant	Equity	Concessional debt	Commercial debt	Commercial debt (private)	Equity	Grant
Brazil	17%		26%	14%	29%		10%
Argentina	28%		26%	13%	19%		9%
Mexico	22%		30%	15%	19%		9%
Rest of LAC	25%		26%	13%	21%		

LARGE FARM

	Grant	Equity	Concessional debt	Commercial debt	Commercial debt (private)	Equity
Brazil		17%	10%	21%	38%	12%
Argentina		8%	16%	33%	30%	10%
Mexico		7%	16%	33%	30%	10%

The public sector must create an enabling environment that goes beyond existing structures and approaches to achieve the IFPS scenario. Building institutional capacity, strengthening governance mechanisms, and creating political incentives that prioritize sustainable development outcomes for the livestock sector are all required to address systemic sectoral issues. In addition to the provision of increased catalytic finance from concessional capital providers, the success of this scenario requires governments to demonstrate their political will to implement reforms, coordinate across agencies, and establish transparent regulatory frameworks that provide private sector confidence while ensuring environmental and social safeguards within the livestock sector.

6. EXAMINING PRIVATE INVESTMENT STRATEGIES

A range of practices exists to support the development of more sustainable on-farm livestock practices, as highlighted in FAIRR (2025). The practices in Table 8 below offer real-world examples of how to reduce emissions, improve animal welfare, and enhance environmental outcomes. Solutions are grouped into five types of on-farm interventions: (i) agroforestry and silvopastoral systems, (ii) sustainable feed production, (iii) agriculture extension, (iv) manure management, and (v) grasslands management; all of which can provide significant climate and nature benefits if invested in and deployed.

FAIRR emphasizes that while technological innovations often receive more attention from investors, nature-based solutions (NbS) are critical to achieving a climate transition. NbS like silvopasture, improved grazing, and agroforestry—approaches that deliver co-benefits for biodiversity and livelihoods while reducing environmental impacts. There is an evident lack of coordination amongst investors towards incentivizing shifts to sustainable practices, even when those can increase productivity and/or income, such as silvopastoral systems (Berania 2021). Recent financial instruments, such as the SPV for silvopastoralism (Box 3), highlight how financial tools can be effectively tailored to reach ranchers and farmers.

The examples below provide valuable insights into what effective livestock sustainability practices can look like at the market and below market levels. They help clarify the types of interventions that merit further support, replication, or adaptation across LAC's livestock systems. These cases can also help guide funders and implementers as they assess the feasibility and scope of various strategies.

Finance and policy design must consider which specific practices or interventions should be supported. Different solutions come with distinct financing needs, risk profiles, and enabling conditions. As such, effective design must align investment structures and policy tools with the nature of the intervention and explicitly identify the barriers that must be addressed to unlock scale and impact.

Table 8: Overview of some investment opportunities at the market and below market rate for sustainable livestock practices

Small farms	Large farms	Common opportunities across scale

Solution	Definition	Examples of market-rate return opportunities	Examples of below-market rate return opportunities
Agroforestry and silvopastoralism systems	The practice of incorporating trees and native vegetation (e.g., shrubs and fodder) in livestock pastures. These systems also incorporate practices such as rotational grazing, water supply management, conservation areas, and ecological corridors. Nature-based interventions, such as managing trees and animals for silvopasture, are less suited to conventional financing instruments and can be challenging to finance.	• Revenue-sharing models with cooperatives based on yield increases • Ecosystem restoration projects with monetizable outputs	• Microloans or grants and technical assistance for tree planting
		• Timber production, carbon and biodiversity credit sales • Ecosystem restoration projects with monetizable outputs	• Supplier finance structures with concessional terms to de-risk the adoption of sustainable practices
			• Grants or concessional capital for early-stage farmer training and technical support
Sustainable feed production	Sustainable feed production includes disassociating production from deforestation, incorporating climate and nature-positive crop practices (e.g., regenerative approaches), and finding alternative sources of high-fat feed (e.g., black soldier flies). This can help conserve resources, reduce emissions, promote biodiversity, ensure animal health, and support long-term agricultural productivity. In some supply chains, such as pig farming, feed production can account for up to 60% of total emissions. This stems mainly from deforestation for feed crops and the use of chemical fertilizers.	• Investment in shared feed-processing equipment (hammer mills, pellet presses, choppers) to pelletize crop residues	• Grant-funded community feed hubs
		• Carbon-linked feed additive innovations with market potential • Participation in premium certified supply chains	• Grant-based support for ecosystem-aligned supply chain development
		• Equity/debt in deforestation-free feed companies	• R&D for novel feed formulations and additives • Pilot funding for sustainable feed systems
Agriculture extension	The provision of on-farm training and advisory services focused on animal husbandry, health, and nutrition, promoting best practices in breeding, disease prevention, and feed management, grazing optimization, and feed production.	• Subscription-based SMS alerts and advisory services	• Philanthropic or concessional funding for rural extension programs • Capacity building for farmer-led cooperatives
		• Investment in digital advisory tools and precision ag platforms	• Capacity building for farmer-led cooperatives
		• Stakes in seed and input companies deploying climate-smart products • Ecosystem monitoring tech startups	• Early-stage support for inclusive service delivery models

Solution	Definition	Examples of market-rate return opportunities	Examples of below-market rate return opportunities
Manure management	Manure management, such as the incorporation of biogas harvesters, composting facilities, slurry treatment, and feed additives that reduce enteric fermentation emissions, improve soil health, reduce pollution, enhance nutrient recycling, mitigate emissions, and support sustainable farming practices.	• Cooperative composting and small-scale biofertilizer production	• Subsidies or blended finance for on-farm biogas systems
		• Biogas and composting facilities with revenue from energy and fertilizer sales • Carbon credit-linked methane capture technologies	
			• Regional technical assistance to comply with low-emission standards
Grasslands management	The strategic management of grazing practices to balance the density, timing, and intensity of livestock grazing to facilitate carbon sequestration.		• Grant funding for biodiversity-focused restoration in non-commercial areas
		• Carbon and biodiversity credit sales tied to improved land management	• Support for upfront certification costs and carbon market access
		• Certification services and MRV platforms • Restoration-focused investment funds	• Derisking vehicles for farmer adoption

Source: CLIC analysis and expert interviews

7.   RECOMMENDATIONS

Unlocking climate finance for livestock systems requires a dual transformation: a more coherent, inclusive, and supportive policy environment and fit-for-purpose financial instruments. Pools of capital exist that could be made available to fund transformational impacts in the livestock sector, but various barriers across markets hinder deployment.

A market-based approach can unlock private sector creativity and efficiency—but this requires strategic government support (ISF 2025). Public institutions play a crucial role in ensuring fair competition, providing catalytic capital, and financing public goods such as extension services, climate data systems, and infrastructure. They can also enact regulations that encourage market forces to protect environmentally important areas, e.g., through the Brazilian Forest Code or the EU Deforestation Regulation, incentivizing sustainable practices. A better enabling environment will be critical to facilitate the deployment of capital.

Table 9 outlines practical interventions to catalyze this transformation across seven key areas. While in the previous two sections we examined solutions through two lenses—financial strategies and policy interventions to investment barriers in sustainable livestock—in the interest of stimulating action, we now present recommendations by actor. We outline the levers available to the public and sectors to implement these policy and financial solutions.

At the center of these recommendations are blended finance approaches and derisking tools. By strategically combining public, private, and philanthropic capital, concessional investors can spearhead initiatives to improve the risk-return profile of livestock investments (CLIC & ISF Advisors 2025). These financial innovations must be supported by coherent policy frameworks, improved data systems, and inclusive financial service providers to ensure equitable access and impact. Together, these interventions can help unlock capital to transform livestock production into a lever for both climate adaptation and mitigation, while securing rural livelihoods across the region.

Table 9: Recommendations to advance climate investment in the LAC livestock sector

Financial Solutions	Policy Solutions

Action area	Public levers	Private levers
1. Implement blended finance approaches	• Governments can establish tiered capital structures with **concessional first-loss** positions to facilitate finance deployment to livestock farmers. • Development finance institutions (BNDES) and multilateral development banks can offer **concessional guarantee facilities** for livestock investments.	• **Outcome-based financing mechanisms** tied to relevant metrics (e.g., increased productivity per animal, animal health improvements, silvopastoral practice implementation). • **Technical assistance facilities** alongside investment vehicles that provide: • For large-scale systems, methane reduction through genetics and additives, and on deforestation-free approaches. • For small-scale systems, animal health and productivity improvements, and support in deploying on-farm climate and nature positive practices (e.g., silvopastoral systems).
2. Develop derisking tools	• **Credit guarantees** and **first-loss capital** to improve financing possibilities for livestock farmers. Incentivize local financial institutions to extend credit to small- and medium-scale producers. • **Patient capital** with 5-10 year repayment time frames to allow livestock farmers to financially benefit from the practices they implement (e.g., increases productivity from silvopastoral systems). • Expand access to **FX hedging tools** and **local currency credit facilities** tailored for livestock farmers to reduce exposure to currency volatility, especially for feed, veterinary inputs, and debt servicing. Support intermediaries that can aggregate demand and offer cost-effective hedging solutions at the farm level.	• **Insurance products** for climate-related livestock risks (e.g., pests and diseases risks linked to poor feed and water quality/availability due to climate hazards).

Action area	Public levers	Private levers
3. Establish supportive regulatory environments	• Adopt standardized **climate reporting requirements** to streamline livestock investment assessments and improve comparability. • Embed **natural capital accounting** into livestock-related policies and planning to capture ecosystem impacts and benefits. • Align **procurement, certification, and trade policies** to reward sustainable livestock practices and incentivize market access.	
	• Support research that measures the impact of livestock measures on methane released and/or carbon sequestered, to facilitate the deployment of the most effective climate and nature-positive practices.	
4. Promote diverse and inclusive financial service providers	• Combine **policy mandates with origination incentives** to help offset lender costs and perceived risks, stimulating credit flow. • Incentivize local lenders to consider **credit for livestock farmers** to increase the overall size of the lender universe (e.g., through fiscal incentives provided to FI revenues stemming from agriculture loans). • **Refinancing mechanisms** to allow early-stage investors to exit investments.	• Design **financing products** aligned with livestock farmers' seasonal cash flows to improve repayment capacity and reduce default risk. • Offer **livestock-specific loans** with flexible terms that reflect biological production cycles and market volatility. • Invest in **digital financial services** tailored for remote livestock producers to expand access to credit, payments, and financial literacy tools. • Support **value chain anchored lending models** where producers receive credit tied to a value chain and buyer companies (e.g., dairy sellers) deduct loan repayments directly from payments to producers, to derisk investments and facilitate credit access for ranchers.
5. Reduce information asymmetries and transaction costs	• Develop **case studies** of successful financing mechanisms (e.g., in the state of California). • Work with potential credit providers to help them understand climate and nature risk and mainstream those concepts in their agricultural portfolios.	• Develop **livestock investment performance databases** to improve risk assessment, benchmark returns, and attract more capital to the sector. • Support **investor knowledge platforms** and **peer-learning networks** to share best practices and derisk livestock investments through collective insights.
6. Improve data availability and quality	• Implement **integrated satellite systems** for livestock monitoring, climate projections, and land administration. • Standardize **climate risk assessment tools** and establish **open-access climate data platforms**.	• Create **integrated databases** with financial and environmental information. • Support **producer-level data collection systems** to improve data quality.
7. Create strategic public-private partnerships	• **Joint financing facilities** for public infrastructure that enable ranchers to access intermediaries and markets better. • Launch **research consortia** for climate-smart livestock practices that go beyond methane to focus on areas such as, carbon sequestration potential in pastures, water pollution, and deforestation. • Invest in **physical connectivity infrastructure** (e.g., roads, rail, ports).	• Establish **shared extension service delivery models** through PPPs to lower costs and expand technical reach to livestock farmers. • Support **value chain partnerships** between farmers and intermediaries to derisk credit provision and formalize access to finance for livestock farmers.

8. CONCLUSION

This report represents our first attempt to apply CPI's Climate Finance Roadmaps methodology framework to identify investment challenges, assess investors' suitability, and identify solutions to scale investments for sustainable livestock in the region. Improved data availability would facilitate both the development of bolder strategies and future climate finance roadmaps. Precise data on climate impacts and climate finance flows is key to identifying what risks are present, what is currently being funded, and where and how capital should flow. For investors, this data would facilitate due diligence and impact measurement. For policymakers, it would enable research into what works best. Yet, data in the agriculture sector is often still too scarce, which inhibits the development of tailored strategies.

In the future, CPI's roadmaps will dive deeper into country-specific analyses, leveraging precise local insights and local data to build an exact picture of existing barriers and opportunities. By combining a top-down roadmap methodology and local bottom-up data, it will be possible to draw a precise picture of the investment landscape in a country or region. Such an approach would facilitate the deployment of, for instance, NDC-adjacent plans for agrifood systems, accelerating the climate transition for agrifood systems.

The scenarios in the roadmap will not take place without enhanced ambition and willingness from private investors and policymakers to invest in livestock systems and learn from past failures when seeking to deploy innovative finance mechanisms. To close the investment gap, deliberate steps must be taken now. Investors must look beyond short-term returns and actively engage with blended structures and long-term risk mitigation strategies, leveraging existing evidence on what works, and scaling those wins and lessons. At the same time, policymakers must embed resilience and equity into national plans, strengthen institutions, and remove regulatory barriers that deter capital flows. Without this dual commitment, interventions risk remaining fragmented and insufficient. Aligning capital with purpose requires coordinated leadership, clear accountability, and sustained investment in both financial innovation and policy reform.

The upcoming COP 30 conference in Brazil presents a major opportunity to further center sustainable livestock systems within the climate and nature agenda for Latin America and the Caribbean. This COP can serve as a platform to elevate successful policy innovations, signal serious political commitment, and attract catalytic blended finance for transformative change across the region. Elevating livestock systems at COP, through for example the release of new NDCs, investment roadmaps, and regional collaboration, can help unlock the financial and policy support needed to transition the sector.

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