Climate Finance Roadmap

For Livestock in Latin America and the Caribbean

Annexes

July 2025

CLIC

CLIMATE POLICY INITIATIVE

CONTENTS

1. ANNEX 1: METHODOLOGY TO ASSESS INVESTMENT RISKS AND ATTRIBUTES

This annex outlines the methodology and assumptions taken to assess investment risks and attributes (Step 2) in the Climate Finance Roadmap in Livestock in Latin America and the Caribbean ("Climate Finance Roadmap"). The approach to classifying and assessing risks and attributes for Step 2 has been adapted from CPI's Climate Finance Roadmaps framework (CPI 2024a) and builds on the first assessment of investment barriers in Climate Finance Innovation for Africa (CPI 2022).

1.1 INVESTMENT RISKS AND ATTRIBUTES

We identified and defined six categories of investment risks (governance, financing, physical climate, market, infrastructure, nature) and three categories of investment attributes (investment horizon, average ticket size, return). For each identified risk category, one or more indicators have been selected to quantify the level of risk exposure. Whenever feasible, publicly available indicators have been prioritized to ensure transparency, accessibility, and ease of validation.

Table 1: Categories and indicators of investment risks and attributes

Risk or attribute	Description	Indicators	Data sources
Governance risk	The risk related to adverse or unfavorable political, legal, or regulatory environments that may affect investment returns (e.g., sovereign and political risk).	• Agriculture total support estimate (TSE) • Control of corruption • Rule of law index	• IDB • World Bank
Financing risk	The risk associated with the limited depth, access to, efficiency of, or maturity of financial markets, and the degree to which these factors may constrain investment returns and long-term refinancing.	• Financial markets development index • Financial institutions development index • Currency risk • Inflation forecast	• IMF • S&P • World Bank
Physical climate risk	The degree to which the profitability of an investment could be negatively impacted by the effects of climate change.	• River flood • Urban flood • Coastal flood • Earthquake • Landslide • Tsunami • Volcano • Cyclone • Water scarcity • Extreme heat • Wildfire	• ThinkHazard • World Bank Global Facility for Disaster Reduction • Recovery World Bank
Market risk	The degree to which expected investment returns may be constrained by the current and projected market size and scope of climate interventions.	• Economy size • Market growth potential • AFOLU contribution to GDP (%) • Share of global livestock sector (import and exports)	• World Bank • IMF • FAOSTAT
Infrastructure risk	The degree to which limited availability of raw materials and physical infrastructures affects the delivery of project outputs.	• Quality of roads index • Quality of rail infrastructure index • Quality of port infrastructure index • Quality of air infrastructure index • Logistics performance index • Population covered by a mobile-cellular network (%) • Households with Internet access at home, rural (%)	• WEF • World Bank
Nature risk	The risk that arises from the degradation or alteration of natural systems, biodiversity, and ecosystem services due to the dependency of investments on natural resources.	• Biodiversity intactness index • Deforestation and forest loss • Water quality (presence of nitrate-nitrate)	• National History Museum • UN FAO • World Bank

Risk or attribute	Description	Indicators	Data sources
Investment horizon	The project duration and how soon the investors can recoup their costs.	• Investment timeline	• Expert interviews
Average ticket size	The size of a project and the upfront financial commitment, encompassing necessary expenses such as the purchase of equipment, installation and setup costs, and initial operating expenses.	• Average ticket size	• CPI • Aspen Network of Development Entrepreneurs • AgFunder
Return	The return that the investment is expected to render at the end of the payback period.	• Target return (project-level)	• Expert interviews

We selected indicators that accurately and comprehensively represented the specific characteristics of each risk category, while minimizing redundancy and overlap between indicators. This approach ensures that the analysis provides a clear and unbiased assessment of each risk type. The method to calculate the risk matrices consists of four components:

1. CLASSIFYING EACH INDICATOR INTO FOUR RISK CATEGORIES

To classify risks into a qualitative rating scale, a simple quartile approach is used, as shown in Table 2.

Table 2: Percentile analysis used for risk classification

Risk level	Score	Percentile range
Very low	1	0–25
Low	2	26–50
Medium	3	51–75
High	4	76–100

Every country is assigned a category and score against each indicator, according to where it falls in the percentile range. Where data is missing for a country, an average is applied based on its sub-region. This average excludes values for Brazil, Argentina, and Mexico and includes only the 'rest of LAC'. Where risk data is not provided in a suitable numerical format, external sources and best judgment are applied to assign categories before testing with experts (e.g., sovereign credit ratings data are typically provided in categorical format, such as AAA, AA, A, etc.). See indicator-specific assumptions (Section 1.2) for more details.

2. WEIGHTING DIFFERENT INDICATORS TO PRODUCE A SINGLE RATING PER COUNTRY-RISK PAIR

Once each indicator has been assigned a score, these scores are combined using a weighted average to produce a single risk rating per overall risk type. The exact approach for assigning weights to each risk category is detailed in Section 1.2, which outlines indicator-specific assumptions. In general, when applying weights to different indicators, the quantity and relevance of the information contained within it has been considered. For example, we weigh indicators that have been compiled using several data sources (e.g., indices) more heavily than indicators with a single data point.

Table 3: Example: Weighting infrastructure risk indicators

Indicator	Relative weight
Air transport infrastructure	1
Quality of port infrastructure	1
Quality of railroad infrastructure	1
Quality of roads	2
Logistics performance index	1

Indicator	Relative weight
Population covered by a mobile-cellular network	1
Rural households with Internet access at home	1

Once weights are assigned, each country-risk pair can be calculated. In this example, Brazil has medium infrastructure risk.

Table 4: Worked example: Assigning an infrastructure risk score to Brazil

Indicator	Brazil
Air transport infrastructure	2
Quality of port infrastructure	4
Quality of railroad infrastructure	4
Quality of roads	4
Logistics performance index	2
Population covered by a mobile-cellular network	4
Rural households with Internet access at home	3
Infrastructure risk score, weighted average	**3**

3. MAKING FARM-SIZE ADJUSTMENTS TO REFLECT DIFFERENCES IN RISKS FACED BY SMALLHOLDER FARMS AND LARGE-SCALE COMMERCIAL FARMS

We assume that the calculations made up to this point are the 'average' for the region. We then apply the following adjustments based on farm size, given the different investment profiles in smallholder, low-tech farming systems compared to large-scale, commercial farming systems, which tend to have a higher penetration of new technologies.

Table 5: Risk adjustments for farm size

Risk	Farm Size	Adjustment	Rationale
Governance	Large	N/A	N/A
Financing	Large	N/A	N/A
Physical climate	Large	-1 (absolute value)	Larger commercial farms have greater capacity to mitigate against physical climate risks through additional climate-resilient infrastructure (e.g., advanced irrigation systems, flood defences).
Market	Large	-1 (absolute value)	Larger commercial farms have greater opportunity and ability to access international markets, for both imports and exports.
Infrastructure	Large	-1 (absolute value)	Larger commercial farms are more likely to be connected to major transport infrastructure (e.g. roads, ports), and have more structured value chains.
Nature	Large	-1 (absolute value)	Larger commercial farms have greater capacity to mitigate nature risks through additional inputs (e.g., fertilizer, manure management technologies).

In this example, large farms in Brazil have low infrastructure risk, while small farms have medium infrastructure risk.

Table 6: Worked example: Marking farm-size adjustments for infrastructure risk in Brazil

Indicator	Brazil, small	Brazil, large
Air transport infrastructure	2	2
Quality of port infrastructure	4	4
Quality of railroad infrastructure	4	4
Quality of roads	4	4
Logistics performance index	2	2
Population covered by a mobile-cellular network	4	4
Rural households with Internet access at home	3	3
Infrastructure risk score, weighted average	**3**	**3**
Infrastructure risk score, adjusted	**3**	**2**

4. AGGREGATING COUNTRY-LEVEL DATA TO OBTAIN A REGIONAL VIEW

The breakdown of the Latin America and the Caribbean (LAC) region includes the following groups: Brazil, Argentina, Mexico, and the rest of LAC. The aggregation of country risk scores to regional scores for the 'rest of LAC' sub-region is achieved using a weighting factor of AFOLU contribution to GDP (AFOLU contribution to GDP (%) * GDP).

Due to data limitations for the livestock sector, investment attributes were obtained for two types of investments: smallholder farms and large-scale commercial farms (not at a country level). This grouping broadly captures the variance in investment terms present in the agrifood sector between high-growth investment strategies in large farms and investments in smallholder farming systems.

Table 7: Data sources for investment attributes

Attribute	Farm size	Value	Source 1	Source 2
Investment horizon	Large	5-10 years	Expert interviews	N/A
Average ticket size	Large	USD 5-10 million	AgTech in Latin America: Small-scale solutions in a large-scale transformation	Global Agrifood Tech Investment Report 2024
Return	Large	15-25%	Expert interviews	N/A
Investment horizon	Small	10-15 years	Expert interviews	N/A
Average ticket size	Small	USD 0-1 million	Climate and Nature-based Interventions in Livestock (FAIRR 2025)	Impact Investing in Latin America (Aspen Network of Development 2020)
Return	Small	5-15%	Expert interviews	N/A

The final results for investment risks and attributes are presented in Section 3 of the main report, also reproduced in Figure 1 below.

Figure 1: 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

1.2 INDICATOR-SPECIFIC ASSUMPTIONS

This section outlines the specific data sources that were used for each risk indicator. Any specific assumptions taken or deviations from the approach outlined in section 1.1 are noted here. Unless otherwise stated, it is assumed that all indicators follow the standardized approach outlined in section 1.1.

GOVERNANCE RISK

Control of corruption has been weighted most heavily because corruption distorts economic decision-making, reduces efficiency, and increases the cost of doing business. The agricultural total support estimate (TSE) has been weighted at a medium level as subsidies and other market incentives can play a critical role in driving investment.

Table 8: Indicator weighting for governance risk

Indicator	Relative weight	Normalised weight
Control of corruption	2.5	1.50
Agricultural total support estimate (TSE)	1.5	0.90
Rule of law	1	0.60

Total Support Estimate (TSE) data for agricultural subsidies includes all support for public goods for agriculture, such as infrastructure and research, individual support for farmers, and other market price supports. The value for TSE is affected in countries with policies that reduce market price—in countries like Argentina and India, TSE is negative. Percentiles are derived based on the 51 countries in our analysis because global data is unavailable.

Table 9: Indicator scoring approach for governance risk

Indicator	Data source	Scoring approach
Agricultural total support estimate (TSE)	IDB's Agrimonitor (IDB n.d.)	Percentile analysis
Control of corruption	Worldwide Governance Indicators (World Bank n.d.)	
Rule of law		

FINANCING RISK

As the indices for financial institutions and financial markets are each composed of three sub-indices, they have been more heavily weighted to reflect the additional information contained within them.

Table 10: Indicator weighting for financing risk

Indicator	Relative weight	Normalised weight
Financial institutions index	3	1.80
Financial markets index	3	1.80
Foreign currency rating	1	0.60
Local currency rating	1	0.60
Legal rights index	1	0.60
Forecast inflation	1	0.60

Table 11: Indicator scoring approach for financing risk

Indicator	Data source	Scoring approach
Financial institutions index	IMF Financial Development Index (Svirydzenka 2016)	Percentile analysis
Financial markets index		
Foreign currency rating	S&P sovereign credit ratings, long-term (S&P Global 2019)	General threshold
Local currency rating		
Legal rights index	World Bank development indicators (World Bank 2020)	Percentile analysis
Inflation forecast	World Economic Outlook, 2029 forecast	General threshold

As the data for currency ratings is in categorical format, risk categories were assigned manually based on commentary provided by S&P Global.

Table 12: Risk classification for credit rating data

Rating	Category	Risk level	Score
No data	No data	No data	N/A
Selective default	SD	High	4
Poor	B-	High	4
Poor	B	High	4
Poor	B+	High	4
Extremely weak	BB-	High	4
Extremely weak	BB	High	4
Extremely weak	BB+	High	4
Very weak	BBB-	High	4
Very weak	BBB	High	4
Very weak	BBB+	Medium	3
Weak	A-	Medium	3
Moderately weak	A	Medium	3
Intermediate	A+	Medium	3
Moderately strong	AA-	Low	2
Moderately strong	AA	Low	2
Strong	AA+	Low	2
Very strong	AAA	Very low	1

Risk categories for inflation forecasts were assigned manually, as outlined below, due to the specific characteristics of inflation data. For example, most central banks pursue a target rate of 2% as optimal for price stability, which is not captured when applying percentiles.

Table 13: Risk classification for inflation forecast data

Inflation forecast	Classification strategy	Risk level	Score
0	0 <= inflation forecast < 1	High	4
1	1 <= inflation forecast < 1.5	Medium	3
1.5	1.5 <= inflation forecast < 2	Low	2
2	2 <= inflation forecast < 2.5	Very low	1
2.5	2.5 <= inflation forecast < 3	Low	2
3	3 <= inflation forecast < 4	Medium	3
4	4 <= inflation forecast <	High	4

INFRASTRUCTURE RISK

Roads are the primary mode of transport for goods in most countries in the LAC region. Unlike regions with extensive rail networks, many LAC countries rely heavily on trucking and road freight for the movement of agricultural and industrial goods. The road infrastructure indicator has been given more weight to reflect this.

Internet access data is not available for Argentina, so this indicator has been excluded from Argentina's overall infrastructure risk calculation. See the 'normalised weight, excluding internet' column for the weights used for Argentina's infrastructure risk.

Table 14: Indicator weighting for infrastructure risk

Indicator	Relative weight	Normalised weight, all	Normalised weight, excluding internet
Quality of roads	2	1.75	1.71
Air transport infrastructure	1	0.88	0.86
Quality of port infrastructure	1	0.88	0.86
Quality of railroad infrastructure	1	0.88	0.86
Logistics performance index	1	0.88	0.86
Population covered by a mobile-cellular network (%)	1	0.88	0.86
Households with Internet access at home, rural (%)	1	0.88	n/a

Table 15: Indicator scoring approach for infrastructure risk

<table>
<tr><th>Indicator</th><th>Data source</th><th>Scoring approach</th></tr>
<tr><td>Air transport infrastructure</td><td rowspan="4">Travel & Tourism Development Index (WEF 2024)</td><td rowspan="7">Percentile analysis</td></tr>
<tr><td>Quality of port infrastructure</td></tr>
<tr><td>Quality of railroad infrastructure</td></tr>
<tr><td>Quality of roads</td></tr>
<tr><td>Logistics performance index</td><td rowspan="3">ITU Data Hub (International Telecommunication Union n.d.)</td></tr>
<tr><td>Population covered by a mobile-cellular network (%)</td></tr>
<tr><td>Households with Internet access at home, rural (%)</td></tr>
</table>

PHYSICAL CLIMATE RISK

Due to the regional variation in our sample, each indicator is given equal weight. This reflects the highly diverse nature of the climate threats facing countries in the LAC region. All indicators have been sourced from ThinkHazard, World Bank Global Facility for Disaster Reduction and Recovery (GFDRR n.d.).

Table 16: Indicator weighting for physical climate risk

Indicator	Relative weight	Normalised weight
River flood	1	1.00
Urban flood	1	1.00
Coastal flood	1	1.00
Earthquake	1	1.00
Landslide	1	1.00
Tsunami	1	1.00
Volcano	1	1.00
Cyclone	1	1.00

Indicator	Relative weight	Normalised weight
Water scarcity	1	1.00
Extreme heat	1	1.00
Wildfire	1	1.00

Table 17: Indicator scoring approach for physical climate risk

Hazard level	Score
Very low	1
Low	2
Medium	3
High	4

MARKET RISK

Economy size and projected economic growth are weighted more heavily, as they are assumed to have a larger impact on the perceived scalability of potential investments in the agricultural sector. This is reflected by increased domestic market opportunities, increased consumer demand, and higher growth prospects.

Table 18: Indicator weighting for market risk

Indicator	Relative weight	Normalised weight
Economy size	2	1.85
Projected economic growth	2	1.85
AFOLU contribution to GDP	1	0.92
Livestock production	1	0.92

Outliers calculated as +/- 2 standard deviations have been excluded from the scoring approach.

Table 19: Indicator scoring approach for market risk

Indicator	Data source	Scoring approach
Economy size	GDP (World Bank n.d.)	Percentile analysis
Projected economic growth, 2025-29 average	IMF real GDP growth (IMF n.d.)	
AFOLU contribution to GDP (%), 2020-24 average	World development indicators (World Bank n.d.)	Mean/standard deviations Mean: 9.88 Standard deviation: 9.21
Livestock production	FAOSTAT (FAO n.d.)	General threshold

Table 20: Risk classification for AFOLU contribution to GDP

Risk level	Score	Threshold	Explanation
Very low	1	19.1-100%	Between 1 standard deviation above mean and 100
Low	2	9.9-19%	Between mean and (mean +1 standard deviation)
Medium	3	0.7-9.8%	Between mean and (mean -1 standard deviation)
High	4	0% 0.7%	Between 1 standard deviation below mean and 0

Livestock production data has been sourced from FAO's global cattle stocks. Each country would produce 0.5% of global stocks under a uniform distribution. This was used to create boundary conditions, as shown below. A three-year average of each country's share of global cattle stocks was then used to assign risk categories.

Table 21: Risk classification for livestock production

Risk level	Score	Threshold
Very low	1	>5%
Low	2	1-4.9%
Medium	3	0.5-0.9%
High	4	<0.5%

NATURE RISK

For the biodiversity intactness index, we assigned a weight of 0.5 to 2020 and a weight of 2 to 2050 to better capture the forward-looking perspective of this indicator, which is more relevant when assessing investment risks.

Table 22: Indicator weighting for nature risk

Indicator	Relative weight	Normalised weight
Biodiversity intactness index (2050)	2	1.78
Change in forest area	1	0.89
Water quality	1	0.89
Biodiversity intactness index (2020)	0.5	0.44

Thresholds were assigned to classify the ratings into scores based on classifications provided in the supplementary materials (Figure S4) of "*Has land use pushed terrestrial biodiversity beyond the planetary boundary? A global assessment*" (Newbold et al. 2016).

Table 23: Indicator scoring approach for nature risk

Indicator	Data source	Scoring approach
Biodiversity intactness index (2020, 2050)	Natural History Museum (Phillips et al. 2021)	General threshold
Change in forest area	FAO deforestation data (Ritchie 2021)	Percentile analysis (LAC countries only)
Water quality	World Bank data catalogue (Damania et al. 2019)	

Table 24: Risk classification for biodiversity intactness index (BII)

Risk level	Score	Threshold
Very low	1	>90%
Low	2	80-90%
Medium	3	70-80%
High	4	<70%

Change in forest area was measured using FAO's deforestation data, available for 1990, 2000, 2010 and 2015. To clean the data, the percent change in forest area was calculated for the periods 2000-2010 and 2010-2015. An average percentage change was then calculated across the two periods to measure the threshold.

There was a 72% change in forest area in the Dominican Republic from 2000-2010, which was considered an outlier. This value was omitted from deforestation calculations to avoid skewing the data, including the regional average.

Table 25: Risk classification for change in forest area

Risk level	Score	Threshold
High	4	<=0.02
Medium	3	0.02-7.96
Low	2	7.96-36.48
Very low	1	>=36.48

The presence of nitrate-nitrate was used as a proxy to measure water quality. Data was sourced from a globally gridded dataset of nitrate-nitrite in surface water from 1992-2010. Data was available at the 0.5x0.5-degree grid cell level, and units were measured in milligram per liter (mg/l).

The data cleaning process was completed using Python using the following steps: i) matched objectID with each raster grid cell, ii) converted raster cells from 0.5x0.5 degree to vector, iii) averaged data for each geolocation, and iv) averaged data across time and location, and added for all points in each country.

Table 26: Risk classification for water quality data

Risk level	Score	Threshold
Very low	1	0.2-0.4
Low	2	0.4-0.5
Medium	3	0.5-1.1
High	4	>=1.1

2. ANNEX 2: METHODOLOGY TO ASSESS INVESTOR PREFERENCES AND CHARACTERISTICS

Investor types were evaluated using various criteria to develop a qualitative analysis of their overall investment approach and risk appetite, including investment objectives, type of financing provided, instrument preferences, regulatory constraints, and assets under management (AUM) allocated to agriculture, where data is available. Adjustments for specific risk categories were made on a case-by-case basis, drawing from existing literature. For example, if an investor's overall risk appetite was 'medium', but desk research demonstrated an aversion to physical climate risks, their risk tolerance for that category was adjusted to 'low'. The results were validated by external experts, and risk scores were adjusted manually to reflect their feedback. These scores for both investor preferences and characteristics are presented in Section 3 of the main report, also reproduced in Figures 2 and 3 below.

Figure 2: 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

Figure 3: 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

3. ANNEX 3: METHODOLOGY TO MATCH INVESTMENT RISKS AND ATTRIBUTES WITH INVESTOR PREFERENCES

To identify the suitability of each investor within each market, scores for investment risks and attributes (see Annex 1) were matched with those for investor preferences (see Annex 2). After each investor–market pair was evaluated across all risk factors and attributes, the individual scores were aggregated into a single overall match score for each pair. This composite score represents the overall alignment between the investor and the cluster.

Table 27: Investor suitability score

Rating	Criteria	Description
4	Mostly scores = 4, no more than two scores = 3	**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	More than two scores = 3, remaining scores = 4	**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.
2	At least one score = 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	At least one score = 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.

The final results of this investor suitability assessment are presented in Section 3 of the main report, also reproduced below.

Figure 4. 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

4. ANNEX 4: SCORING ADJUSTMENTS IN IMPROVED SCENARIOS

The following scoring adjustments are implemented in the Improved Finance Strategies (IFS) scenario. If an indicator is influenced by multiple strategies, only a single adjustment is applied, regardless of how many relevant solutions are available. A threshold score of 3 is applied, meaning adjustments are only made when risk scores are 3 or higher. This avoids enhancing already strong matches, maintaining focus on addressing significant misalignments. As there is no identified financial strategy to alleviate infrastructure risk, no adjustment is made to that score.

Table 28: Scoring adjustments from financing strategies

Indicator	Scoring adjustment	Threshold
Nature risk	-1	3
Physical climate risk	-1	3
Infrastructure risk	-	-
Governance risk	-1	3
Financing risk	-1	3
Market risk	-1	3
Investment horizon	-1	3
Average ticket size	-1	3
Return	-1	3

The results of these adjustments to the investor suitability matrix are presented in Section 5 of the main report, also reproduced below.

Figure 5: 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 following scoring adjustments are implemented in the Improved Finance and Policy Strategies (IFPS) scenario, in addition to the scoring adjustments implemented in the ISF scenario. For all risks, scores above 2 are replaced with the adjusted values shown below. This reflects the targeted and potentially more effective impact of the proposed interventions on these risk types. The policy solutions identified are designed to address systemic investment risks, not transaction-specific financial barriers; therefore, no adjustments are made to investment attribute scores.

Table 29: Scoring adjustments from policy interventions

Indicator	Scoring adjustment	Threshold
Nature risk	-1	2
Physical climate risk	-1	2
Infrastructure risk	-1	2
Governance risk	-1	2
Financing risk	-1	2
Market risk	-1	2
Investment horizon	-	-
Average ticket size	-	-
Return	-	-

The results of these adjustments to the investor suitability matrix are presented in Section 5 of the main report, also reproduced below.

Figure 6: 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

5. ANNEX 5: MODELING IMPACT ON CAPITAL AND INVESTOR MIX

This annex describes how we modelled the impact of the financial and policy solutions on the capital, instrument, and investor mix in each of the three scenarios: business-as-usual (BAU), improved finance strategies (IFS), and improved finance and policy strategies (IFPS).

5.1 BUSINESS-AS-USUAL (BAU)

The capital mix in this scenario is constructed using the historical investment data from CPI's Global Landscape of Climate Finance (GLCF) for the years 2018-2022 in the AFOLU sector (see GLCF methodology). Due to the lack of available data and gaps in reporting by private finance institutions, it is expected that private finance flows to the AFOLU sector are underrepresented in tracked climate flows, as evidenced by zero or near-zero flows for many regions. Therefore, we assume that current tracked private climate finance is a lower bound of actual private climate finance flows for AFOLU. We create an upper bound of the range by adding 25% to the current share of tracked private finance.

Broader macroeconomic data support this assumption. For instance, private sector investment in Brazil is projected to account for 14.3% of GDP in 2024, compared to just 3.7% from the public sector, according to IMF estimates. This implies a private-to-public investment ratio of approximately 3.85:1. While this ratio reflects economy-wide investment rather than climate-specific flows, it underscores the likelihood that private finance plays a more significant role than currently tracked figures suggest, supporting our assumption that actual private finance to the AFOLU sector could be meaningfully higher than reported.

Table 30: Capital mix across all farm types in the BAU scenario

Sub-region	Public			Private		
	Lower bound	Upper bound	Midpoint	Lower bound	Upper bound	Midpoint
Brazil	63%	88%	76%	12%	37%	24%
Argentina	75%	100%	87%	0%	25%	13%
Mexico	74%	99%	87%	1%	26%	13%
Rest of LAC	74%	99%	87%	1%	26%	13%

To determine ranges for small and large farm types, we assume that small farms occupy the top half of the range for public finance and the bottom half of the range for private finance, and vice versa for large farms. For instance, for small farms, the public finance midpoint for the sub-region is the lower bound, while the upper bound stays the same. Constantly, for large farm types, the public finance midpoint for the sub-region becomes the upper bound, while the lower bound stays the same. The upper and lower bounds are rounded to the nearest 5%. However, for rest of LAC, where there is no distinction across farm types, the split remains the same.

Table 31: Capital mix across small farms in the BAU scenario

Sub-region	Public			Private		
	Lower bound	Upper bound	Midpoint	Lower bound	Upper bound	Midpoint
Brazil	75%	90%	83%	10%	25%	18%
Argentina	85%	100%	93%	0%	15%	8%
Mexico	85%	100%	93%	0%	15%	8%
rest of LAC	85%	100%	93%	0%	15%	8%

Table 32: Capital mix across large farms in the BAU scenario

Sub-region	Public			Private		
	Lower bound	Upper bound	Midpoint	Lower bound	Upper bound	Midpoint
Brazil	65%	75%	70%	25%	35%	30%
Argentina	75%	85%	80%	15%	25%	20%
Mexico	75%	85%	80%	15%	25%	20%

These assumptions are supported by the Climate Finance Gap for Small-Scale Agrifood Systems (CPI 2023b), which finds that small-scale agrifood primarily receive funding from public sources. State banks, primarily in Asia provide USD 9 billion, and MFIs and social lenders together contribute roughly USD 3.3 billion, mostly in Latin America and Sub-Saharan Africa. This supports our assumption that small farms are primarily served by public, concessional, and semi-formal finance mechanisms, while larger farms are more likely to access commercial private finance.

Due the data gaps in tracking private finance, assumptions are applied to the GLCF data to determine the instrument mix for the BAU scenario. We assume that 5-7% of public finance is provided in the form of public equity, though nearly zero public equity for AFOLU is tracked within LAC. Public equity is low because the agriculture and livestock industries are generally better suited for debt funding or credit lines rather than equity. However, some public equity is likely present for the expansion of large agribusiness and agri-tech innovation. The shares for the remaining instruments are readjusted accordingly. According to the Landscape of Climate Finance for Agrifood Systems (CPI 2023a), project-level equity represented just 3% of agrifood climate finance in 2019/20, while debt instruments accounted for 44% and grants for 38%. Separately, the Climate Finance Gap for Small-Scale Agrifood Systems (CPI 2023a) notes that total project-level equity in AFOLU reached just USD 300 million in 2019/20, underscoring the limited role of equity in the current funding landscape. The remaining public finance instruments are based on the GLCF and scaled proportionally according to the public equity adjustment. For private instruments, we assume largest shares of commercial debt due to the nature of the livestock industry, which generally relies on debt or credit. Small portions on private grants are from institutional investors.

Table 33: Public instrument mix in the BAU scenario

Sub-region	Public			
	Grant	Concessional debt	Commercial debt	Equity
Brazil	13%	67%	12%	7%
Argentina	12%	28%	55%	5%
Mexico	9%	25%	61%	5%
rest of LAC	24%	31%	40%	5%

Table 34: Private instrument mix in the BAU scenario

Sub-region	Private		
	Commercial debt	Equity	Grant
Brazil	75%	20%	5%
Argentina	73%	20%	7%
Mexico	73%	20%	7%
rest of LAC	70%	20%	10%

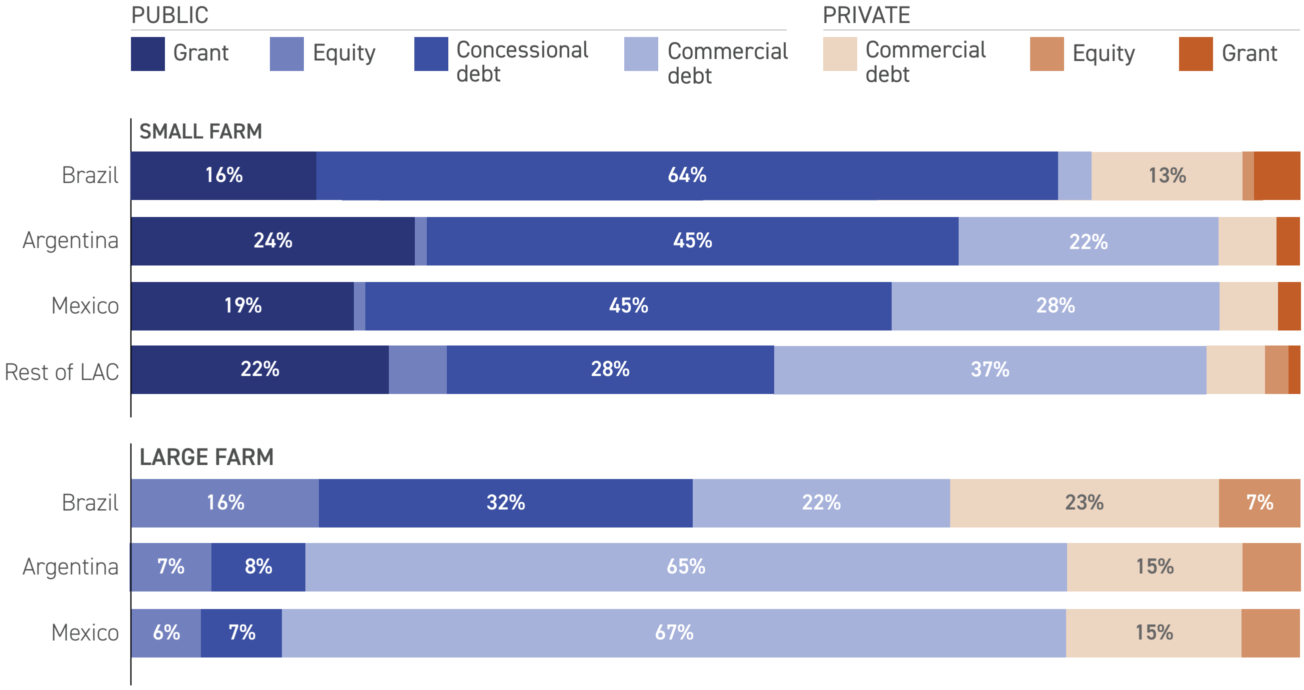
To determine the instrument split for small and large farm types, a set of assumptions is applied (see Table 34), which distributes the public-private instrument mix across the small and large farm types. This approach is supported by CPI data, which shows that in 2019/20, small-scale agrifood systems received nearly half of climate finance as grants (USD 2.7 billion) and 39% as concessional debt (USD 2.2 billion), with minimal use of equity.

Table 35: Assumptions for instruments in the BAU scenario

	Public				Private		
	Grant	Concessional debt	Commercial debt	Equity	Commercial debt	Equity	Grant
Small	100%	80%	20%	5%	20%	5%	100%
Large	-	20%	80%	95%	80%	95%	-

Applying these assumptions and scaling them proportionally according to the capital mix, using the midpoint of the range, we determine the instrument split for each sub-region and farm type. The final instrument split for the BAU scenario is presented in Section 5 of the main report and reproduced below.

Figure 7: Capital mix under the BAU Scenario



5.2 IMPROVED FINANCE STRATEGIES (IFS) AND IMPROVED FINANCE AND POLICY STRATEGIES (IFPS) SCENARIOS

In the improved finance strategies (IFS) and improved finance and policy strategies (IFPS) scenarios, the capital mix is constructed qualitatively to reflect the conditions of the scenario. The table below summarizes the assumptions and rules applied to estimate the share of public and private finance for both scenarios.

Table 36: Assumptions for the capital mix in the IFS and IFPS scenarios

Scenario	Assumption	Rules applied
Improved Finance Strategies (IFS)	The public share of finance decreases slightly. The absolute value of public finance increases, particularly catalytic public finance. This crowds in private finance, decreasing the share of public finance.	• The public share lower bound decreases by 10% compared to the BAU scenario. • The upper bound is created by adding 10% to the newly calculated lower bound.
Improved Finance and Policy Strategies (IFPS)	The share of public finance decreases even further than in the IFS scenario, due to increased private investment resulting from both financial and policy incentives, as well as an improved enabling environment.	• Where the share of private finance in the IFS scenario is greater than or equal to 50%, it stays the same because it is unlikely that private finance will surpass 50%. • Where the share of private finance in the IFS Scenario is less than 50%, we increase the share of private finance lower bound by 10%. • We create the private finance upper bound by adding 10% to the newly calculated lower bound.

The tables below demonstrate the results of applying these assumptions for the IFS and IFPS Scenarios.

Table 37: Capital mix across all farm types in the IFS scenario

		Public			Private		
		Lower bound	Upper bound	Midpoint	Lower bound	Upper bound	Midpoint
Brazil	Small	65%	75%	70%	25%	35%	30%
Brazil	Large	55%	65%	60%	35%	45%	40%
Argentina	Small	75%	85%	80%	15%	25%	20%
Argentina	Large	65%	75%	70%	25%	35%	30%
Mexico	Small	75%	85%	80%	15%	25%	20%
Mexico	Large	65%	75%	70%	25%	35%	30%
Rest of LAC	Small	75%	85%	80%	15%	25%	20%

Table 38: Capital mix across all farm types in the IFPS scenario

		Public			Private		
		Lower bound	Upper bound	Midpoint	Lower bound	Upper bound	Midpoint
Brazil	Small	55%	65%	60%	35%	45%	40%
Brazil	Large	45%	55%	50%	45%	55%	50%
Argentina	Small	65%	75%	70%	25%	35%	30%
Argentina	Large	55%	65%	60%	35%	45%	40%
Mexico	Small	65%	75%	70%	25%	35%	30%
Mexico	Large	55%	65%	60%	35%	45%	40%
Rest of LAC	Small	65%	75%	70%	25%	35%	30%

Similarly, the instrument mix is constructed qualitatively to reflect the conditions of each scenario. The table below summarizes the assumptions and rules applied to estimate the instrument mix for both scenarios. We apply the same assumptions across the IFS and IFPS Scenarios, since the same financial mechanisms are implemented to increase catalytic public equity.

Table 39: Assumptions for the instrument mix in the IFS and IFPS Scenarios

Instrument	Assumption	Rules applied
Catalytic public finance (grants and public equity)	Each instrument represents at least 5% of public finance.	• Where the share of catalytic public finance is less than 5% under the BAU scenario, we increase the share to 5%. • Where the share of grants or public equity is greater than 5% in BAU, we assume that it increases by 1.5 times.
Other public instruments	Small farms receive more concessional debt, while large farms receive more commercial debt.	• For small farms, two-thirds of the remaining public finance is considered concessional debt, and one-third is commercial debt. • For large farms, one-third of the remaining public finance is considered concessional debt, and two-thirds is commercial debt.
Private finance instruments	No change from the BAU scenario.	N/A

Table 40: Instrument mix in the IFS Scenario

		Public				Private		
		Grant	Concessional debt	Commercial Debt	Equity	Commercial Debt	Equity	Grant
Brazil	Small	20%	31%	16%	4%	21%	1%	7%
Argentina	Large	3%	12%	25%	20%	30%	10%	0%
Mexico	Small	32%	29%	15%	4%	13%	1%	6%
Rest of LAC	Large	4%	19%	38%	9%	23%	7%	0%
Brazil	Small	25%	34%	17%	4%	13%	1%	6%
Argentina	Large	4%	19%	39%	8%	23%	7%	0%
Mexico	Small	29%	30%	15%	6%	14%	4%	2%

Table 41: Instrument mix in the IFPS scenario

		Public				Private		
		Grant	Concessional debt	Commercial Debt	Equity	Commercial Debt	Equity	Grant
Brazil	Small	17%	26%	14%	3%	29%	2%	10%
Argentina	Large	3%	10%	21%	17%	38%	12%	0%
Mexico	Small	28%	26%	13%	4%	19%	1%	9%
Rest of LAC	Large	3%	16%	33%	8%	30%	10%	0%
Brazil	Small	22%	30%	15%	4%	19%	1%	9%
Argentina	Large	3%	16%	33%	7%	30%	10%	0%
Mexico	Small	25%	26%	13%	5%	21%	6%	3%

The final instrument split for the IFS and IFPS scenarios are presented in Section 5 of the main report and reproduced below.

Figure 8: Capital mix under the IFS scenario

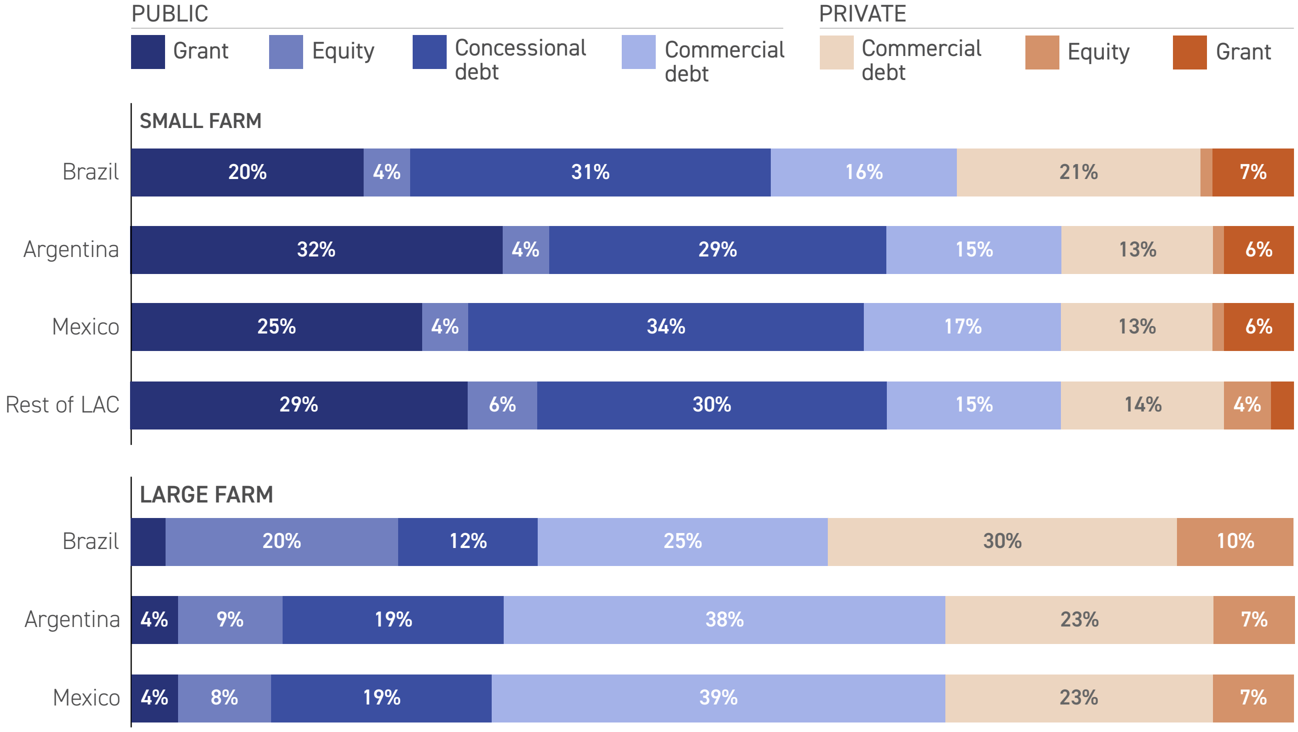
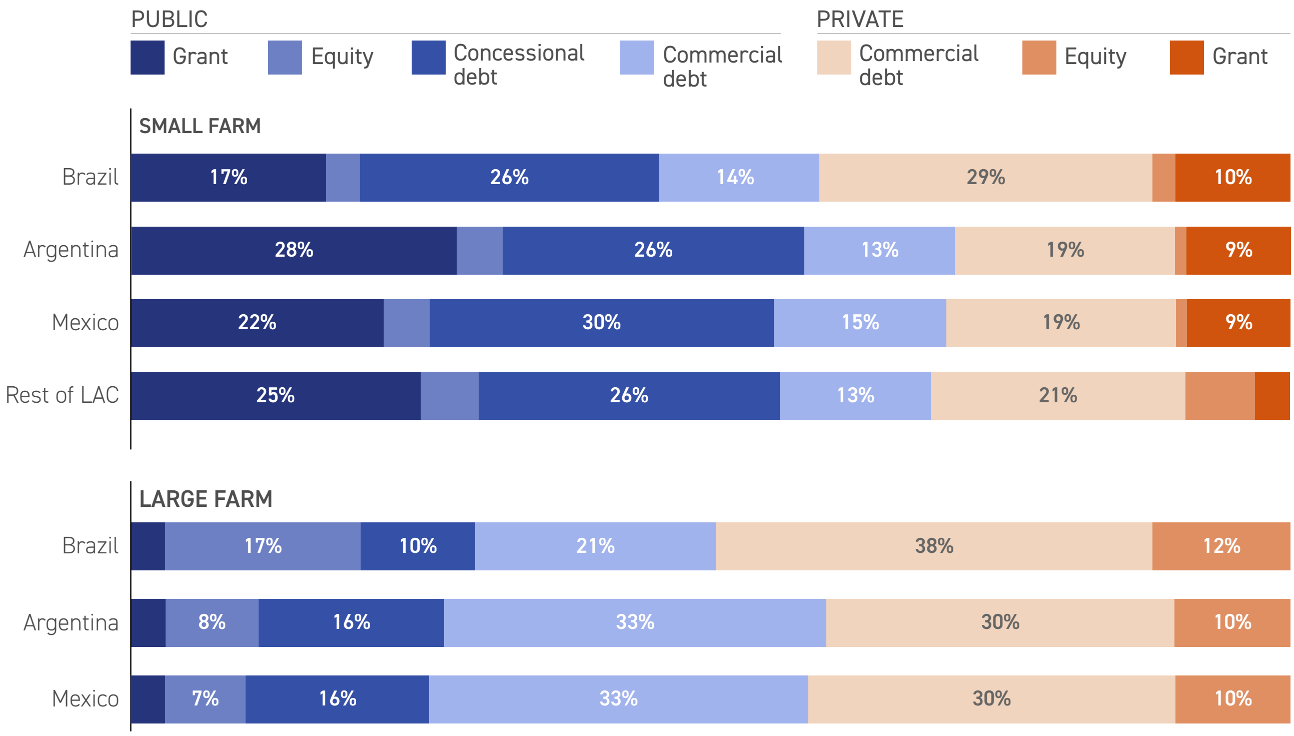


Figure 9: Capital mix under the IFS scenario



6. ANNEX 6: FARMER CHARACTERISTICS IN LAC

To support our analysis, we segment the region into seven distinct markets, using geography and farm size as the primary criteria. Due to the region's vast land area, diverse landscapes, and rich biodiversity, its countries exhibit some of the most complex and varied farming systems globally. For analytical purposes, we classify the region into four geographic categories—Brazil, Argentina, Mexico, and the rest of LAC—to reflect differences in market scale, performance, and the structure of their domestic livestock sectors. Within each geographic category, we further differentiate by farm size to capture two key types of livestock operations: small-scale and large-scale farms. This results in the following seven market segments: small farms in Brazil, Argentina, Mexico, and the rest of LAC, as well as large farms in Brazil, Argentina, and Mexico.

We divide farms into small and large due to their distinct nature and unique importance in LAC. Industrial-scale operations, while vital to economies, are often vulnerable to trade restrictions, currency volatility, and environmental sustainability challenges (World Bank 2021). They are also major sources of emissions and nature degradation. On the other hand, small and medium farms, often family-run, in regions such as Patagonia in Argentina or Mexico's southern states employ more diversified agricultural practices and produce artisanal products, making them better suited to switching to climate-friendly practices. However, small farms often exist in highly fragmented networks, making investment deployment challenging.

This report uses the term small-scale farms in a general sense, as definitions vary widely across LAC countries. This approach aims to strike a balance between providing a comprehensive overview of investment opportunities tailored to relevant local circumstances. Given that different investors will have varying degrees of familiarity with sectors and regions, we focus on the role that the size and maturity of different markets play in investor decision-making. Various other factors, such as the role of indigenous and community-managed lands, representation in farmer co-operative groups, and specific types of investments and farming practices, should also be considered when deploying capital in the region.

For this analysis, small-scale farms operate on farm sizes ranging from 2 to 10 hectares, while large-scale farms are those with 10 hectares or more. Small-scale farms are primarily smallholder and family farms that rely on household labor and traditional farming methods. With limited mechanization and technological inputs, they face significant financial constraints and often combine livestock with crop-based systems. Large-scale ranches are commercial and sometimes internationally owned enterprises. They employ significant mechanization, hired labor, modern technologies, and intensive production practices to cater to export markets.

The large markets of Argentina, Brazil, and Mexico, contain a wide range of farm types and livestock systems. Breaking these sub-groups into two categories—small- and large-scale farms—enables a more targeted analysis of existing investment barriers and investor opportunities for each, based on their key differences. Geographically, risks are more pronounced for Argentina and Mexico, whereas Brazil faces relatively lower risks due to its more stable macroeconomic environment, strong international demand, and supportive governance environment. With GDP growth consistently in the 2-3% range and inflation maintained below 4%, the country provides investors with a predictable economic environment (World Bank 2025). In 2024, beef production increased by 8% and exports by 1%, while live cattle exports increased by 79% (USDA 2024). In

2024, Brazil also entered 24 new export markets for livestock, a strategy to expand and diversify livestock trade (USDA 2024). Additionally, Brazil's rural credit program enables farmers to scale, ensuring sustained growth for the sector (CPI 2020, 2024b).

BRAZIL

In Brazil, intensive monoculture practices—e.g., soybean and cattle production—attract international investors due to high returns and access to global markets. Brazil is the leading meat producer in the LAC region, accounting for approximately half of total regional production (AgEcon 2020). However, these operations face significant challenges, including land tenure issues, environmental concerns over deforestation, and price volatility in commodity markets (FAO 2021).

Small-scale family farms, concentrated in southern and northern Brazil, offer opportunities for investments in sustainable, diversified farming practices. In southern Brazil, smallholders benefit from a well-organized agricultural structure, often operating through cooperatives and having access to credit and technical assistance. Conversely, family farms in the northeast tend to be more vulnerable, as they face greater exposure to climate risks, limited access to credit, and are generally less integrated into commercial markets

Family farms play a crucial role in Brazil's food system. They represent 85% of all farms and produce over two-thirds of the country's food, despite occupying only one-quarter of the agricultural land (Gross 2019). Additionally, smallholder farms contribute at least 70% of the country's staple food production (Schneider 2014). Improving the environmental and climate impact of the livestock sector is currently a major political priority in Brazil, making the support and development of sustainable family farming even more relevant.

ARGENTINA

Argentina features both industrial-scale operations focused on export markets and smallholder farming. In Argentina, more than four-fifths of small-scale farmers occupy only 11% of agricultural land. In contrast, large-scale farms, which make up 0.3% of all farmers, occupy more than three-quarters of total farm land in the country (World Bank, FAO, and ABC n.d.). Argentina is the region's second-largest beef producer (AgEcon 2020), and most of Argentina's livestock, along with export crops like grain and oil seeds, are produced on large farms in the Pampas region.

MEXICO

Mexico has a mix of industrial-scale operations and smallholder farmers across the country. Mexico is LAC's second-largest producer of pork, poultry, milk, and sheep meat (AgEcon 2020). More than three-fourths of all cattle farms in Mexico are small-scale, but the average production of large-scale farms is 70 times higher for cattle farms (Ibarrola-Rivas, Orozco-Ramírez, and Guibrunet 2023) small farms have been relatively important for national food supply due to an agrarian reform in the first half of the 20th century, but their role has been decreasing in the last decades. The aim of this study is to quantify how much small farms produce of the Mexican agricultural supply, and with which farming practices, using the 2019 National Agricultural Survey. The results show that small farms produce 19% of the national agricultural production with similar farming practices to those of medium and large farms. When considering imports and exports, small farms produce 15% of the national agricultural supply. The production of small farms consists mainly of cash crops (e.g.

sugar cane, fruits and vegetables, animal products, fodder crops. Mexico's large-scale agricultural production is concentrated in three regions: the tropical Gulf of Mexico and Chiapas highlands, the irrigated lands of the north and northwest, and the Bajío region in central Mexico. Small-scale farmers are predominantly found in the southern mountainous regions and along the coast, where land is less suitable for industrial farming.

REST OF LAC

Other countries in LAC have more limited livestock production, often for local markets, and are grouped together for this analysis. However, livestock is still a key sector in these countries. For example, cattle ranching is a key mitigation sector in Colombia's NDCs, occupying 80% of the country's agricultural land and generating income for more than 500,000 families (Becking et al. 2021). Similarly, 75% of Uruguay's agricultural land is used for cattle farming, accounting for 14-16% of GDP and employing over 100,000 people (The Land Group 2023, Uruguay XXI 2024).

The rest of LAC tends toward less developed and inward-looking farming systems. This report acknowledges that this category is quite heterogeneous within the sector. Colombia, along with other Andean countries, Central American countries, and Caribbean states, primarily produces agricultural goods for domestic consumption, with only a small share destined for export. These production patterns impact farming practices and limit incentives to adopt climate-positive approaches, as producers face less pressure from export market standards or international buyers. It also influences the type of investors active in the sector, with fewer international players, higher reliance on public or local finance, and a tendency towards feature smaller farming systems.

7. ANNEX 7: ESTIMATING MISSING CLIMATE FINANCE FLOWS TO LAC

Finance flows for sustainable livestock in Latin America and the Caribbean (LAC) are extremely limited, averaging approximately USD 100 million per year across 2021-22. However, known data gaps in the sources used for CPI's Global Landscape of Climate Finance (GLCF), particularly in private sector flows and domestic spending, suggest this is likely an underestimate. To gauge the potential scale of unreported finance, we compared public and private flows between the Brazilian livestock sector in the 2024 GLCF with those in CPI's Landscape of Climate Finance for Land Use in Brazil 2021–2023 (CPI 2024b). The latter works more closely with public and private actors at the national level and provides a more precise estimate of climate finance in Brazil. The comparison revealed 120 times more private finance and 2.5 times more public finance in the Brazil-specific analysis. This discrepancy is likely attributable in large part to Brazil's Rural Credit policy, which channels significant private finance toward sustainable land use but is not yet captured in CPI's global dataset. We use these scaling factors in a rough estimate to calculate the potential volume of finance missing from current assessments of sustainable livestock finance in the LAC region.

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