

Livestock & Silvopastoral Systems

Source Metadata

Field	Value
source	cpi
source_version	GLCF 2025
source_id	CPI-AF-004
sector	AFOLU
subsector	Livestock & Silvopastoral Systems
mitigation	Y
adaptation	Y
last_checked	2026-05-26

CPI Definition & Scope

Livestock and Silvopastoral Systems in CPI's GLCF framework tracks climate finance directed at reducing emissions from animal husbandry and transforming pastoral landscapes for climate benefits. CPI captures investment in silvopastoral systems (integrating trees with livestock grazing), improved pasture management, manure management systems (biodigesters, composting), feed additives that reduce enteric methane, and rotational grazing systems. Livestock accounts for approximately 14.5% of global GHG emissions, making decarbonization of this sector critical.

Subsectors & Examples

- **Silvopastoral Systems** — trees integrated with pastures for shade, fodder, and carbon sequestration
- **Improved Pasture Management** — rotational grazing, pasture renovation, legume integration
- **Manure Management** — biodigesters, covered lagoons, composting systems
- **Enteric Methane Reduction** — feed additives, improved feed quality, genetic selection
- **Degraded Pasture Restoration** — converting degraded grasslands to productive silvopastoral systems

Mitigation & Adaptation Classification

Livestock and silvopastoral systems are classified as **dual-benefit** in CPI's framework. Mitigation comes from reduced enteric methane, improved manure management, carbon sequestration in silvopastoral trees and improved soils, and avoided deforestation when intensification reduces land pressure. Adaptation benefits include improved animal welfare under heat stress (shade from trees), diversified farm income, improved soil water retention, and enhanced biodiversity.

LATAM Relevance

Livestock is central to Latin American economies and landscapes. Colombia is a global leader in silvopastoral system implementation, with projects supported by the World Bank and GEF converting degraded pastures across the cattle belt. Costa Rica's Livestock NAMA is a pioneering national program to reduce cattle sector emissions through silvopastoral adoption. Peru's highland livestock (llama, alpaca) face climate stress from changing Andean conditions. The region's cattle sector is a primary driver of deforestation, making sustainable intensification critical for climate goals.

Cleantech Taxonomy Crosswalk

Maps to Cleantech Taxonomy sector **AF** (AFOLU) for livestock systems. Cross-references with **ES** (Energy Systems) for biogas energy, **WA** (Waste) for manure management, and **XS** (Cross-Sectoral) for deforestation-free supply chains.

Revisión #2

Creado 2026-05-27 03:39:03 UTC por Gideon Blaauw

Actualizado 2026-05-27 03:51:13 UTC por Gideon Blaauw