Cattle Geolocation & Land Use Tracking

EUDR Context

Field	Value
eudr_commodity	cattle
country_focus	Colombia
eudr_article9_field	geolocation — single coordinate per establishment, all establishments in animal lifetime
eudr_evidence_type	satellite_verification, primary_field_data, geospatial_analysis
deforestation_risk	HIGH
last_updated	2026-05-26

Overview

EUDR Article 9 establishes specific geolocation requirements for cattle that differ from crop-based commodities. For cattle, operators must provide at least one latitude/longitude coordinate with six decimal digits for each establishment where the animal was kept during its lifetime. This establishment-level approach contrasts with the plot-perimeter requirement for crops grown on areas larger than four hectares, reflecting the mobile nature of cattle production where animals transit through birth farms, fattening operations, feedlots, and slaughterhouses.

Satellite monitoring plays a critical role in verifying that ranch lands associated with cattle production have not undergone deforestation after the December 31, 2020 cutoff date. Technologies including Sentinel-2, Landsat, and NICFI Planet imagery enable detection of pasture expansion into forest areas. For Colombia, the deforestation monitoring system operated by IDEAM provides national-level forest change data, while Global Forest Watch and MapBiomas Amazonia offer complementary independent verification layers.

The integration of geolocation data with deforestation alert systems is essential: each ranch coordinate must be cross-referenced against forest cover change datasets to produce the deforestation risk assessment required under EUDR due diligence. The temporal dimension is critical — cattle may spend only months at a given establishment, but that establishment's land use history across the full post-2020 period must be verified.

Colombian Context

Colombia's deforestation hotspots for cattle-driven land clearing are concentrated in the Amazonian departments of Caqueta, Guaviare, and southern Meta, as well as the Orinoquia plains and Pacific coast lowlands. In 2024, Caqueta recorded approximately 25,263 hectares deforested, Guaviare 16,908 hectares, and Meta 21,107 hectares — with cattle pasture expansion as the primary driver in all three regions. The phenomenon of praderizacion involves clearing forest to establish pasture, often as a mechanism for informal land claims rather than productive ranching.

Monitoring challenges include cloud cover in tropical forest regions which limits optical satellite revisit effectiveness, large ranch sizes in the Llanos Orientales where a single property may span thousands of hectares, and the prevalence of informal land tenure where property boundaries are poorly defined. The SINIGAN system records farm locations but does not systematically integrate satellite deforestation verification, creating a gap that EUDR compliance will require closing.

Cleantech Taxonomy Nodes

Directly relevant: CT-EX-014 (Remote sensing and satellite deforestation monitoring — requires eudr_cattle=Y), CT-AF-001 (Land and Soil — geolocation for ranch lands), CT-AF-006 (Smart Farming — precision data feeds for cattle geolocation). New extension needed: CT-EX-028 (Cattle establishment geolocation and movement tracking) to cover the unique multi-establishment geolocation challenge specific to cattle EUDR compliance.

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