



A PATH TO ACCOUNTABILITY:

Why Colombia Needs a Cattle Traceability System

February 2025

In 2021, the Environmental Investigation Agency (EIA) revealed in its report *Tainted Beef* how Colombian supermarkets were linked to cattle ranchers connected to deforestation in national parks and in protected Amazon forests, as well as to funding armed groups. New data analysed by EIA shows that threats to Colombia's national parks persist.

Tens of thousands of cattle are still grazing within three of Colombia's most deforested national parks, according to official vaccination data, while **hundreds of thousands** have been transported from rural districts that partially or fully overlap with these parks. These cattle then enter supply chains and are sold in urban centers like Bogotá,

with no traceability back to their origins. This data underscores the urgent need to approve the cattle traceability bill currently being considered in Congress, to ensure buyers and slaughterhouses exclude deforestation-linked products from their supply chains to protect the country's unique parks.

DEFORESTATION ON THE RISE

There is a troubling resurgence of deforestation in the Colombian Amazon. The Ministry of Environment estimated an increase of 40% in the first quarter of 2024 compared to 2023.¹ “We may be at an historic peak,” exceeding the deforestation data for the first quarter of 2022, “a period that was terrible,” reported Minister Muhamad.² The expansion of road networks has further enabled access to protected areas, making it easier for agricultural practices, including cattle ranching, to encroach on pristine ecosystems.³

La Macarena, Tinigua and Picachos are among the areas in Colombia’s national park system most historically impacted by deforestation - with cattle ranching being one of the main drivers.⁴ Repeated warnings from civil society have highlighted a loss of ecological connectivity in the Andean-Amazonian corridor linking these three parks, driven by this problem. This loss affects wildlife migration and gene flow, harming the parks’ biodiversity and resilience, threatening their long term survival.⁵ In response to this issue, EIA has persistently sought information from Colombia’s Agricultural Institute (ICA) on ranching activities within national parks, finally obtaining cattle vaccination and transport data that sheds light on operations and ranches in these protected areas, and the ongoing threats they face (see methodology for more details).



Cattle ranching is one of the main drivers of deforestation.



Deforestation in the Colombian Amazon.

THE EXTENT OF CATTLE RANCHES IN LA MACARENA, TINIGUA AND PICACHOS NATIONAL PARKS

EIA's analysis of cattle vaccinations uncovers troubling evidence of ongoing ranching in these three parks:

- The total extent of cleared forests in these three national parks alone accounts for an area covering 80% of the city of Bogota.⁶ EIA's analysis of vaccination data for 2023 shows the existence of **over 24,000 cattle, distributed over more than 180 ranches** in the three parks, showing an ongoing problem that contributes significantly to their forest loss.
- **Tinigua National Park** covers 214,360 hectares (ha) and is estimated to have lost 35% of its forests, topping the list of the most deforested parks.⁷ EIA's analysis of the data reveals the existence of **10,453 cattle in the park in 2023 in more than 50 ranches**, contributing to its record forest loss. **Four of these ranches each held at least 500 cattle.** The government has not yet legally defined ranches that are for subsistence and those that are for commercial trade. FCDS estimates there could be over 60,000 ha of pasture in the park.⁸
- The **Picachos and La Macarena** parks extend over a combined 906,933 ha, having lost 62,824 ha of their forests, also among the list of worst hit parks.⁹ The data analysed by EIA for 2023 shows **13,994 cattle in these two parks, spread over more than 130 ranches.** As in the case of Tinigua, it is not known which of the total number of ranches are defined as for subsistence and which are not.

In the next section, EIA demonstrates how cattle reared in rural districts that partially or fully overlap with these parks are being transported in significantly greater numbers than the registered cattle in the parks, as indicated by the vaccination data. These cattle then enter formal supply chains, where they are mixed with others and sold in Colombia's major urban centers, with no traceability of their origin.

"EIA's analysis of vaccination data for 2023 shows the existence of over 24,000 cattle, distributed over more than 180 ranches in the three parks."

Top 20 Ranches in Tinigua National Park (2023)

Ranch	Number of cows	Ranch	Number of cows
LA PRADERA	545	LA ESPERANZA	296
FINLANDIA	530	LAS MESITAS	289
VILLA ALEJANDRA	530	EL CAÑO LINDO	252
ESCORPION	500	LA BOCANA	248
LA CABAÑA	420	BUENAVISTA	240
LA JARDINERA	400	EVENECER	240
BELLA VISTA	360	SANTA BARBARA	230
LA PRADERA	347	LA ESPERANZA 2	206
EL PARAISO	326	ALTAMIRA	190
LA BARQUENERA	300	LOS OLIVOS	180

Source: EIA analysis based on data from National Parks and ICA.

Top 20 Ranches in Picachos National Park (2023)

Ranch	Number of cows	Ranch	Number of cows
LA PRADERA	553	LA ESPERANZA	205
LA FORTUNA	520	VISTA HERMOSA	203
LOS MELLISOS	329	LA CRISTALINA	200
LA ESPERANZA	300	LA FLORIDA	200
EL LIMONAR	275	LA JARDINERA	198
EL PARAISO	268	TAILANDIA	191
EL BRASIL	248	LA SABANA	188
LAS CEIBAS	245	EL AGUILA	158
LA NIÑA	234	EL CEBU	156
EL PROGRESO	205	EL VALLE	155

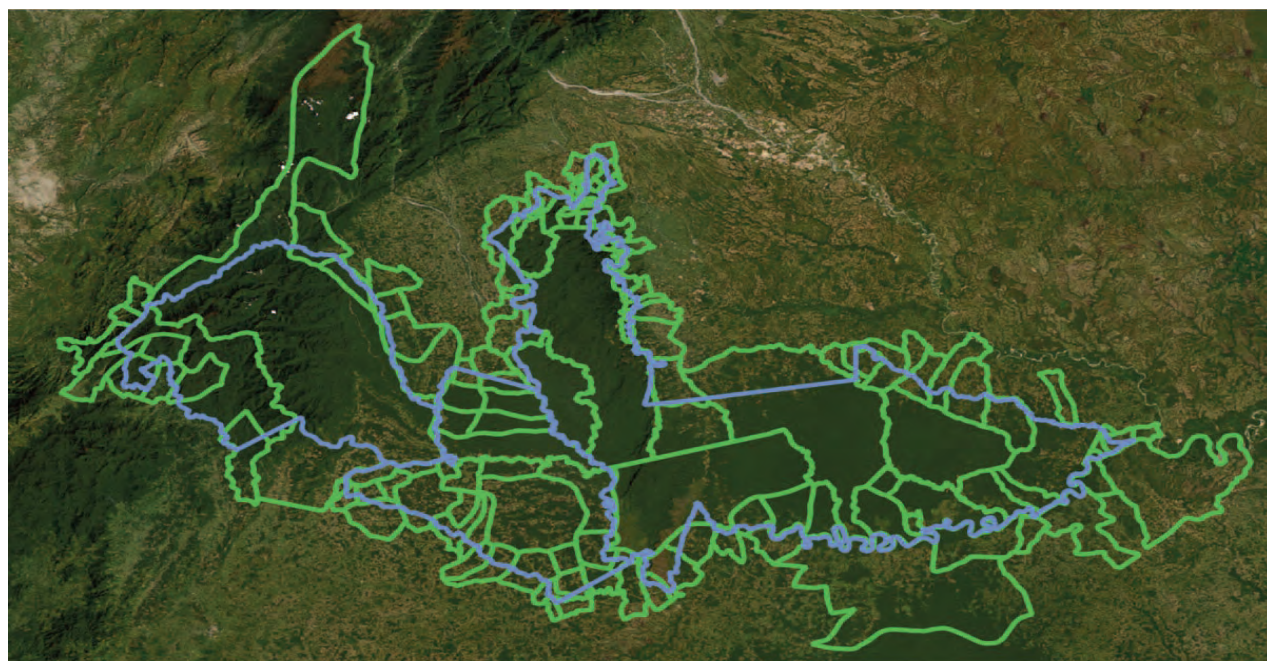
Source: EIA analysis based on data from National Parks and ICA.

Top 20 Ranches in Macarena National Park (2023)

Ranch	Number of cows	Ranch	Number of cows
LAS PALMAS	671	PALMA REAL	155
NARANJOS	262	PORVENIR	148
ESPERANZA	250	VENADA	135
CORRALES	243	EL BERGEL	122
SINAI	240	LA LADRILLERA	120
CEDROS	200	LA CORTINA	115
CUESTA	200	VILLA MARIA	114
CAÑO CAFRA	175	JARDIN	108
TANQUES	163	OASIS	104
PARAISO	161	CASA DE PIEDRA	102

Source: EIA analysis based on data from National Parks and ICA.

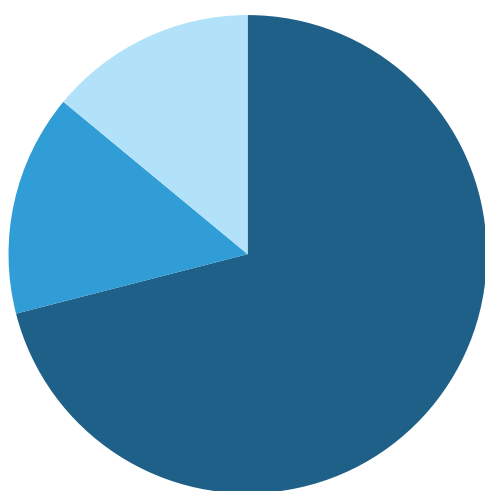
National Parks and overlapping veredas (rural districts)



Tinigua, La Macarena, Los Picachos National Parks in blue. The veredas (rural districts) that partially or wholly overlap into the parks in green, from where 221,779 cattle were transported to other parts of Colombia.

Source: Veredas and National Park boundaries from the Colombian state, visualised in QGIS by EIA using Planet imagery.

Cattle transports 2020-2024



■ Farms (71.9%)
■ Slaughterhouse (14.5%)
■ Cattle Market (13.5%)

Destination of transported cattle from districts that partially or wholly overlap the Tinigua, Los Picachos and La Macarena National Parks (2020-2024) and had vaccinations present.

Source: Data from ICA, analyzed by EIA.

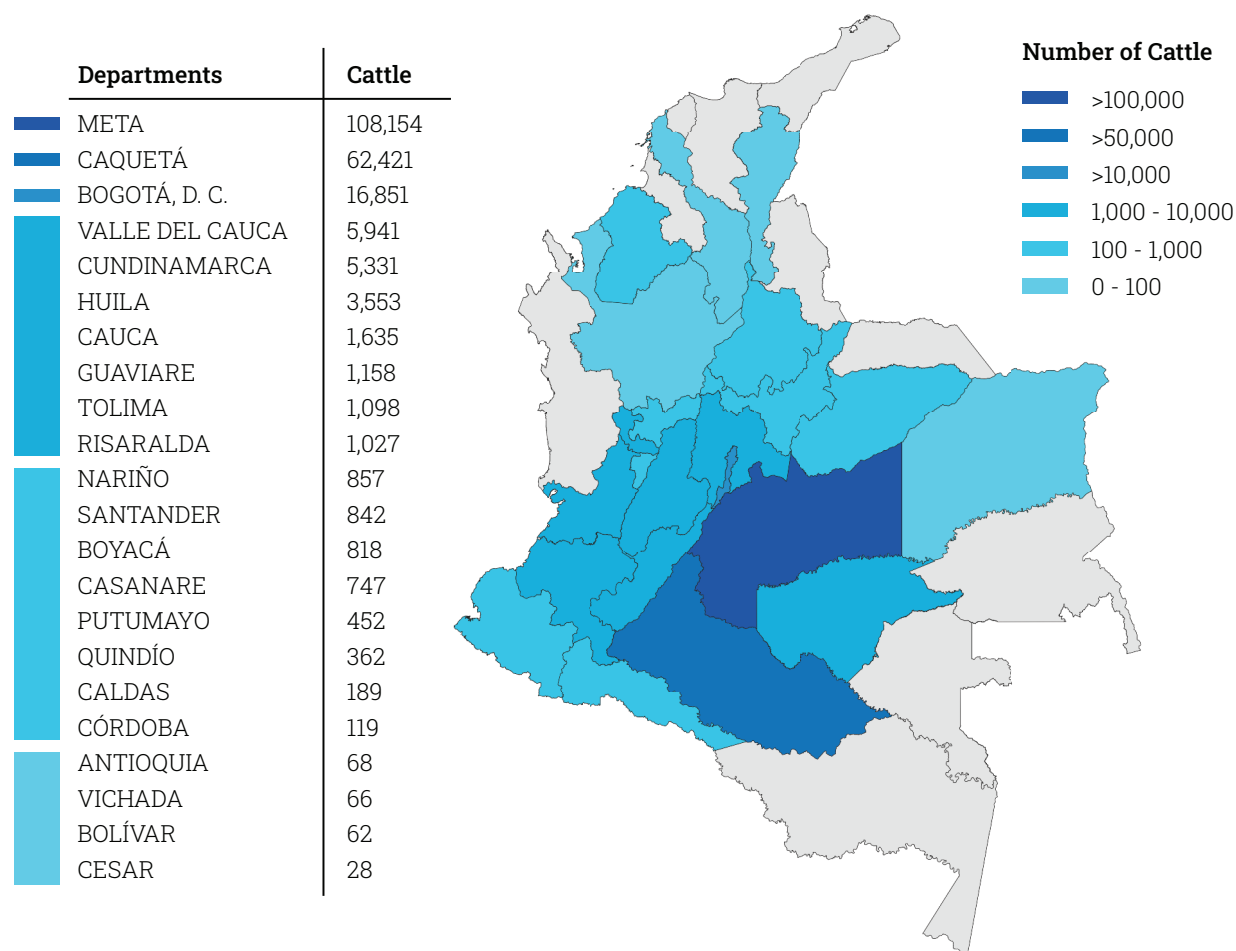
HUNDREDS OF THOUSANDS OF CATTLE TRANSPORTS (2020-2024)

Official transport information analyzed by EIA shows that **211,779** cattle were transported from veredas (rural districts) that are either completely or partially inside La Macarena, Tinigua and Picachos National Parks. When considering the destination of the cattle:

- **71.9%** of them were moved to other farms where their origins then became untraceable, disappearing into the broader livestock supply chains.
- **14.5%** of them went directly to slaughterhouses, and **13.5%** were transported to cattle markets, further obscuring their origins.

“Official transport information analyzed by EIA shows that 211,779 cattle were transported from veredas (rural districts) that are either completely or partially inside La Macarena, Tinigua and Picachos National Parks.”

Destination of transported cattle from districts that partially or wholly overlap the Tinigua, Los Picachos and La Macarena National Parks (2020-2024)



Source: Data from Colombia's Agricultural Institute (ICA). Analysis and graphic by EIA.

BOGOTA FUELING DEFORESTATION A MOMENT OF OPPORTUNITY

The departments of Meta and Caquetá accounted for 80% of the destination of the cattle originating in districts that partially or wholly overlap into these parks. Colombia's capital, Bogota, emerged as the third-largest direct destination. This indicates that consumers are unwittingly contributing to deforestation by purchasing products tied to cattle ranching in protected areas. Other reports indicate that Bogota is also the main destination of cattle coming from the Guaviare department, which has historically seen the highest rates of deforestation in protected areas in the country.¹⁰

These findings come as Colombia's Congress debates a [cattle traceability bill](#). It aims to combat deforestation by introducing a system to track each cow's origin and lifecycle with unique identifiers linked to a digital database, preventing cattle from deforested areas, including national parks, from entering supply chains.

The bill aims to deter ranching that drives deforestation by obliging cattle buyers to carry out due diligence and remove cows from deforested areas from their supply chains. It also proposes the creation of high-surveillance zones that detail deforestation hotspots in rural properties and monitor cattle movements from there.



Origin of cattle bought in cattle markets is currently untraceable.

PRINCIPLES FOR AN EFFECTIVE CATTLE TRACEABILITY SYSTEM

To ensure the proposed cattle traceability system mentioned in the bill effectively addresses the challenges posed by ranching in protected areas and deforestation, EIA calls for it to include the following principles:

- 1. Farm-to-Slaughterhouse traceability:** Cattle need to be traced back to their place of birth with individual identifications, such as ear tags, used through their entire life cycle.
- 2. Unbroken supply chain:** Monitor cattle throughout every stage, from farms to intermediaries to slaughterhouses.
- 3. Direct, verifiable, digital inputs:** The system should incorporate technology, such as mobile applications, to record and validate data in person, including GPS coordinates, at every step of the supply chain, ensuring the system is tamper-proof and reliable.
- 4. Digital and offline functionality:** Design the system to work in areas with limited connectivity, with automatic synchronization when online.
- 5. Real-Time transparency:** Provide public access to traceability data to ensure accountability and to empower consumers to make informed choices.

These principles are essential for implementing a robust system that not only identifies cattle coming from Colombia's National Parks but also fosters a sustainable and transparent livestock industry.

TIME TO ACT

The scale of deforestation linked to land grabbing and cattle ranching in Colombia's protected forests is alarming. The presence of ranches in national parks like La Macarena, Tinigua, and Picachos underscores the urgent need for systemic change in the cattle sector. The proposed congressional traceability bill represents a pivotal opportunity to enact a transformative system to address this issue.

One crucial lesson from the current data on cattle transports is the lack of information about ranches of origin or buyers. This gap makes it impossible to know where cattle come from, who is rearing them, and who is driving demand, leaving supply chain actors unaccountable for their links to deforestation. The bill seeks to solve all of these problems by introducing a system to track individual cows throughout their lifecycle and to require due diligence across the supply chain—a critical technological solution to protect Colombia's forests and parks. Importantly, any measures introduced through the traceability bill must distinguish between large-scale operations driving deforestation and subsistence ranchers, ensuring the latter are supported rather than penalized.

Protected areas are not just vital bulwarks against climate change but also living libraries of evolutionary knowledge, containing untapped biological innovations with the potential to advance fields like medicine and engineering.¹¹ Destroying these poorly studied ecosystems for grazing not only erases biodiversity but also forecloses opportunities for discoveries that could benefit humanity. By approving the traceability bill, Colombia can tackle one of the main drivers of deforestation and set a powerful precedent both regionally and globally, while protecting its unique parks.



Cattle ranching in Chiribiquete National Park in 2021.



Tinigua National Park.

Source: National Parks authority

EIA'S METHODOLOGY FOR CALCULATING THE FIGURES

1. Through multiple freedom of information requests to Colombia's Agricultural Institute (ICA), EIA obtained data on cattle vaccinations (2021 to 2023) and transports (2020 to 2024) at the national level. Note the transport permit data only shows cattle being transported from districts (*veredas*) and does not contain the names of the ranches from where those cattle originated.

2. EIA also obtained data from Colombia's National Parks authority, which included the geographic locations and names of ranches within the national parks and the points where vaccinations occurred.

3. EIA combined the vaccination data from ICA with the National Parks data to determine the number of ranches located within various parks and the number of cattle vaccinated at specific points in time. The vaccination data reflects multiple cycles of vaccination efforts within each one-year period and covers the years 2021 to 2023. Each cow receives one vaccination per cycle, so each batch of vaccinations recorded within a year is equal to the number of cows that were vaccinated.¹² This allowed us to calculate the total number of cattle present in the three national parks in 2023. We prioritised Tinigua, La

Macarena and Picachos National Parks, because these are some of the most impacted by deforestation and cattle ranching. We were able to identify the total number of ranches in the parks, because each has a unique vaccination code (RUV), as well as a name and a unique latitude and longitude coordinate.

4. EIA then analyzed cattle transport data from ICA, focusing on districts (*veredas*) that partially or fully overlap with Tinigua, La Macarena, and Picachos National Parks and that had cows present in the park in the vaccination data. The data EIA received contains the volume of cattle leaving these districts, their destinations, and the categories of buyers involved (farms, slaughterhouses, or cattle markets). It does not contain data on the ranches sending the cattle or on individual buyers. It is important to note that of the cattle transported from districts that partially overlap into these national parks, it is not possible to see in the data accessed by EIA whether they originated from the part of the district that overlapped into the park or the part outside of it. This demonstrates an important problem with the lack of cattle traceability in the data.

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Cattle in ranch that was established in a Forest Reservation in the Colombian Amazon.

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