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Crime**

ANALYSIS AND INVESTIGATION
OF ORGANIZED CRIME

Cash Cows - The Inner Workings of Cattle Trafficking from Central America to Mexico

#CattleAndCrime



Cash Cows - The Inner Workings of Cattle Trafficking from Central America to Mexico

May 2022

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1

Executive Summary

The expansion of illegal cattle ranching is threatening nature reserves in Nicaragua, Honduras and Guatemala. This activity provokes staggering levels of deforestation, irreversible environmental degradation and violence towards Indigenous communities, all while fueling a criminal market that generates millions of dollars in proceeds. A portion of these cattle are smuggled into Mexico, where they either feed the domestic demand for meat or are mixed with beef exports sent to the United States and other countries.

This report, produced by InSight Crime, follows the cattle trafficking chain from Central America to Mexico and provides an overview of how this illicit market works. It estimates the size and scope of the industry, highlights illegal ranching hotspots and smuggling routes, identifies the main actors involved in the value chain, analyzes where and how this activity overlaps with other criminal economies, and offers recommendations for governments to tackle the issue.

The findings are based on a 14-month investigation that included desktop research, telephone and in-person interviews, and fieldwork in the Mexican states of Veracruz, Tabasco, and Chiapas, the Río Plátano Reserve in Honduras and the Maya Biosphere Reserve in Guatemala. Our sources include international, national and local authorities, cattle ranchers and cattle union leaders, former contraband cattle buyers, veterinarians, Indigenous leaders, park rangers, residents of the nature reserves, environmental activists and academic experts. Most of them asked to remain anonymous for their protection. We also reviewed official government data, studies conducted by academics and non-governmental organizations, and press reports.

On one hand, the illicit cattle industry is fueled by the growing global beef trade, which remains largely unsupervised in the region and has helped push several producers into the black market. However, on the other hand, cattle trafficking also responds to various criminal interests: it is a mechanism for drug traffickers to control territory and launder money; it offers a business opportunity for land and timber trafficking networks to exploit the resource-rich nature reserves; and it gives predatory criminal groups another opportunity to obtain criminal rents and diversify their income sources.

Several actors participate along the cattle trafficking chain. Businessmen, drug traffickers, and large cattle ranchers manage livestock production in the reserves through frontmen and armed actors who protect the ranches;

networks of brokers, wholesalers and smugglers – known colloquially as coyotes – engage in a continuous process of buying and selling to move cattle from one country to another; corrupt officials facilitate the laundering of cattle into the legal supply chain so that once it reaches slaughterhouses and meat companies, these entities can claim plausible deniability, as there is no hard evidence or paper trail of the cattle’s illicit origin.

Although the countries considered in this study have robust legal frameworks to combat the trade on paper, they face significant challenges in tackling the illicit cattle market. Most of it has to do with the fact that cattle trafficking is not high on their list of priorities, but challenges also arise from a severe lack of coordination among the different agencies involved in regulating the livestock industry. Systemic corruption, violence and the threat of organized crime groups also contribute to the relative ease with which cattle trafficking can occur largely uninterrupted, as few people trust authorities to report illegal activities.

In that sense, raising awareness about the issue, not just among the general population, but also among different government agencies, is one of the first steps that should be taken. In the medium- and long-term, governments should direct their efforts towards improving transparency, strengthening coordination among different government actors, and incentivizing cattle producers to enter the legal framework. Agencies in charge of regulating the livestock industry should strengthen their due diligence on meat companies and demand a more transparent sourcing process. Finally, the international community should hold regional governments accountable for their role in facilitating or turning a blind eye to illegal cattle ranching and trafficking, thus contributing to its devastating consequences.



2

Illegal Cattle Ranching and Trafficking Patterns

The Bosawás and Indio Maíz nature reserves in Nicaragua, the Río Plátano Reserve in Honduras and the Maya Biosphere Reserve in Guatemala make up some of the Americas' largest and most important natural ecosystems. These reserves are threatened by extensive livestock farming, which contributes to deforestation, soil degradation, the loss of wildlife, deterioration of bodies of water and the displacement of Indigenous peoples.

Most agricultural activities are severely restricted in these areas, as they are protected by international biodiversity conservation agreements, national environmental laws and laws supporting communal land rights for Indigenous communities. However, cattle ranching is used as a cover for various criminal interests that converge in these spaces, such as drug trafficking, money laundering, land trafficking and timber trafficking.

A portion of the cattle raised within these nature reserves are trafficked to Mexico to meet the country's domestic demand, and part of that processed beef is then exported internationally, including to the United States. This is, in part, a knock-on effect of the globalization of the cattle trade in the region. Following the passage of the North American Free Trade Agreement (NAFTA) in 1994, Mexico converted into a larger cattle and beef exporter to the United States and later to other markets. This put pressure on the Mexican supply chain to produce sufficient cattle to meet the international and local demand, which has, in part, been filled by contraband cattle from Central America.¹

This demand also generates a highly organized criminal business involving long-established and heavily-armed smuggling networks.

Size and Scope of Cattle Trafficking

Due to the illegality in which cattle are raised within nature reserves, there is no consensus on the amount of cattle in these territories. However, there are ways to get a rough estimate. In all, some 1.3 million hectares have been

1 Yankuic Galvan-Miyoshi, Robert Walker and Barney Warf, "Land Change Regimes and the Evolution of the Maize-Cattle Complex in Neoliberal Mexico," *Land* (2015), 4, pp. 754-777.

deforested in the last 35 years, and of this deforested territory, about 70 percent is used for raising cattle.² Using that as a baseline, and assuming that at least one calf can be raised per hectare,³ we estimate the number of cattle being raised in the Indio Maíz Reserve to be 12,000, around 370,000 in the Bosawás Reserve, 65,000 in Río Plátano, and 440,000 in the Maya Biosphere. These are likely modest estimates, given that productivity can be higher in some of the illicit ranches.⁴ The cattle bred in these territories are primarily Zebu or Brahman, and they are mainly sold for their meat rather than their dairy.⁵

Determining how many of these cattle are smuggled into Mexico is even more difficult. This is because it is nearly impossible to trace the origins of cattle once the animals are laundered into the legal distribution chain. Still, there are some estimates. Using data from the Mexican government, one academic research team estimated in 2015 that every year, about 300,000 head of cattle that were exported to central and northern Mexico from Chiapas, which is among the top 10 cattle-producing states in the country, were sourced from Central America. The authors did not estimate a total number of smuggled cattle that cross that border, but they noted large numbers of Central American-sourced cattle were likely also smuggled into Tabasco and Campeche.⁶

To a certain extent, Mexican authorities corroborated these rough estimates, telling InSight Crime that close to 800,000 head of cattle cross illegally into the country each year via the country's southern border with Guatemala.⁷ In comparison, Guatemala legally exported just 7,234 head of cattle to Mexico in 2021. Before 2020, there was no regulated trade of cattle between the two countries.⁸

Contraband cattle are rapidly laundered into the legal supply chain, sacrificed and processed into meat products, representing something in the range of 10 percent of Mexico's total beef production every year, according to our

2 Jennifer Devine, Nathan Currit, Yunuen Reygadas, Louise I. Liller, Gabrielle Allen, "Drug trafficking, cattle ranching and Land use and Land cover change in Guatemala's Maya Biosphere Reserve," *Land Use Policy*, vol. 95 (2020); WCS Newsroom, "Breaking: Honduran Government Announces Unprecedented Commitment to Protect Ancient City and Surrounding Rainforest," *Wildlife Conservation Society*, 9 November 2018.

3 The number of cattle raised within the reserve varies depending on the purpose of ranching. In some cases, there can be vast amounts of land with little cattle, as in the case of Guatemala, or there can be a higher concentration of cattle, as in the case of Indio Maiz. Between one and two heads of cattle is what is raised on average in all four reserves. InSight Crime telephone interviews, environmental activist in Indio Maiz, Nicaragua, 17 June 2021; Jennifer Devine, professor at Texas State University, 20 January 2022; InSight Crime interviews with residents of the Río Plátano Reserve, Honduras, November 2021.

4 InSight Crime telephone interview, environmental activist in Indio Maiz, Nicaragua, 17 June 2021.

5 InSight Crime interviews, cattle rancher in Palenque, Chiapas, Mexico, 9 October 2021; Miskito leader in Río Plátano, Gracias a Dios, Honduras, 6 November 2021.

6 Yankuic Galvan-Miyoshi, Robert Walker and Barney Warf, "Land Change Regimes and the Evolution of the Maize-Cattle Complex in Neoliberal Mexico," *Land* (2015), 4, pp. 754-777.

7 InSight Crime telephone interview, Francisco Javier Trujillo, Chief Director of SENASICA, Secretaría de Agricultura y Desarrollo Rural (SADER), Mexico City, Mexico, 19 April 2021.

8 Data provided to InSight Crime by Guatemala's Ministry of Agriculture. The Mexican government reported importing only 6,569 heads of cattle, according to information provided to InSight Crime by the Ministry of Agriculture and Rural Development (Secretaría de Agricultura y Desarrollo Rural - SADER).

estimates.⁹ In comparison, Mexican beef exports to the United States in 2021 represented roughly 14 percent of the country's total production.¹⁰ Mexico is the third-largest foreign beef supplier to the United States after Canada and Australia, and the 10th largest beef exporter in the world.¹¹ In 2021, Mexico exported around 300,000 tons of beef to the United States.¹² An unknown part of the illicitly sourced beef ends up being mixed into these international exports.¹³

In fact, those who profit the most from cattle trafficking appear to be the networks responsible for coordinating transport and brokering deals between actors in different countries.

Cattle trafficking from Central America to Mexico is a multimillion-dollar business. If 800,000 head of cattle enter the country each year and are sold for approximately \$400 per head, that is a \$320 million illicit market annually.¹⁴ How these proceeds are distributed across the distribution chain, however, is also challenging to calculate. According to InSight Crime's investigations, cattle trafficking in the region is less profitable than other criminal economies, such as drug trafficking and timber trafficking. To be sure, for a large part of the criminal networks involved in this activity, the illegal production and movement of livestock represents a secondary source of income and may be more valuable as a way of trafficking drugs and laundering the proceeds.¹⁵

In fact, those who profit the most from cattle trafficking appear to be the networks responsible for coordinating transport and brokering deals between actors in different countries. We estimate that the annual value of the purchase and sale of livestock in the nature reserves of Central America, for example,

9 Based on data provided by the Ministry of Agriculture and Rural Development (Secretaría de Agricultura y Desarrollo Rural - SADER), the Food and Fishery Information Service (Servicio de Información Agroalimentaria y Pesquera - SIAP), the National Service of Health, Safety and Agri-Food Quality (Servicio Nacional de Sanidad, Inocuidad y Calidad Agroalimentaria - SENASICA) and the National Institute of Statistics and Geography (Instituto Nacional de Estadística y Geografía - INEGI).

10 Calculation based on beef import data provided by the USDA and beef production data provided by Mexico's Food and Fishery Information Service (Servicio de Información Agroalimentaria y Pesquera - SIAP).

11 Derrell S. Peel, "Mexican Beef Exports Continue to Grow," Beef2Live, 28 February 2022.

12 USDA, "Livestock and Meat International Trade Data," 2022.

13 InSight Crime interview, official working in the national cattle industry, Mexico City, Mexico, 27 January 2022; Oakland Institute, "Drivers of Violence Against Environment Defenders in Nicaragua," [PowerPoint Presentation]

14 Local ranchers interviewed by InSight Crime in southern Mexico mentioned that a calf smuggled into Mexico sells for about \$2 per kilogram. Calves reportedly weigh on average about 200kg by the time they enter Mexico, so they can sell for about \$400.

15 Jennifer Devine, David Wrathall, Nate Currit, Beth Tellman, Yunuen Reygadas, "Narco-Cattle Ranching in Political Forests," *Antipode*, vol. 52, no. 4 (2020), pp. 1018-1038.

can be as high as \$158 million.¹⁶ Brokers certainly make their share: In 2013, an investigation by the Mexican Army discovered that, at a single border crossing between Guatemala and Mexico, buying and selling smuggled cattle could generate some \$30.6 million per year.¹⁷

There are also numerous ancillary criminal businesses that have emerged from cattle trafficking. To cite just one example in Mexico, a cattle identification earring legally sells for \$2.50. On the black market, however, it sells for at least \$25, according to local cattle ranchers. If each of the 800,000 head of cattle smuggled into the country receive an earring purchased on the black market, this part of the cattle laundering process alone would be worth some \$18 million per year.

In comparison, the Mexican agency in charge of tracking the movement of livestock has far less resources. In 2021, the annual budget for the Secretariat of Agriculture and Rural Development (Secretaría de Agricultura y Desarrollo Rural - SADER) was about 51 billion Mexican pesos, or around \$2.5 billion.¹⁸ Within that ministry, the National Service of Health, Safety and Agri-Food Quality (Servicio Nacional de Sanidad, Inocuidad y Calidad Agroalimentaria -) was allocated just about \$160 million that year. However, the National Livestock Identification System (Sistema de Identificación Individual de Ganado - SINIIGA) does not receive any government money. Rather, cattle ranching unions have historically funded a large part, if not all, of SINIIGA's operations in the absence of public contributions.¹⁹

Illegal Cattle Production Hotspots

In the three source countries that make up the focus of this investigation – Nicaragua, Honduras and Guatemala – cattle are raised illegally in natural reserves and on protected Indigenous lands. These areas almost always share four key characteristics: they sit on porous, isolated, and often unmonitored international borders; are at crucial points along drug trafficking routes to the United States; suffer from local corruption; and are mired in land ownership and human rights conflicts involving Indigenous communities.

Cattle ranching has expanded into these areas over the past 40 years²⁰ as producers and landowners obtain land at low prices –or for free via forced

¹⁶ The calculation is based on the average going price (\$360) for a head of cattle in Central America, according to field investigations by InSight Crime.

¹⁷ Jorge Alejandro Medellín, “[Deja ganancias millonarias el tráfico ilegal de ganado de CA,](#)” *El Universal*, 24 June 2013.

¹⁸ Fundar: Centro de Análisis e Investigación, “[Presupuesto para el campo y desarrollo rural,](#)” 2022.

¹⁹ InSight Crime interview, member of the national union of cattle ranchers, Mexico City, Mexico, 27 January 2022; *El Norte*, “[Resaltan ganaderos falta de recursos,](#)” 17 November 2021.

²⁰ Norman Myers, “[The Hamburger Connection: How Central America’s Forests Became North America’s Hamburgers,](#)” *Ambio* (1981), vol. 10 no. 1, pp. 2-8.

occupations– and with access to quality soil that remains productive for around five years, while also potentially hiding other types of illegal activities in these areas due to the remote and inaccessible location of the reserves.

Indio Maíz Biological Reserve

The Indio Maíz Biological Reserve is located to the southeast of Nicaragua on the country's border with Costa Rica. Spanning 263,900 hectares, this reserve was declared a United Nations Educational, Scientific and Cultural Organization (UNESCO) protected site in 2003,²¹ and more than half of its territory makes up part of the communal lands of the Rama and Kriol Indigenous communities.²²

Illegal cattle ranching has contributed to high levels of deforestation in this reserve. According to the Ministry of the Environment and Natural Resources of Nicaragua (Ministerio del Ambiente y Recursos Naturales de Nicaragua - MARENA), approximately 500 hectares in the center and more than 7,000 hectares of the buffer zone are lost each year to cattle grazing.²³ However, according to the Indio Maíz Civic Battalion, a non-governmental organization dedicated to conservation in the reserve, these numbers are likely higher, and they estimate that each cattle rancher may clear as much as 280 hectares every year.²⁴

Cattle are raised in the reserve until they are ready for slaughter, then moved on foot to various nearby municipalities. From there, they are delivered to slaughterhouses or put on transport trucks and moved to the cities of San Carlos and Managua, as well as other distant parts of the country.²⁵

On the southern edge of the Indio Maíz Reserve, cattle are also moved across the San Juan River into Costa Rica, making use of blind spots near the municipality of El Castillo, in an area populated by private ranches.²⁶

Cattle ranching in this reserve is fostered by local corruption. According to the Civic Battalion, land trafficking networks that allegedly work within nearby municipal government offices usurp and sell pieces of land that traditionally belong to Indigenous communities to cattle ranchers.²⁷

21 La Prensa Nicaragua, “Indio Maíz declarada Reserva Mundial de la Biósfera,” 10 July 2003.

22 Reserva Biológica Indio-Maíz, “Pueblos Rama y Kriol,” 2021.

23 Nicaragua Ministry of the Environment and Natural Resources, “Estudios de las causas de la deforestación y la degradación forestal,” May 2017.

24 Batallón Cívico Indio Maíz, “Amenazas”, Indio Maíz Reserva Biológica.

25 Fundación Río, “Dinámica ganadera relacionada a la Reserva Biológica Indio-Maíz.” May 2020.

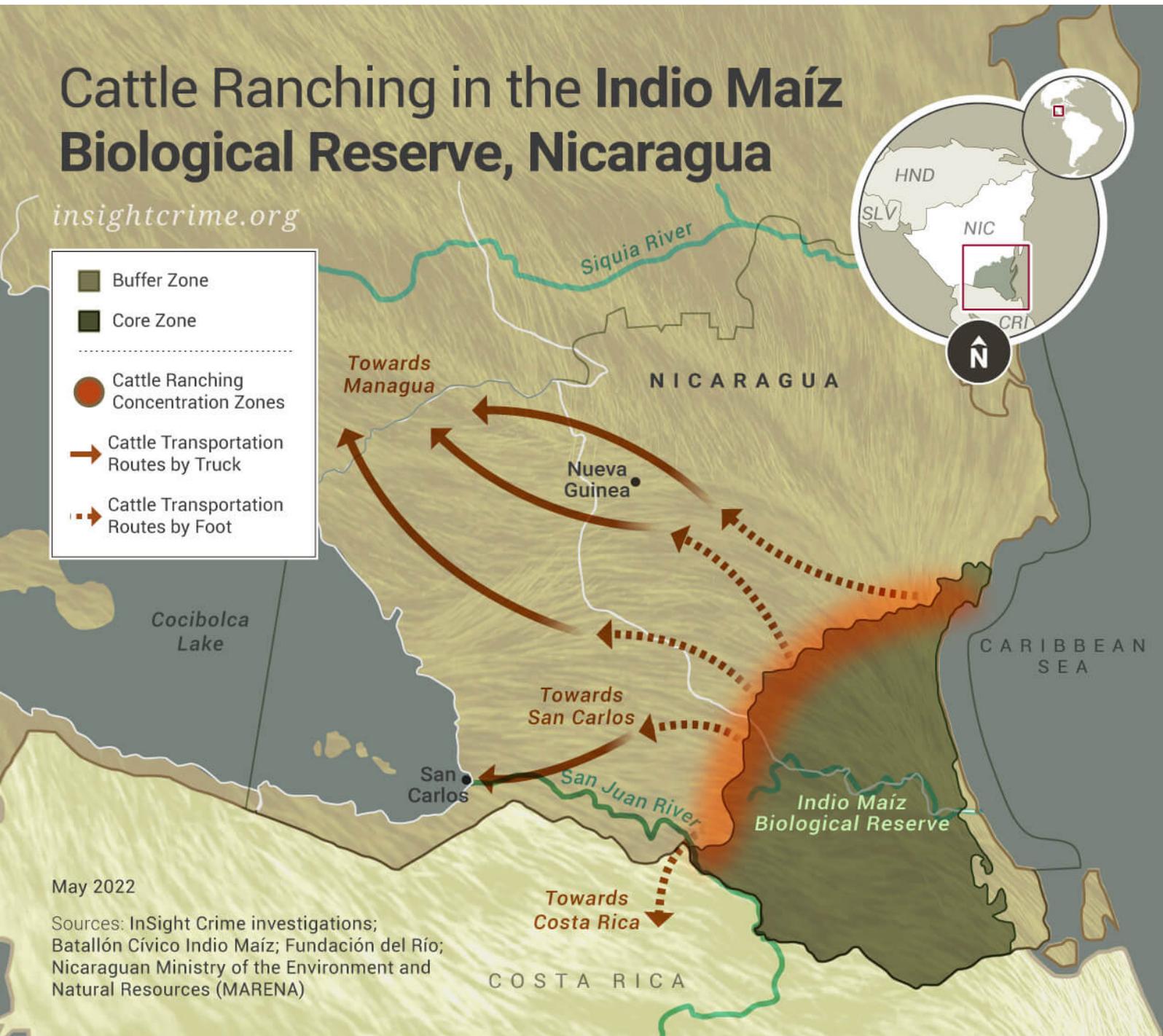
26 Fundación Río, “Dinámica ganadera relacionada a la Reserva Biológica Indio-Maíz.” May 2020.

27 Batallón Cívico Indio Maíz, “Deforestación por invasión de colonos,” Indio Maíz Reserva Biológica.

Cattle Ranching in the Indio Maíz Biological Reserve, Nicaragua

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- Buffer Zone
- Core Zone
- Cattle Ranching Concentration Zones
- Cattle Transportation Routes by Truck
- Cattle Transportation Routes by Foot



May 2022

Sources: InSight Crime investigations; Batallón Cívico Indio Maíz; Fundación del Río; Nicaraguan Ministry of the Environment and Natural Resources (MARENA)

INDIO MAÍZ BIOLOGICAL RESERVE

TOTAL EXTENSION

263,900 hectares
(Core Zone)

DEFORESTATION DATA

4,960 ha lost from 2007 to 2019



12,000
Estimated number of calves raised in the Reserve



ADMINISTERED BY
Nicaraguan Ministry of the Environment and Natural Resources (MARENA)



HOME OF
Rama and Kriol Indigenous communities

RELATED CRIMINAL ACTIVITIES

Land Trafficking

Illegal Logging

Bosawás Biosphere Reserve

Spanning 2.2 million hectares, the Bosawás Biosphere Reserve is located in the Jinotega department and the Autonomous Region of the North Caribbean Coast of Nicaragua, on the border with Honduras. This territory was declared a UNESCO-protected site in 1997, and is home to the Miskito and Mayangna Indigenous communities, who were granted land rights at the turn of the century.²⁸

The most recent figures from the MARENA indicate that between 2015 and 2019, around 35,000 hectares of forest were lost in Bosawás, mainly to plant grasslands.²⁹ The German Agency for International Cooperation (GIZ) estimates that another 564,000 hectares were lost between 1987 and 2010.³⁰ Part of this deforested territory forms a buffer zone where regulated agricultural activities are allowed, with the purpose of containing the expansion of human activity towards the center of the reserve. However, cattle ranching has also illegally expanded beyond this area,³¹ affecting primary forests,³² and into lands that have been granted to Indigenous communities.³³

Once cattle are ready for sale, they are moved from the reserve by foot and then boarded on trucks headed towards slaughterhouses near Managua.³⁴ Other cattle are transported by foot across the Coco River into Honduras' Río Plátano Reserve, often on territory belonging to the Miskito Indigenous communities that occupy both sides of the border.³⁵ This porous border area with Honduras has traditionally been a strategic region for transnational drug trafficking organizations that receive cocaine shipments by air and sea from South America.

28 Asamblea Nacional de la República de Nicaragua, “Ley No. 445. Ley del Regimiento de Propiedad Comunal de los Pueblos Indígenas y Comunidades Étnicas de las Regiones Autónomas de la Costa Atlántica de Nicaragua y de los Ríos Bocay, Coco, Indio y Maíz,” Gaceta Oficial No. 16, 23 January 2003.

29 Ministerio del Ambiente y Recursos Naturales de Nicaragua, “Reservas de Biosferas Bosawás y Río San Juan. Dinámica de la cobertura del bosque. Análisis multitemporal 2000-2010-2015-2019” April 2019.

30 Environmental Justice Atlas, “Deforestación en la Reserva de la Biósfera Bosawás, Nicaragua,” 13 April 2016.

31 Taran Volckhausen, “Indigeneous Communities, Wildlife under Threat as Farms Invade Nicaraguan Reserve,” Mongabay, 17 September 2019.

32 Primary forests are the oldest and least disturbed part of the forest, and thus form the core of a thriving ecosystem. See: Sarah Ruiz, “What are Primary Forests and Why Should We Protect Them?” Global Forest Watch, 18 May 2020.

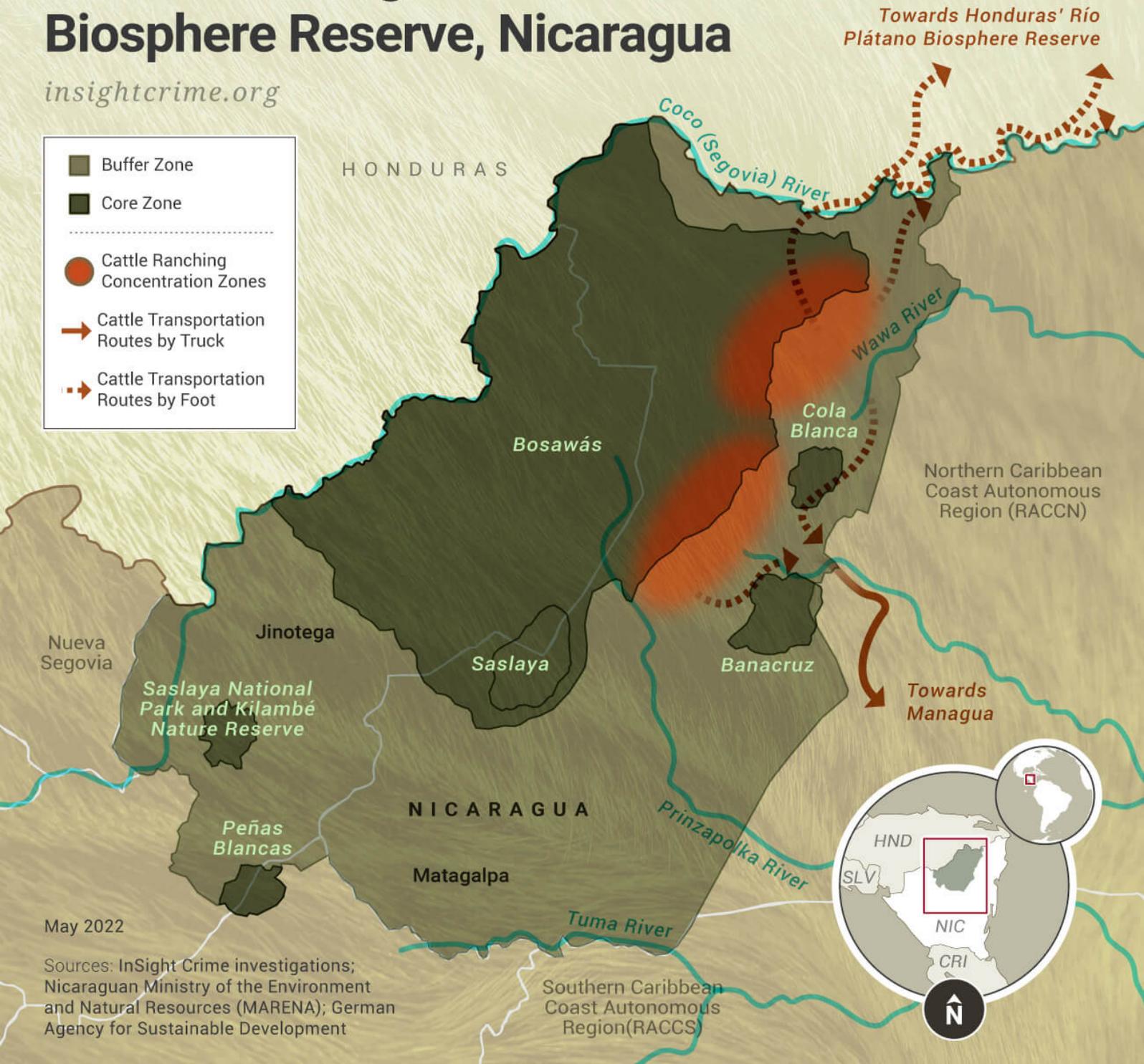
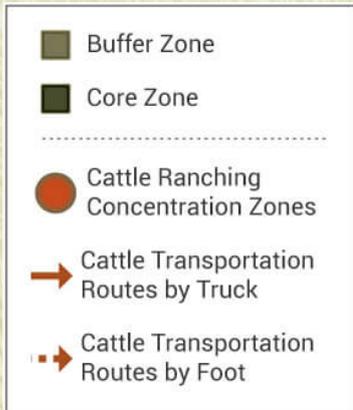
33 InSight Crime telephone interview, Bosawás community leader, Nicaragua, 27 January 2022.

34 InSight Crime telephone interviews, Nicaraguan bovine veterinarian, Nicaragua, May 2021; Bosawas community leader, 3 February 2021.

35 InSight Crime telephone interview, Bosawás community leader, Nicaragua, 3 February 2021.

Cattle Ranching in the Bosawás Biosphere Reserve, Nicaragua

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BOSAWÁS BIOSPHERE RESERVE

TOTAL EXTENSION



DEFORESTATION DATA



370,000
Estimated number of calves raised in the Reserve.



ADMINISTERED BY
Nicaraguan Ministry of the Environment and Natural Resources (MARENA)



HOME OF
Miskito and Mayangna Indigenous communities

RELATED CRIMINAL ACTIVITIES

- Cocaine Trafficking
- Land Trafficking
- Timber Trafficking

Extensive cattle ranching in Bosawás is carried out by people known popularly as colonos (settlers), who often migrate from the center of the country. As only Indigenous people have legal rights to the lands in Bosawás, settlers depend on land trafficking networks that usurp territory, and then sell or issue land titles in the municipalities surrounding the reserve. On other occasions, the land is informally purchased from Indigenous authorities at low prices. In some instances, it is simply forcibly occupied.³⁶ In a 2018 study cited by Nicaraguan environmental authorities, the Nicaraguan Army found that around 60 percent of the settlements within the Bosawás Reserve did not have documents proving their legal possession of the occupied lands.³⁷

Río Plátano Biosphere Reserve

Illegal cattle ranching is closely linked to drug trafficking in the Río Plátano reserve and the nearby Tawahka reserve. The region is situated on Honduras' southeastern border with Nicaragua's Bosawás Reserve, and stretches across the departments of Gracias a Dios, Olancho and Colón – a region also known as La Mosquitia. This territory is home to Indigenous and Afro-Honduran communities, such as the Miskitos, Pech, Tawahkas and Garífunas.

Due to its strategic location and the state's poor presence in this territory, La Mosquitia has for several years served as the main entry point for cocaine transported into Honduras by air and sea. Several family clans dedicated to drug trafficking have established their centers of political, economic and social power here.³⁸

In this scenario, cattle ranching in Río Plátano is used to launder money from drug trafficking and hide clandestine airstrips.³⁹ Cattle ranching is concentrated primarily within the forested areas, as well as in areas that are not in the reserves, but that have been formally titled to the Miskito community.⁴⁰

36 Michelle Carrere, "Cattle Ranching Devours Nicaragua's Bosawás Biosphere Reserve," Mongabay, 10 March 2017.

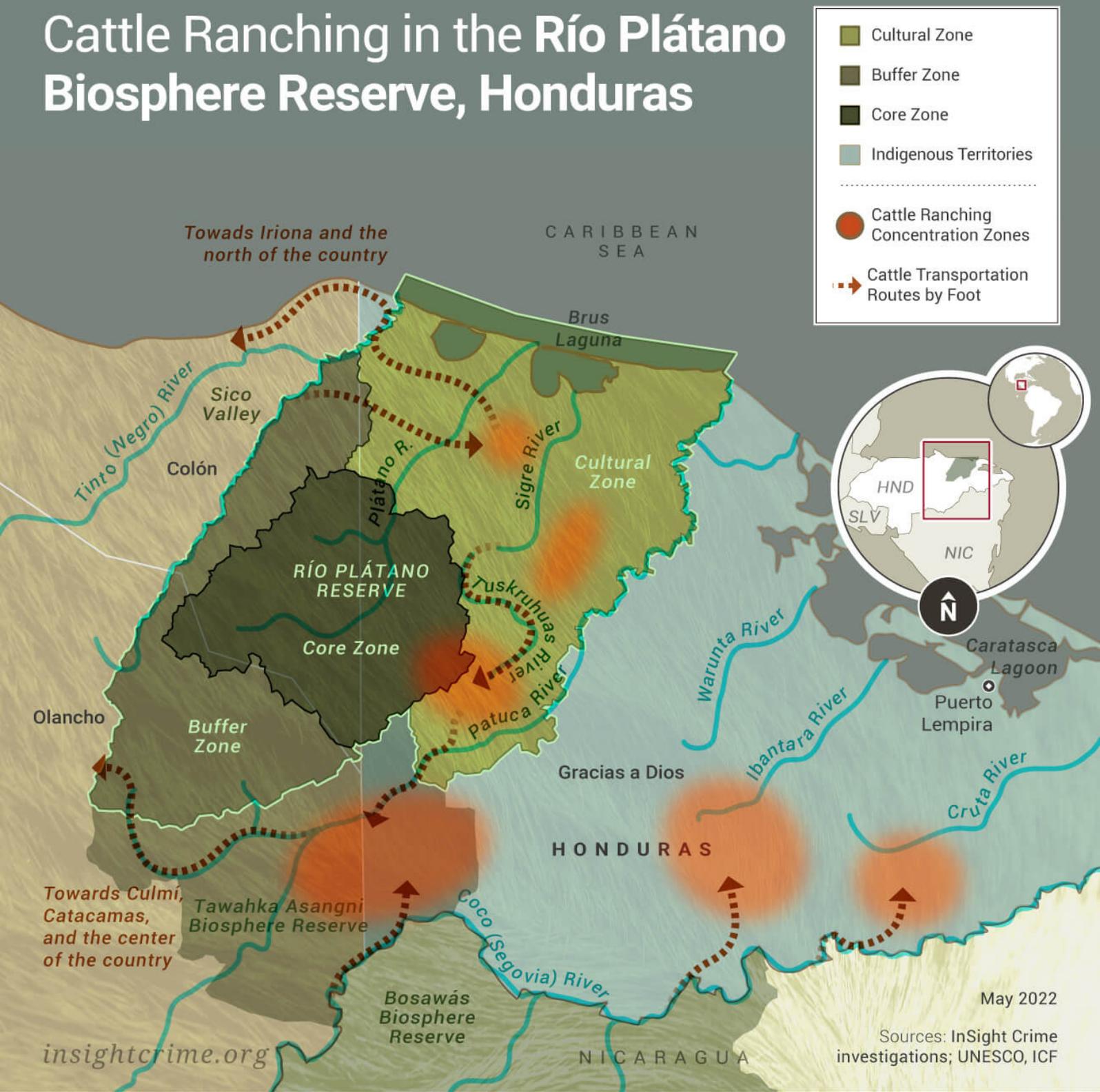
37 Ministerio del Ambiente y Recursos Naturales de Nicaragua, "Causas de Deforestación y Degradación Ambiental en Nicaragua," November 2019.

38 Héctor Silva Ávalos, "Brothers' Arrest Displays History of Narco-Politics in Honduras Drug Corridor," InSight Crime, 6 November 2019.

39 InSight Crime telephone interviews, environmental activist, Río Plátano Reserve, Gracias a Dios, Honduras, 24 May 2021; Miskito activist, Gracias a Dios, Honduras, 18 May 2021; David J. Wrathall, Jennifer Devine, Bernardo Aguilar-González, Karina Benessaiah, Elizabeth Tellman, Steve Sesnie, Erik Nielsen, Nicholas Magliocca, Kendra McSweeney, Zoe Parson, John Prostigel, Andrea Rivera Sosa, Anayansi Dávila, "The impacts of cocaine trafficking on conservation governance in Central America," *Global Environmental Change*, vol. 63 (2020).

40 InSight Crime telephone interviews, environmental activist, Río Plátano Reserve, Gracias a Dios, Honduras, 24 May 2021; local journalist and Miskito activist, Gracias a Dios, Honduras, 18 May 2021.

Cattle Ranching in the Río Plátano Biosphere Reserve, Honduras



RÍO PLÁTANO BIOSPHERE RESERVE

TOTAL EXTENSION



DEFORESTATION DATA



65,000 Estimated number of calves raised in the reserve



ADMINISTERED BY Institute for Forest Conservation (ICF)



HOME OF Miskito, Tawahka, Pech, and Garifuna communities

RELATED CRIMINAL ACTIVITIES

- Cocaine Trafficking
- Land Trafficking
- Timber Trafficking

Local residents told InSight Crime that contraband cattle entering the country from Nicaragua tend to go to the towns of Auka, Wampusirpi and Mocerón. From Olancho and the Sico Valley, they are brought into the heart of the reserves. To move cattle, ranchers have also cleared part of the forest to make way for informal roads⁴¹ that allow them to connect with the main towns just outside the reserves, as well as to urban centers like Irióna.⁴² Local residents employed by ranchers also move cattle in and out of the reserve along the various rivers that flow through the forests.

Cattle ranching has resulted in high levels of deforestation, one reason for which the Río Plátano Biosphere has been listed by UNESCO as a World Heritage Site in Danger since 2011.⁴³ The reserve has 350,000 hectares of forest area⁴⁴ and 332,335 hectares of land that has traditionally belonged to Indigenous communities – which is referred to as the “cultural zone.” According to Honduras’ Institute for Forest Conservation (Instituto de Conservación Forestal - ICF), the reserve loses approximately 2,700 hectares per year;⁴⁵ and according to the Wildlife Conservation Society, 90 percent of this deforestation is related to illicit cattle ranching.⁴⁶

This expansion of cattle ranching has also resulted in the forced displacement of Indigenous communities and severe human rights violations. When InSight Crime visited the reserve, local residents mentioned receiving constant threats to give up their lands to settlers.

Maya Biosphere Reserve

As in Honduras, cattle ranching in Guatemala’s Maya Biosphere Reserve provides multiple advantages to international drug trafficking networks utilizing the country as an air bridge between South American drug producers and Mexican organized crime groups.⁴⁷ The grazing areas are flat enough for

41 Santiago Previde, “How a ‘Narco-Highway’ in Honduras Became National News”, InSight Crime, 6 July 2021.

42 InSight Crime telephone interviews, environmental activist, Río Plátano Reserve, Gracias a Dios, Honduras, 24 May 2021; local journalist and Miskito activist, Gracias a Dios, Honduras, 18 May 2021.

43 Kendra McSweeney and Erik Nielsen, “Drug Policy as Conservation Policy: Narco-Deforestation,” Policy Forum, vol. 343 no. 6170, pp. 489-490, 2014.

44 UNESCO, “Río Plátano Biosphere Reserve,” UNESCO World Heritage Center, 2022.

45 Leonardo Guevara and Karen Paredes, “Honduras: deforestación amenaza la zona cultural de la Biósfera Río Plátano,” Mongabay, 25 October 2021.

46 WCS Newsroom, “Breaking: Honduran Government Announces Unprecedented Commitment to Protect Ancient City and Surrounding Rainforest,” Wildlife Conservation Society, 9 November 2018.

47 Alessandro Ford. “Drug Flights Climb Again in Honduras and Guatemala.” InSight Crime. 14 October 2020; Max Radwin, “Guatemala Officials Say Organized Crime is Largely Responsible for Forest Fires,” InSight Crime 11 June, 2020.

airplanes to land safely, can act as cover for more well-constructed clandestine airstrips hidden on the properties and allow for temporary drug storage in ranches and barns. Criminal networks can also use cattle to move drugs and launder money.⁴⁸

The Maya Biosphere Reserve, established in 1990, is located in the northern half of the Petén department, along the porous border with Mexico and Belize. Its land area of more than two million hectares covers 19 percent of Guatemala's territory. Illegal cattle ranching is concentrated in the Laguna del Tigre and Sierra del Lacandón national parks, near Chiapas, Tabasco and Campeche, the three Mexican states where cattle are trafficked across the border.⁴⁹

For years, Petén has served as a strategic territory for organized crime, as it is a passageway for goods and people moving into Mexico. Both Guatemalan criminal groups and large Mexican criminal organizations, such as the Sinaloa Cartel, Zetas and Jalisco Cartel New Generation (Cartel de Jalisco Nueva Generación – CJNG), have used this territory to exchange products and negotiate trade deals.⁵⁰

These dynamics have seriously impacted ecological conservation. In just a few months in 2016, some 8,000 hectares of the Maya Biosphere were impacted by a series of fires allegedly started by cattle ranchers, drug trafficking networks, and timber traffickers.⁵¹ According to Global Forest Watch, Petén lost 362,000 hectares of primary forest between 2001 and 2020.⁵² One recent academic study said around 70 percent of this deforestation is related to cattle ranching.⁵³

48 William Allen, "[In the Land of the Maya, a Battle for a Vital Forest](#)," Yale School of the Environment, 8 October 2012.

49 InSight Crime interviews with Guatemalan park guards, Maya Biosphere Reserve, November 2021; Jennifer Devine, Nathan Currit, Yunuen Reygadas, Louise I. Liller, Gabrielle Allen, "[Drug trafficking, cattle ranching and Land use and Land cover change in Guatemala's Maya Biosphere Reserve](#)," *Land Use Policy*, vol. 95 (2020); Jennifer Devine, David Wrathall, Nate Currit, Beth Tellman, Yunuen Reygadas, "[Narco-Cattle Ranching in Political Forests](#)," *Antipode*, vol. 52, no. 4 (2020), pp. 1018-1038

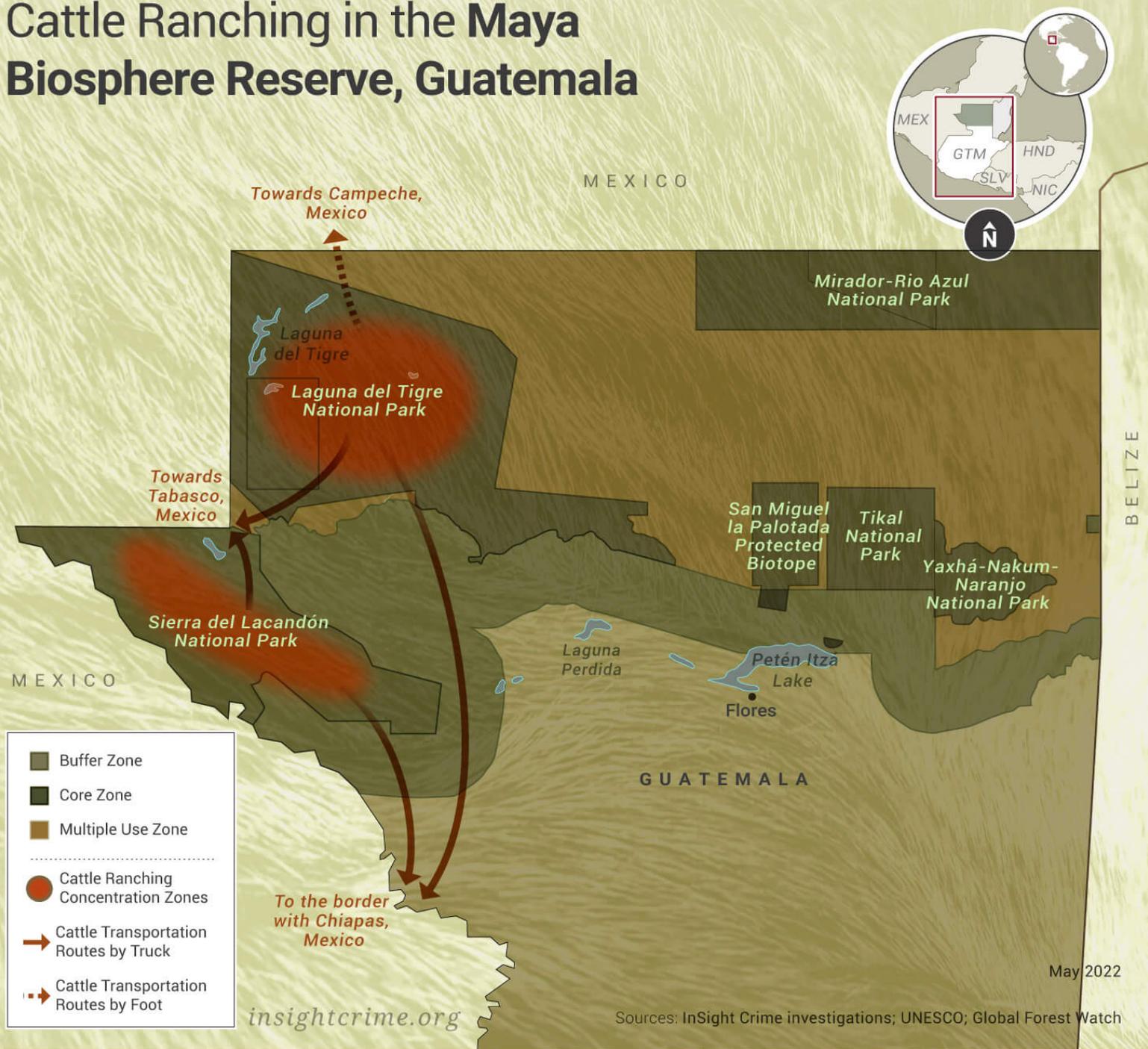
50 Julie López, "[Jalisco Cartel Sets Off Alarm Bells Along Mexico-Guatemala Border](#)," InSight Crime 23 September, 2021; Óscar Martínez, "[Ser un nadie en tierra de narcos](#)," *El Faro*, 3 November 2011; InSight Crime, "[Grupos de poder en Petén: Territorio, política y negocios](#)," July 2011.

51 Deborah Bonello, "[Criminal Activity Spreading Fire in Guatemala's Maya Reserve](#)," InSight Crime, 1 July, 2016.

52 Global Forest Watch, "[Pérdida de bosque primario en Petén, Guatemala](#)," 2020.

53 Jennifer Devine, Nathan Currit, Yunuen Reygadas, Louise I. Liller, Gabrielle Allen, "[Drug trafficking, cattle ranching and Land use and Land cover change in Guatemala's Maya Biosphere Reserve](#)," *Land Use Policy*, vol. 95 (2020)

Cattle Ranching in the Maya Biosphere Reserve, Guatemala



MAYA BIOSPHERE RESERVE

TOTAL EXTENSION



DEFORESTATION DATA



440,000 Approximate number of calves raised in the reserve



ADMINISTERED BY National Council for Protected Areas (CONAP)



HOME OF Maya communities

RELATED CRIMINAL ACTIVITIES



Land Trafficking



Cocaine Trafficking

Transit Routes and Contraband Mechanisms

Unlike other illicit products, contraband cattle are not usually moved and smuggled in secret. Cattle are largely transported along national highways and are only smuggled through irregular routes when crossing borders. Still, cross-border smuggling can occur in broad daylight, sometimes with the knowledge and complicity of authorities.

Several cattle ranchers interviewed by InSight Crime at the Mexico-Guatemala border, including one who used to buy contraband cattle, mentioned that most of the cattle smuggled into Mexico are bred in neighboring Guatemala, but large amounts also come from Nicaragua and Honduras –as indicated by their ear tags. This was also highlighted by a national official in the Mexican cattle industry. Along that route, cattle are siphoned for slaughter and sold in local markets or in other foreign markets. Cattle raised in Bosawás and northern Indio Maíz, for instance, are sent mainly to the cities of Managua and San Carlos, while cattle raised in southern Indio Maíz are smuggled across the country's border with Costa Rica.⁵⁴

Traffickers use main roads, back roads, trails and rivers to move cattle from one country to another. From Nicaragua to Honduras, traffickers move cattle across the border between the Bosawás Reserve and the Honduran Mosquitia, along the Coco River. The main crossing points are the towns of Auka, Wampusirpi and Mocerón.⁵⁵ There is also a route between the Nicaraguan department of Chinandega and the Honduran department of Choluteca, on the Pacific Coast.⁵⁶ While most of the cattle smuggled through this area may not originate from protected areas, a portion of them are then transported into the Río Plátano reserve.⁵⁷ Movements of livestock between and within the reserves are coordinated by cattle ranchers but carried out by locals who herd cattle in the jungle. During field investigations in Río Plátano, several residents explained to InSight Crime that these crossings can last up to 15 days.

Once in Honduras, some of the cattle are laundered into the legal distribution chain and sold locally. This is done with the complicity of municipal government offices that falsify mobilization permits and veterinary certificates.⁵⁸ The cattle are then sold to meat processing plants and distributed in local markets.⁵⁹ From

54 InSight Crime telephone interview, Costa Rican environmental activist, San José, Costa Rica, 26 April 2021; Fundación del Río, “Dinámica ganadera relacionada a la Reserva Indio Maíz,” May 2020.

55 InSight Crime interviews, Wildress Wood, Pra Wänka organization, Puerto Lempira, Gracias a Dios, Honduras, 3 November 2021; environmental activist, Río Plátano Reserve, Gracias a Dios, Honduras, 24 May 2021.

56 InSight Crime telephone interview, judicial authority in Choluteca, Honduras, 12 April, 2021; local cattle rancher, Choluteca, Honduras, 9 April 2021.

57 InSight Crime interview, resident in Krausirpi, Gracias a Dios, Honduras, November 2021.

58 InSight Crime telephone interviews, member of the Directorate for Indigenous and Afrohonduran communities, Río Plátano Reserve, Gracias a Dios, Honduras, 18 May 2021; judicial authority in Choluteca, Honduras, 12 April 2021; local cattle rancher, Choluteca, Honduras, 9 April 2021.

59 InSight Crime interviews, several residents of the Río Plátano Reserve, November 2021; judicial authority in Choluteca, Honduras, 12 April, 2021; local cattle rancher, Choluteca, Honduras, 9 April 2021.

Río Plátano, traffickers move the cattle on foot or by river to various towns in the departments of Colón, Atlántida and Olancho. There they can be marketed or loaded on trucks to be transported via road to the department of Copán, on the border with Guatemala.⁶⁰ From Copán, traffickers move cattle on foot via the dozens of irregular border crossings present in this area.

Guatemala acts as a major collection point (centro de acopio) for both legal and illegally sourced cattle from Central America that are destined for the Mexican market.⁶¹ By far the main entry point for contraband cattle into Mexico is Benemérito de las Américas.⁶² As one of the state of Chiapas' easternmost municipalities along the border with Guatemala, it is separated only by the Usumacinta River and sits largely unsupervised.

During our visit to the area, InSight Crime investigators observed small boats carrying goods and people from the Guatemalan side of the border into Benemérito without having to register their arrival or pass through any type of checkpoint or security post. During the two hours InSight Crime was in the area, we did not see any security forces or regulatory authorities. Meanwhile, various sources said that long wooden canoes with covers regularly ferry dozens of calves across the river, which InSight Crime later witnessed on another trip to the region. These cattle are emaciated, and in much poorer condition than the cattle we observed that were born and raised in Mexico. Cattle are transported almost every other day across the river and into Benemérito de las Américas in these boats.⁶³

In addition to Benemérito de las Américas, traffickers use Marqués de Comillas and Lagos de Montebello,⁶⁴ further south in Chiapas state, as well as Tenosique in the state of Tabasco,⁶⁵ and Candelaria further northeast in Campeche.⁶⁶ Of these, sources said that Benemérito de las Américas and Marqués de Comillas were the most important crossing points for contraband cattle.

However, it is worth mentioning that not all of the cattle that are crossed through these points originated in nature reserves. Some of them may have been raised under legal conditions, and smuggled into Mexico to avoid export taxes and other regulations.

60 InSight Crime interviews, Miskito residents in Río Plátano, Gracias a Dios, Honduras, November 2021; community professor, Brus Laguna, Gracias a Dios, Honduras, November 2021; judicial authority in Choluteca, Honduras, 12 April 2021; local cattle rancher, Choluteca, Honduras, 9 April 2021.

61 InSight Crime telephone interview, OIRSA officials, San Salvador, El Salvador, 26 January 2022.

62 Rodrigo Soberanes, "Illegal cattle ranching deforests Mexico's massive Lacandon Jungle," Mongabay, 14 March 2018.

63 InSight Crime interview, former cattle buyer in Benemérito de las Américas, Mexico, 1 November 2021.

64 InSight Crime interview, former cattle buyer in Benemérito de las Américas, Mexico, 1 November 2021.

65 InSight Crime interviews, cattle rancher in eastern Tabasco, Mexico, 11 October 2021; state government official, Villahermosa, Tabasco, 14 October 2021.

66 InSight Crime interviews with Guatemalan park guards, Maya Biosphere Reserve, Guatemala, November 2021.



*Dock in Benemérito de las Américas where goods and people are moved from Guatemala into Mexico.
Credit: InSight Crime.*

Once on the Mexican side of the border, cattle are loaded onto large trucks for transport. On the highway from Benemérito, InSight Crime investigators witnessed several large trucks transporting cattle in the middle of the night. During a single one-hour stretch, six trucks passed through the nearby town of Palenque headed north, each with at least 25 head of cattle on board. By our quick count, it appeared that traffickers could easily move hundreds of contraband cattle through this area at night along the main thoroughfare.

From the border, some of these cattle are unloaded to rest at ranches further up the highway heading north towards Palenque.⁶⁷ Others make it to ranches around Palenque or just south of Catazajá, in Chiapas, where there is a

customs station manned and operated by Mexico's armed forces. It is in this area, between Benemérito and Catazajá, where cattle are outfitted with the proper ear tags and forged veterinarian documents needed to make it appear as if they are being transported through the country legally. (See Laundering section below)

Cattle Trafficking at Mexico-Guatemala Border



Source: InSight Crime investigations

May 2022

KEY POINTS



Smuggled up Highway 307 in large trucks. Brought to resting points en route to Palenque to get fitted with ear tags and forged health docs.



Customs checkpoint in Cajazajá. By this point, contraband cattle already have ear tags and health docs. After passing here, moved to central and northern states.

This is so they can easily pass the checkpoint at Catazajá. Once the cattle pass through customs in Catazajá, they continue on their route to the north of the country, arriving primarily in states such as Oaxaca, Veracruz, San Luis Potosí and Querétaro.⁶⁸ Cattle entering through the state of Campeche are transported to the Yucatán Peninsula, especially to the state of Quintana Roo, where they are consumed.⁶⁹

Domestic and International Markets

The meat products derived from cattle raised in the nature reserves are commercialized in the local markets of Nicaragua, Honduras and Guatemala, as well as in Costa Rica and Mexico.

In the domestic markets of these countries, the meat is sold at informal stands, butcher shops, supermarkets and restaurants. According to a government source in the Mexican state of Tabasco, for example, an important part of the livestock that enters the country from Guatemala feeds the demand for beef in the Mexico City area, which has more than 20 million inhabitants. Here, it goes to informal markets with virtually no regulations, which supply a large part of the food in the taquerías in the capital and surrounding states.⁷⁰

A part of the illicitly sourced beef may be exported to the United States from Mexico, but finding documented evidence to prove it is a difficult task. On the one hand, officials from Mexico's SENASICA deny that this takes place, arguing that contraband cattle do not get mixed with Mexican-produced cattle that are destined for international markets. This point of view is shared among some livestock specialists in the United States, who argued that the tropical breed of cattle common in the southern region of Mexico and northern Central America is not of the quality or taste that US consumers demand, so there is very little market for this type of beef in the United States.⁷¹

Moreover, the United States Department of Agriculture (USDA) can ban entire Mexican states and municipalities from exporting beef to the United States if bovine tuberculosis is prevalent.⁷² Given that the contraband cattle that

68 InSight Crime telephone interview, Tabasco government officer, Villahermosa, Tabasco, 14 October 2021; InSight Crime interview, official working in the national cattle industry, Mexico City, Mexico, 27 January 2022.

69 InSight Crime interviews with Guatemalan and Mexican park guards, Maya Biosphere Reserve and Calakmul Biosphere Reserve, Guatemala and Mexico, November 2021.

70 InSight Crime telephone interview, Tabasco government officer, Villahermosa, Tabasco, 14 October 2021.

71 InSight Crime interview, US-Mexico livestock specialist, 3 March 2021.

72 SENASICA, "Reconocimientos internacionales de tuberculosis bovina," Mexican Government, 20 October 2021.

enter the country do not necessarily meet the standard health requirements established by the international community, they represent a health hazard and, according to local union leaders in Veracruz, Mexican producers do not take the risk to export them. As of April 2021, the states of Chiapas, Tabasco and the southern municipalities of Veracruz – our area of study – were not accredited for exporting beef to the United States.⁷³

However, officials who work in national and international cattle organizations, cattle ranchers near the Mexico-Guatemala border and local government officials in Mexico all told InSight Crime that contraband meat can get exported, so long as it is processed and packaged by a federally inspected plant (Tipo Inspección Federal – TIF) that meets USDA requirements. Contraband cattle can reach these facilities if they have been properly laundered into the legal system. This means that the ranchers who bought the animals and sell them to the processing plants have all the relevant health documentation, and have properly tagged the cattle to make them appear as if they originated from a municipality that is clear to export to the United States. After slaughter, and once the meat is packaged and mixed with other meat that is legally sourced, a Mexican official said it is “virtually impossible to tell the difference.”⁷⁴

Mexico, the second most important beef supplier to the United States after Canada in 2021,⁷⁵ has been increasingly pressured to meet the international demand for meat. One Mexican official, who spoke to InSight Crime on condition of anonymity, went so far as to argue that certain medium-sized companies in the country acquire contraband cattle from Central America in order to maintain the required levels of productivity to be competitive in the international market.⁷⁶

Another government source in the south of Mexico, who also asked to remain anonymous, told InSight Crime that Mexico “needs” cattle from Guatemala – and elsewhere in Central America – because the country’s productivity levels are not sufficient to fill the void left by the animals that are exported.⁷⁷ This argument was also mentioned to InSight Crime by a former contraband cattle buyer in Veracruz.⁷⁸

Moreover, investigations by journalists and non-profit organizations have suggested that Nicaragua, another top beef supplier, may also be exporting illicitly sourced meat to the United States.⁷⁹ These cattle, however, do not appear

73 SENASICA, “[Lista de municipios reconocidos por el USDA](#),” Mexican Government, 16 April 2021.

74 InSight Crime interview, official working in the national cattle industry, Mexico City, Mexico, 27 January 2022.

75 USDA, *Livestock and Meat International Trade Data*, 2021.

76 InSight Crime interview, official working in the national cattle industry, Mexico City, Mexico, 27 January 2022.

77 InSight Crime telephone interview, government official in the south of Mexico, 14 October 2021.

78 InSight Crime interview, former cattle buyer in Benemérito de las Américas, Mexico, 1 November 2021.

79 Batallón Cívico Indio Maíz, “Propuesta para frenar la expansión de la ganadería extensiva en la Reserva Biológica de Indio Maíz y territorio Rama-Kriol,” 18 December 2020; Nate Halverstone, “[In Nicaragua, supplying beef to the US comes at a high human cost](#),” PBS News, 20 October 2020.

to traverse the same path as the cattle that are trafficked into Mexico from the protected areas in Central America. Instead, they go directly to Nicaraguan slaughterhouses where they are laundered into the legal supply chain. Nestlé and Cargill, two large cattle importers, told Mongabay in 2020 they were only able to trace the origins of their meat products to the slaughterhouses.⁸⁰ A 2020 investigation by the Oakland Institute also found that slaughterhouses cannot confirm the origin of the cattle, so “no US company importing beef from Nicaragua under [the] national traceability program can be assured that cattle were not raised illegally in deforested areas.”⁸¹

Meat packaging and distribution companies in Mexico and Central America can claim plausible deniability regarding illegally-sourced livestock. Once it has been laundered and cleared by security checkpoints like Catazajá in Mexico, it is nearly impossible to track its origins.

80 Mario Rautner and Sandra Cuffe, “[Nicaraguan beef, grazed on deforested and stolen land, feeds global demand](#),” Mongabay, 10 June 2020.

81 Oakland Institute, “Drivers of Violence Against Environment Defenders in Nicaragua,” [PowerPoint Presentation]

Cattle Trafficking Routes Through Central America



3

Existing Regulations and Legal Tools

Generally speaking, all the countries considered for this study have robust legal frameworks regulating the protection of natural areas and Indigenous lands, the registration and movement of livestock, the health of livestock and meat marketing in domestic and international markets. Several institutions are involved in these processes: from environmental and agricultural ministries, to public forces and tax and customs agencies. However, in practice, governments largely fail to deter extensive cattle ranching that leads to environmental degradation and Indigenous rights violations, as well as to prosecute traffickers, due to a series of drawbacks that will be explained across this report, specifically in the section on Challenges to Curb Cattle Trafficking.

Environmental and Land Regulations

Nicaragua, Honduras and Guatemala joined the UNESCO Convention on World Cultural and Natural Heritage in 1979, in order to designate resources and adopt measures to protect the conservation of designated natural areas.⁸² The Bosawás Biosphere, the Indio Maíz Biological Reserve, the Río Plátano Biosphere and the Maya Biosphere Reserve fall within this framework.⁸³

Each of these countries has a general environmental law⁸⁴ and protected area regulations⁸⁵ which outline the institutions responsible for planning and designating resources for environmental protection. Environmental ministries are primarily responsible – Nicaragua’s Ministry of the Environment

82 UNESCO, “Convention Concerning the Protection of the World Cultural and Natural Heritage,” 1972.

83 UNESCO, “Man and the Biosphere (MAB) Program,” 2022.

84 Diario Oficial de Nicaragua, “Ley No. 217. Ley General del Medio Ambiente y los Recursos Naturales,” Nicaraguan Congress, 31 January, 2014; Guatemalan Congress, “Decreto No. 68-1986. Ley de protección y mejoramiento del medio ambiente,” 16 April, 1986; Tribunal Superior de Cuentas de Honduras, “Decreto 98-2007. Ley Forestal, Áreas Protegidas y Vida Silvestre,” Honduran Legislative Power, 2007.

85 Normas Jurídicas de Nicaragua, “Decreto Ejecutivo No. 01-2007. Reglamento de Áreas Protegidas de Nicaragua,” Nicaraguan Congress, 11 January, 2007; Diario de Centroamérica, “Decreto No. 4-89. Ley de Áreas Protegidas,” Ministerio de Ambiente y Recursos Naturales de Guatemala, 1996; Tribunal Superior de Cuentas de Honduras, “Decreto 98-2007. Ley Forestal, Áreas Protegidas y Vida Silvestre,” Honduran Legislative Power, 2007.

and Natural Resources (Ministerio del Ambiente y los Recursos Naturales - MARENA), Honduras' Secretariat of Natural Resources and the Environment (Secretaría de Recursos Naturales y Ambiente - SERNA), and Guatemala's Ministry of the Environment and Natural Resources (Ministerio de Ambiente y Recursos Naturales - MARN).

In Nicaragua, MARENA is present in Bosawás and Indio Maíz through the General Directorate of Natural Heritage (Dirección General de Patrimonio Natural).⁸⁶ In each of these reserves, MARENA works with a commission composed of representatives of other government institutions, such as the Ministry of Agriculture and Forestry, the Rural Titling Office (Oficina de Titulación Rural - OTR), mayors of municipalities where the parks are located, as well as representatives of Indigenous communities and autonomous councils along the Caribbean coast.⁸⁷ The latter two are especially relevant in the Nicaraguan context, since the autonomy of these Indigenous communities was recognized⁸⁸ in 1987, and a law was passed in 2003 decreeing that they have the right to communal property in the reserves. In this sense, third parties are forbidden from appropriating these lands.⁸⁹

Cattle ranching activity and human settlements are, in theory, strictly prohibited in the core zones, which are areas completely reserved for their conservation.

In Guatemala and Honduras, reserves are administered by semi-autonomous government agencies linked to the presidency of each country: The National Commission of Protected Areas (Comisión Nacional de Áreas Protegidas - d)⁹⁰ and the National Institute of Forest Conservation and Development, Protected Areas and Wildlife (Instituto Nacional de Conservación Forestal, Áreas

86 Normas Jurídicas de Nicaragua, "Decreto Ejecutivo No. 01-2007. Reglamento de Áreas Protegidas de Nicaragua," Nicaraguan Congress, 11 January, 2007.

87 Normas Jurídicas de Nicaragua, "Ley No. 407. Ley que declara y define la Reserva de Bosawás," Nicaraguan Congress, 24 December 2001; Normas Jurídicas de Nicaragua, "Decreto No. 66-99. Actualización y Precisión de Categorías y Límites de las Áreas Protegidas Ubicadas en el Territorio del Sureste de Nicaragua," Nicaraguan Congress, 18 June 1999.

88 Normas Jurídicas de Nicaragua, "Ley No. 28. Estatuto de Autonomía de las Regiones de la Costa Caribe de Nicaragua," Nicaraguan Congress; 1986.

89 Nicaraguan Judicial Power, "Ley No. 445. Ley del Régimen de Propiedad Comunal de los Pueblos Indígenas y Comunidades Étnicas de las Regiones Autónomas de la Costa Atlántica de Nicaragua y de los Ríos Bocay, Coco, Indio y Maíz," Nicaraguan Congress, 23 January 2003.

90 Diario de Centroamérica, "Decreto No. 4-89. Ley de Áreas Protegidas," Ministerio de Ambiente y Recursos Naturales de Guatemala, 2016.

Protegidas y Vida Silvestre - ICF),⁹¹ respectively. Both CONAP and ICF must work together with other state entities and members of civil society to implement park conservation strategies. In both cases, this includes representatives of the ministries of agriculture and livestock, as well as members of the private sector. Similar to the case of Nicaragua, property laws in Honduras grant Indigenous and Afro-Honduran communities communal land tenure rights within protected areas.⁹²

All the reserves considered in this study are divided, for administrative purposes, into areas in which different activities are either allowed or not, in order to minimize the environmental impact. Each park has regulations or a development plan officially delimiting these spaces.⁹³ Agricultural activities are allowed in so-called “buffer zones,” located on the reserve’s borders and close to the surrounding towns. The laws in all three of these countries only allow livestock in these spaces if the cattle ranching is done in a sustainable manner, with permits from corresponding regulatory entities (MARENA, CONAP and ICF). However, the implementation of these measures is ambiguous and some ranchers take advantage of this in order to expand their lands, even towards the “core zone.”

Cattle ranching activity and human settlements are, in theory, strictly prohibited in the core zones, which are areas completely reserved for their conservation. The legal framework in Nicaragua establishes that livestock activity within the core zones, as well as land appropriation, represent “very serious infractions,” and sanctions involve fines and the confiscation of property.⁹⁴ In Honduras, these actions are even considered forestry crimes.⁹⁵

In the case of Laguna del Tigre, which is part of the core zone of the Maya Biosphere Reserve, the Guatemalan Congress created an Emergency Law in 2004 due to the increase in extensive livestock farming, fires, land use change and activities related to organized crime. This document, which is still in force today, outlined the collaboration between CONAP, Guatemala’s national government, security forces and the Attorney General’s Office to address the problem and expel extractive activities from the area.⁹⁶

91 Tribunal Superior de Cuentas de Honduras, “Decreto 98-2007. Ley Forestal, Áreas Protegidas y Vida Silvestre,” Honduran Legislative Power, 2007.

92 Honduras’ Judicial Power, “Decreto No. 82-2004. Ley de Propiedad,” Honduran Congress, 29 June 2004.

93 Centro de Acción Legal – Ambiental y Social de Guatemala, “Decreto No. 5-90. Ley que declara Área Protegida la Reserva de la Biósfera Maya,” Guatemalan Congress, 1990; Normas Jurídicas de Nicaragua, “Ley No. 407. Ley que declara y define la Reserva de Bosawás,” Nicaraguan Congress, 24 December 2001; Normas Jurídicas de Nicaragua, “Decreto No. 66-99. Actualización y Precisión de Categorías y Límites de las Áreas Protegidas Ubicadas en el Territorio del Sureste de Nicaragua,” Nicaraguan Congress, 18 June 1999; ICF, “Plan de Manejo. Reserva del Hombre y la Biósfera de Río Plátano (2013-2025),” 2013.

94 Normas Jurídicas de Nicaragua, “Decreto Ejecutivo No. 01-2007. Reglamento de Áreas Protegidas de Nicaragua,” Nicaraguan Congress, 11 January 2007.

95 Tribunal Superior de Cuentas de Honduras, “Decreto 98-2007. Ley Forestal, Áreas Protegidas y Vida Silvestre,” Honduran Legislative Power, 2007.

96 Guatemalan Congress, “Decreto No. 16-2004. Ley de Emergencia para la defensa, la restauración y la conservación del Parque Nacional Laguna del Tigre,” Guatemalan Congress, 2004.

Domestic Cattle Movement: Registration, Tracking and Transporting

The fundamental mechanism to regulate livestock activity is the traceability system.

It is designed to register, monitor and track cattle to prevent the spread of diseases and ensure better control over crimes such as cattle rustling and smuggling.

Mexico, Guatemala, Honduras and Nicaragua are member states of the International Regional Organization for Agricultural Health (Organismo Internacional Regional de Sanidad Agropecuaria - OIRSA), so their traceability systems work under the same principles. According to OIRSA's regional standards, the competent authorities from each country must: 1) have a database that tracks all animals, producers and establishments related to livestock production, as well as carriers, vehicles and personnel responsible for transporting livestock; 2) identify bovine animals by means of an official ear tag with a unique code to trace their origin and owner; and 3) keep track of and establish control over every movement of livestock from one establishment to another, as well ownership changes.⁹⁷

In other words, a good traceability system would allow authorities to have information on all the places where an animal has been, from birth to slaughter, both permanently and in transit. Animals raised in a protected area or smuggled into a country would not appear in these records or carry ear tags, since they cannot be legitimately linked to a legally registered establishment. However, traffickers find ways to circumvent these systems (see Laundering section).

In Nicaragua, Honduras and Guatemala, oversight of the cattle ranching industry is carried out by national authorities in coordination with local government officials. As a result, some regulations are slightly different depending on the municipality. In general, however, the regulations always involve some combination of brandings, ear tags, letters of sale and travel itineraries, all of which are intended to create a paper trail for each step of the supply chain.

In Nicaragua, at the start of the process, ranchers must register their properties and animals with the Agricultural Protection and Health Institute (Instituto de Protección y Sanidad Agropecuaria – IPSA).⁹⁸ The property receives a unique code, as do the cattle, in the form of an ear tag. Ranchers then fill out a brand application document with the municipal government. Officials check to ensure the brand is unique and not already registered with another rancher.⁹⁹

⁹⁷ OIRSA, “Estándar Regional de Trazabilidad Bovina,” 2013.

⁹⁸ IPSA, “Ley No. 862. Ley Creadora del Instituto de Protección y Sanidad Agropecuaria,” 2014.

⁹⁹ Normas Jurídicas de Nicaragua, “NTON No. 11 026-10. Sistema de Registro de Establecimientos, Identificación y Movilización de Ganado Bovino,” Nicaraguan Congress, 24 October 2011.

This is the same process that takes place in Guatemala and Honduras. In the former, the National System of Animal Traceability (Sistema Nacional de Trazabilidad Pecuaria - SINAT-GT), administered by the Vice Ministry of Agricultural Health and Regulations (Viceministerio de Sanidad Agropecuaria y Regulaciones - VISAR), keeps the registry of cattle, people and establishments related to livestock.¹⁰⁰ In Honduras, this is tasked to the National Service of Health and Food Safety (Servicio Nacional de Sanidad e Inocuidad Agroalimentaria - SENASA) that belongs to the Secretariat of Agriculture and Livestock (Secretaría de Agricultura y Ganadería - SAG).¹⁰¹

t's not clear how the black-market sales take place, but several sources spoke of rampant corruption within SINIIGA.

It is the responsibility of local governments to control the cattle trade. Municipal authorities in the three countries are in charge of issuing letters of sale, which ranchers apply for and then provide to the buyer. When moving cattle outside of the municipality, ranchers must also provide an itinerary (“guía de movimiento”) for each truckload of cattle, a process that is facilitated by the national sanitary agencies. These agencies have checkpoints on national highways, where they operate with the police or armed forces to verify permits. Slaughterhouses are ordered by law to require traceability documents to authorize slaughter.¹⁰²

One challenge authorities have faced is convincing ranchers to enter traceability systems. In part, because these are relatively new and because many ranchers perceive the costs and taxes associated to be high, resulting in some small and medium-sized ranchers choosing not to register their livestock.¹⁰³

In 2021, for example, the SINAT-GT had a record of 24,439 cattle registered throughout the country,¹⁰⁴ this is low considering the number of animals smuggled into Mexico and the number of cattle we estimate that are produced

100 MAGA, “Acuerdo Ministerial No. 24-2014. Creación del Sistema Nacional de Trazabilidad Pecuaria,” 7 February 2014.

101 Diario Oficial de la República de Honduras, “Acuerdo Ejecutivo No. 02-2016. Creación del Sistema Nacional de Rastreabilidad y Registro Pecuario,” 13 February 2016.

102 Diario Oficial de la República de Honduras, “Acuerdo Ejecutivo No. 02-2016. Creación del Sistema Nacional de Rastreabilidad y Registro Pecuario,” 13 February 2016.

103 InSight Crime telephone interviews, OIRSA officials, San Salvador, El Salvador, 26 January 2022; SENASA officials, Tegucigalpa, Honduras, 10 February 2022.

104 Information provided to InSight Crime by Guatemala’s Agricultural Ministry (MAGA) on 28 January 2022.

in the Maya Biosphere Reserve. In Honduras, SENASA reported that almost half a billion bovines are registered.¹⁰⁵ The IPSA register could not be accessed for this investigation.

In Mexico, the Ministry of Agriculture and Rural Development (Secretaría de Agricultura y Desarrollo Rural- SADER) and the National Service of Health, Safety and Agricultural Quality (Servicio Nacional de Sanidad, Inocuidad y Calidad Agropecuaria - SENASICA) are in charge of controlling the livestock industry. However, the entity that administers the traceability system is the National Confederation of Livestock Organizations (Confederación Nacional de Organizaciones Ganaderas - CNOG), a civil organization that brings together all livestock associations and unions in the country. Ranchers in Mexico must register their operations with the National Livestock Register (Padrón Ganadero Nacional – PGN), which serves as a database of livestock production units (Unidades de Producción Pecuaria – UPP) in the country, as well as of owners and livestock service providers (Prestador de Servicios Ganaderos – PSG).¹⁰⁶ The National System of Individual Identification of Cattle (Sistema Nacional de Identificación Individual de Ganado - SINIIGA), in charge of providing identification earrings for cattle, is also operated by CNOG.

In theory, the ear tags should be sold directly to the UPPs, and the UPPs would then be responsible for having a certified veterinarian place ear tags on the cattle before they are transferred to the PSGs, where they are either sold or prepared for slaughter. However, on the black market, ear tags are sold to the PSGs directly and placed on cattle at their facilities or at the different resting points.¹⁰⁷ Contraband cattle from Central America can be brought to these points without ear tags or proper documentation. It's not clear how the black-market sales take place, but several sources spoke of rampant corruption within SINIIGA.

Another pillar of Mexico's tracking system is the Electronic Movement Record (Registro electrónico de la movilización -- REEMO),¹⁰⁸ which is managed by both the CNOG and local governments. To move cattle from one Mexican state to another, a rancher must request a "REEMO guide" from the government office in the state of origin, and this guide must then be approved by the government of the destination state and SADER. The CNOG keeps a register of these movements.

¹⁰⁵ Information provided to InSight Crime by Honduras' SENASA on 23 February 2022.

¹⁰⁶ SADER, "Mexico's Livestock Identification and Traceability Program," October 2017.

¹⁰⁷ InSight Crime interview, local cattle rancher, Chiapas, Mexico, 9 October 2021.

¹⁰⁸ SADER "Registro electrónico de la movilización (REEMO): Avances y novedades," SADER, January 2017.

Transnational Cattle Movement

Free trade agreements and economic integration in Central America allow for the free trade of cattle between Guatemala, Honduras and Nicaragua – and the other countries that have signed on to the trade agreements.¹⁰⁹ For this to be carried out legally, the animals must have the aforementioned documents – sales letters, mobilization guides – and be duly identified with the ear tag and corresponding health certificates.¹¹⁰

But little movement is reported to the authorities. For example, from 2010 to 2021, the MAGA in Guatemala reported that only 23 bovines had been imported from Honduras. Trade figures with Nicaragua are higher –168,062 bovines during this same time frame– but there are years in which imports are not reported, such as 2019 and 2020.¹¹¹

In 2019, the Mexican and Guatemalan governments signed an agreement, supported by the OIRSA, to regulate the entry of cattle.¹¹² Prior to that agreement, Guatemalan authorities did not report any legal exports to Mexico.¹¹³ For Guatemala’s livestock – or Central American cattle that have been transported to Guatemala – to enter Mexico legally, they must come from some of the 70 livestock production units endorsed by the MAGA and should comply with a quarantine process to detect bovine diseases.¹¹⁴ Legal cattle wear a blue earring provided by the OIRSA. Mexican authorities then track the livestock entering Mexico until the day it reaches the butcher.¹¹⁵

When cattle enter Mexico through border crossings along the border with Guatemala, SENASICA verifies that the documents presented correspond with the quantity of cattle reported, provides a stamp of approval, and monitors the cattle’s movement using various inspection points until the cattle arrive at their destination. Once in Mexico, cattle are outfitted with an ear tag to identify their registration in the country, while also retaining their Guatemalan tag.¹¹⁶

Transnational livestock smuggling is considered a tax crime in all countries in the region but does not seem to fall within the priorities of regulatory

109 Sistema de Información sobre Comercio Exterior “[Tratado Multilateral de Libre Comercio e Integración Económica Centroamericana](#),” 1960.

110 OIRSA, “[Estándar Regional de Trazabilidad Bovina](#),” 2013.

111 Data provided to InSight Crime by Guatemala’s Ministry of Agriculture on 27 January 2022.

112 Secretaría de Agricultura y Desarrollo Rural de México, “[Acuerdan México y Guatemala mecanismos de control sanitario para la introducción legal de ganado bovino procedente de Centroamérica](#),” 27 November 2019.

113 Data provided to InSight Crime by Guatemala’s Ministry of Agriculture on 27 January 2022.

114 Ministerio de Agricultura, Ganadería y Alimentación de Guatemala, “[Guía para exportar ganado a México](#),” 2020.

115 Secretaría de Agricultura y Desarrollo Rural de México, “[Avanzan en regulación del ingreso de ganado de Centroamérica a México](#),” 2 March 2020.

116 InSight Crime telephone interview, SENASICA official, Mexico City, Mexico, 19 April 2021.

authorities. Mexico's Attorney General's Office, including regional offices in border states, reported no information on complaints related to cattle smuggling.¹¹⁷ Guatemala's Attorney General's Office has only registered two cases since 2017,¹¹⁸ and the Honduran authorities said they had only four cases.¹¹⁹ InSight Crime received no response from authorities in Nicaragua.

With regards to international meat trade, Mexican companies exporting beef to the United States must process their products in a TIF facility, approved by SENASICA.¹²⁰ This qualifies them for a clearance process with the USDA. Within that agency, the Food Safety and Inspection Service (FSIS) acts as the central competent authority responsible for regulating and inspecting meat using an equivalence process. Mexican companies maintain eligibility to export meat through this process, which is conducted annually.¹²¹

After meeting the documentation requirements for US Customs and Border Protection (CBP) and the Animal and Plant Health Inspection Service (APHIS), imported shipments of meat products are then presented to FSIS for reinspection at an official import establishment.

As of February 2022, there were 6,655 establishments inspecting meat, poultry and egg products across the United States.¹²² In Mexico, there are just over 100 eligible plants certified to export meat to the United States as of February 21, 2022.¹²³

117 Information Request to the Attorney General's Office of Mexico, No. 330022462100502, 30 November 2021; Information Request to the Attorney General's Office of Tabasco No. 00626421, 9 June 2021; Information Request to the Attorney General's Office of Chiapas No. 00326321, 29 June 2021; Information Request to the Attorney General's Office of Campeche No. 0101133121, 16 June 2021.

118 Information Request to the Attorney General's Office of Guatemala UDIP-G 2022-001002, 18 February 2022.

119 Oficina de Transparencia del Ministerio Público de Honduras, "SOL-MP-1217-2022", 21 February 2022

120 SENASICA, "[Establecimientos Tipo Inspección Federal](#)," Mexican Government, 19 October 2021.

121 USDA-FSIS, "[Equivalence Process](#)," August 2020.

122 USDA-FSIS, "[Inspection Directory](#)," February 2022.

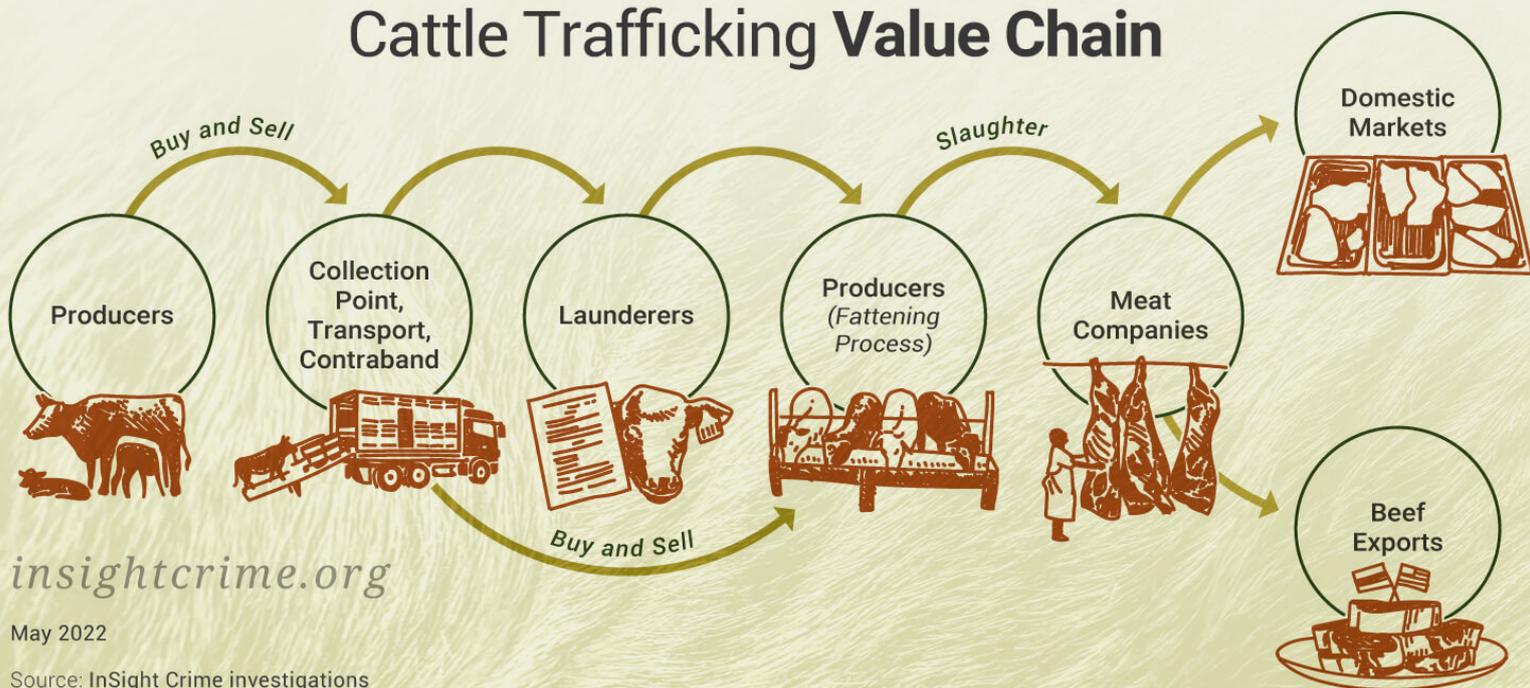
123 USDA-FSIS, "[Mexico – Eligible Plants Certified to Export Meat and Poultry to the United States](#)," 22 February 2022

4

Cattle-Trafficking Value Chain

Cattle trafficking follows a supply chain involving criminal groups, brokers, legally-constituted companies and corrupt officials. The process is broadly divided into four stages: breeding, trafficking, laundering and commercialization. Criminal organizations can be involved throughout this chain. They can also take advantage of livestock trafficking to launder money, transport drugs, hide clandestine airstrips or even, in some cases, run extortion schemes.

Cattle Trafficking Value Chain



Breeding – ‘Colonos’ and Large Landowners

The cattle that are trafficked are normally calves. Farmers usually raise the calves within the reserves for about 18 months before selling them.¹²⁴ Most of the ranchers are not native to the area, and local communities typically refer to them as colonos, or settlers.¹²⁵ But there are various types of settlers, and many of them are not even the rightful owners of the livestock but are acting as caretakers.

In fact, most of the cattle owners are medium- or large-scale ranchers that count on legal livestock production outside the reserves,¹²⁶ but have taken advantage of corruption and a lack of government oversight to expand their holdings into the reserves, using cheap labor or desperate peasant farmers to manage these plots. In Indio Maíz, settlers farm up to 35 hectares and raise up to 10 head of cattle.¹²⁷ But as noted, it can be difficult to discern who is the rightful owner of the land (and the cattle).

In Bosawás, for example, local residents told InSight Crime that the settlers who protect the ranches tend to be former military officers and land owners of nearby municipalities. These individuals are subcontracted by prominent cattle ranchers from other parts of the country who, motivated by the country's growing beef industry, have expanded their holdings into protected areas and Indigenous lands.¹²⁸

In Honduras, most of the cattle owners are businessmen and landowners from Olancho and Colón who employ colonos to handle livestock for them.¹²⁹ They often have political connections that allow them to falsify land titles and skirt regulatory and judicial scrutiny.¹³⁰ In some cases, the cattle owners are involved in other criminal activities, and cattle ranching is often more

124 InSight Crime interviews, Río Plátano residents, Gracias a Dios, Honduras, 3-13 November 2021; CONAP official, Guatemala, February 2021; Michelle Carrere, “Cattle Ranching devours Nicaragua’s Bosawás Biosphere Reserve,” Mongabay, 10 March 2017.

125 InSight Crime telephone interview, member of the Directorate for Indigenous and Afrohonduran communities, Río Plátano Reserve, Gracias a Dios, Honduras, 18 May, 2021; Oakland Institute, “Drivers of Violence Against Environment Defenders in Nicaragua,” [PowerPoint Presentation]; Max Radwin, “Fire, cattle, cocaine: Deforestation spikes in Guatemalan National Park,” Mongabay, 21 June 2019.

126 Miguel Angel Navarrete Rivera, “Análisis de la cadena de la carne bovina proveniente de la Reserva Biológica Indio-Maíz y Territorio Rama Kriol,” Universidad Centroamericana, February 2021.

127 Miguel Angel Navarrete Rivera, “Análisis de la cadena de la carne bovina proveniente de la Reserva Biológica Indio-Maíz y Territorio Rama Kriol,” Universidad Centroamericana, February 2021.

128 InSight Crime telephone interviews, indigenous activist in Bosawás, 12 March, 2021; journalist in Bosawás, 7 June, 2021; Bosawás community leader, 27 January 2022.

129 InSight Crime telephone interview, member of the Directorate for Indigenous and Afrohonduran communities, Río Plátano Reserve, Gracias a Dios, Honduras, 18 May 2021.

130 Radio Progreso, “Ganadería ilegal ataca el corazón de la Biósfera del Río Plátano en Honduras,” 14 November, 2018.

of a front than a primary business venture. If they are drug traffickers, for example, they can use these settlers and the ranching proceeds to launder money or to cover up clandestine runways.¹³¹



Cattle grazing in the Río Plátano Biosphere Reserve. Credit: InSight Crime.

This is also relevant in the Maya Biosphere Reserve, where local residents have coined the term “narco-ranchers” to refer to those settlers whose livestock farms have been capitalized by drug money and who utilize the cleared land for trafficking activities. For these actors, cattle ranching is not an end, but a means to control territory for cocaine trafficking.¹³²

In all cases, the presence and expansion of cattle ranching settlements has corresponded with increased violence towards Indigenous communities and environmental activists.¹³³ In Bosawás, for example, the land conflict has resulted in the forced displacement of more than 1,000 Indigenous Miskito

131 Jennifer Devine, Nathan Currit, Yunuen Reygadas, Louise I. Liller, Gabrielle Allen, “Drug trafficking, cattle ranching and Land use and Land cover change in Guatemala’s Maya Biosphere Reserve,” *Land Use Policy*, vol. 95 (2020).

132 InSight Crime telephone interviews, Jennifer Devine, professor at Texas State University, 20 January 2022; CONAP official, Maya Biosphere Reserve, February 2021.

133 InSight Crime telephone interview, Head of Fundación Río, Indio Maíz, Nicaragua, 17 June, 2021.

people.¹³⁴ One of the most recent violent events occurred in August 2021, when at least 18 Mayangna Indigenous people were killed by suspected armed settlers.¹³⁵ Local communities say that the settlers have strong ties to government and law enforcement officials, allowing them to act with impunity.¹³⁶

In Río Plátano, InSight Crime saw how the presence of settlers frightened local communities. Several residents described how there are continuous clashes over territory between criminal groups in the area. Ranchers also have military-grade weaponry – including AK-47s and AR-15s - and shotguns, which they use to frighten locals and defend their farms from other ranchers who want to steal cattle and land. They have also used violence against Indigenous communities to coerce them into selling their lands.¹³⁷

Trafficking – ‘Coyotes’

Once the calves reach the right age and size, the buying and selling begins. Those involved in this process are colloquially known as coyotes. But there is a wide array of actors, including everyone from collectors to wholesalers to smugglers. Coyotes can be independent actors or belong to a larger network. They are not necessarily part of a criminal group, but may be subcontracted to support the money laundering process, since the buying-and-selling transactions are often conducted informally and in cash.¹³⁸

Yet each type of coyote has a particular role. The collectors, for example, are brokers. As their name suggests, they work with settlers in the reserves to gather the cattle in large numbers. These cattle will most likely be sold to wholesalers. The wholesalers can then sell the cattle to meat-processing companies, to farmers in charge of fattening the cattle, or to smugglers who transport the cattle to another country.

134 Organización Mundial Contra la Tortura, “Nicaragua: Briefing Conjunto: Un año de violencia sistemática contra quienes defienden los derechos indígenas,” 29 January 2021.

135 Swissinfo, “ONG denuncia asesinato de al menos 18 indígenas en Caribe Norte de Nicaragua,” 27 August 2021.

136 InSight Crime telephone interviews, Bosawás resident, Nicaragua, 14 February, 2021; Bosawás community leader, Nicaragua, 27 January 2022.

137 InSight Crime interviews, various Río Plátano residents, Gracias a Dios, Honduras, 3-13 November 2021.

138 Jennifer Devine, Nathan Currit, Yunuen Reygadas, Louise I. Liller, Gabrielle Allen, “Drug trafficking, cattle ranching and Land use and Land cover change in Guatemala’s Maya Biosphere Reserve,” *Land Use Policy*, vol. 95 (2020).

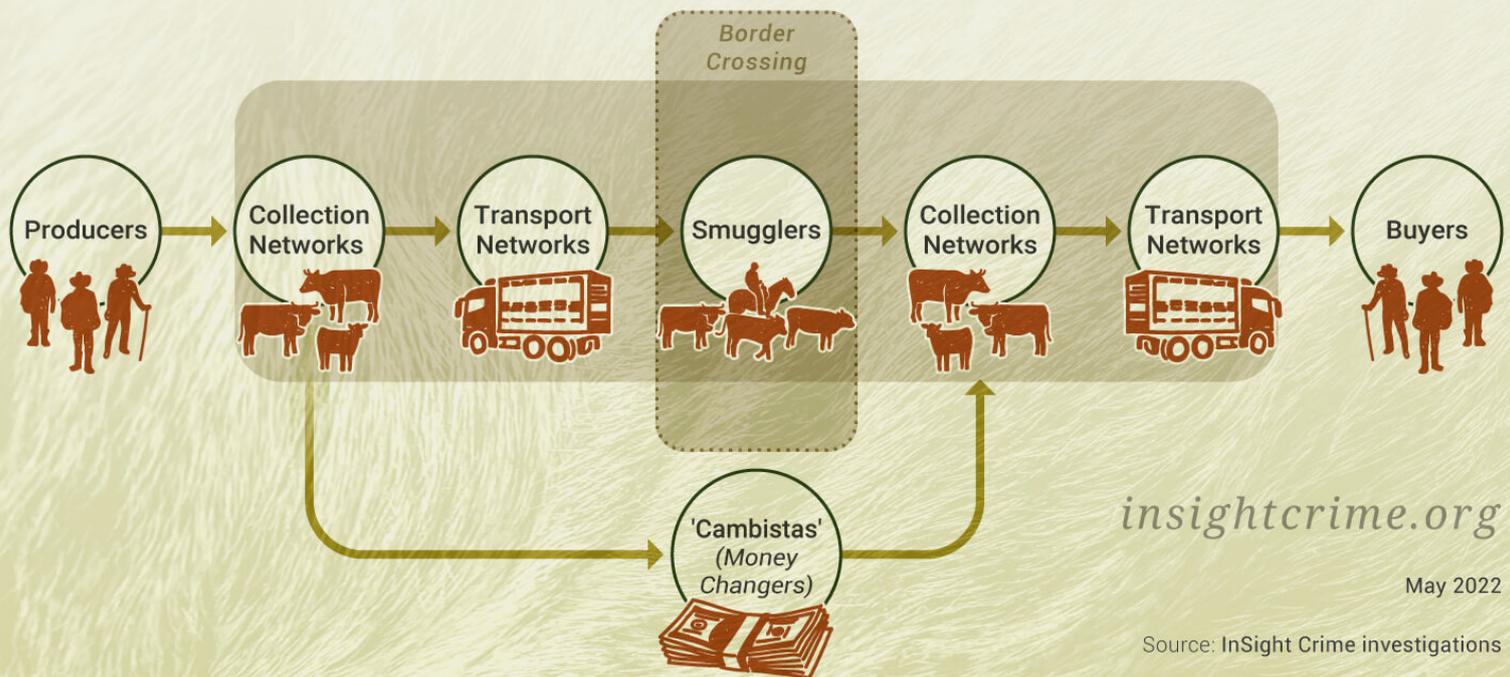


Transport trucks outside of the cattle rancher's association in Benemérito de las América. Credit: InSight Crime

Smugglers who move cattle from nature reserves gather the animals in ranches near the border. There, they can sell the cattle to coyotes in the neighboring country on the route or use existing smuggling networks to move the cattle across the border. These smuggling networks not only specialize in moving cattle but have experience moving all kinds of products.¹³⁹ In Guatemala, for example, networks of coyotes bring cattle to collection centers near the border before selling them, then move them across the Usumacinta River via other intermediary smugglers, who then pass them to coyotes operating in Mexico.

Among these buyers, sellers, logistical specialists and brokers is another intermediary. Known as cambistas (roughly translated as “money changers”), these intermediaries are responsible for facilitating payment. A Mexican buyer, for example, does not negotiate or pay a Guatemalan coyote directly, but rather negotiates with a cambista. This added layer of protection is intentional. Since the cambistas are third-party operators, they bring less attention to the operation.¹⁴⁰ Cambistas also generate receipts for the purchase of smuggled cattle, which facilitates money laundering.¹⁴¹

Cattle Trafficking - 'Coyote' Supply Chain



139 InSight Crime interviews, former cattle buyer in Benemérito de las Américas, Mexico, 1 November 2021; cattle rancher in southern Veracruz, Mexico, 4 October 2021; judicial authority in Choluteca, Honduras, 12 April 2021; local cattle rancher, Choluteca, Honduras, 9 April 2021.

140 InSight Crime interview, former cattle buyer in Benemérito de las Américas, Mexico, 1 November 2021.

141 InSight Crime interview, former cattle buyer in Benemérito de las Américas, Mexico, 1 November 2021; Jennifer Devine, David Wrathall, Nate Currit, Beth Tellman, Yunuen Reygadas, “Narco-Cattle Ranching in Political Forests,” *Antipode*, vol. 52, no. 4 (2020), pp. 1018-1038.

In Mexico, the networks of coyotes responsible for purchasing contraband cattle can at times be overseen and directed by individuals with links to organized crime groups. For example, a suspected member of the Familia Michoacana allegedly operated a coyote network responsible for bringing contraband cattle to Veracruz from Guatemala. Authorities arrested him in Mexico City in August 2021 for a number of crimes, including weapons charges, organized crime and kidnapping – but not for cattle smuggling or anything related to the livestock industry.¹⁴²

Violence is not limited to well-established criminal organizations. There is a common understanding that Mexican buyers are not allowed to bypass the intermediaries to work directly with Central American producers. As one former buyer put it, “they’ll kill you, if you do.”¹⁴³

Laundering

From the time of procurement, cattle can be laundered into the legal distribution chain. This process can happen via falsified or doctored paperwork for transport, or by illicitly obtaining ear tags.¹⁴⁴ To be sure, corrupt government officials and local rancher unions play a key role in the laundering side of the contraband cattle trade moving from Central America to Mexico.

In Central America, municipal notaries or judicial offices near the borders or in the nature reserves are often corrupted or coerced into approving livestock mobilization permits and sales letters. On the border between Honduras and Nicaragua, for example, sources told InSight Crime that coyotes obtain sales letters to register the cattle in the Honduran border department of Choluteca. The letters are then stamped in cattle sale centers by members of the security forces, allowing them to be transported freely in Honduras.¹⁴⁵

Meanwhile, traffickers moving cattle from Río Plátano frequently launder the animals via the illegal purchase of sales letters and mobilization permits in the Honduran municipality of Irióna in the Colón department, in Dulce Nombre de Culmí in Olancho, and in Juan Francisco Bulnes and Brus Laguna in Gracias a Dios.¹⁴⁶ In the Indio Maíz and Bosawás reserves, cattle buyers have sales

142 La Jornada, “Detienen a presunto miembro de ‘La Familia Michoacana’ en CDMX,” 21 August 2021.

143 InSight Crime interview, former cattle buyer in Benemérito de las Américas, Mexico, 1 November 2021.

144 Miguel Angel Navarrete Rivera, “Análisis de la cadena de la carne bovina proveniente de la Reserva Biológica Indio-Maíz y Territorio Rama Kriol,” Universidad Centroamericana, February 2021.

145 InSight Crime telephone interview, judicial authority in Choluteca, Honduras, 12 April, 2021; local cattle rancher, Choluteca, Honduras, 9 April 2021.

146 InSight Crime telephone interview, member of the Directorate for Indigenous and Afrohonduran communities, Río Plátano Reserve, Gracias a Dios, Honduras, 18 May 2021.

letters drawn up and obtain identification earrings from collection centers in the buffer area, where cattle are weighed and auctioned.¹⁴⁷ They can then move the animals freely to feeding centers and then to slaughterhouses.

Other means are also widespread. Farmers with legally registered properties in Nicaragua, for example, can falsely register a higher number of cattle in order to obtain an excess number of ear tags from the IPSA. They then resell them to settlers and ranchers with cattle in the reserves.¹⁴⁸ Cattle raised in Indio Maíz, for example, tend to have ear tags despite not being allowed to be registered in properties in protected areas.¹⁴⁹



For their part, land traffickers in Honduras can act as fronts for settlers to register some of their cattle with property outside the reserve.¹⁵⁰

In Mexico, contraband cattle from Central America go to resting areas near the Guatemala border where they are illegally tagged and documented so they can be sold throughout the country. The process has numerous safeguards, all of which appear to be easily subverted. SINIIGA officials are supposed to sell the ear tags – which can only be applied by a certified veterinarian or technician – to registered cattle production units (UPPs). The UPPs then place them on the animals that are then brought to collection points. However, almost all the sources

consulted by InSight Crime said that corruption exists within the SINIIGA system, and some officials will sell ear tags under the table, either directly to the traffickers or to other entities involved in the trade.

147 Miguel Angel Navarrete Rivera, “Análisis de la cadena de la carne bovina proveniente de la Reserva Biológica Indio-Maíz y Territorio Rama Kriol,” Universidad Centroamericana, February 2021.

148 Oakland Institute, “Drivers of Violence Against Environmental Defenders in Nicaragua,” [PowerPoint Presentation].

149 InSight Crime telephone interview, head of Fundación Río, Indio Maíz, Nicaragua, 11 March 2021; Dyerling Ríos and Christopher Mendoza, “Extensive Cattle Ranching Destroys Core Area of Nicaragua’s Indio Maíz Biological Reserve,” Mongabay, 28 August 2017.

150 InSight Crime interview, Río Plátano resident, Gracias a Dios, Honduras, November 2021.

Indeed, those who do not get the ear tags from SINIIGA can buy them from collection points, which frequently obtain their own ear tags illegally from SINIIGA or via other corrupt officials.¹⁵¹ Others collect ear tags by falsifying the number of cattle they have. In all instances, the black market for earrings is a brisk and lucrative business. While official ear tags from SINIIGA cost between 40 or 50 Mexican pesos (around \$2.50), the ones sold on the black market can hover between 400 and 700 pesos (\$20-35), according to ranchers in Chiapas and Veracruz.¹⁵² Considering that 800,000 head of cattle need fake ear tags, the business could be worth as much as \$18 million annually.

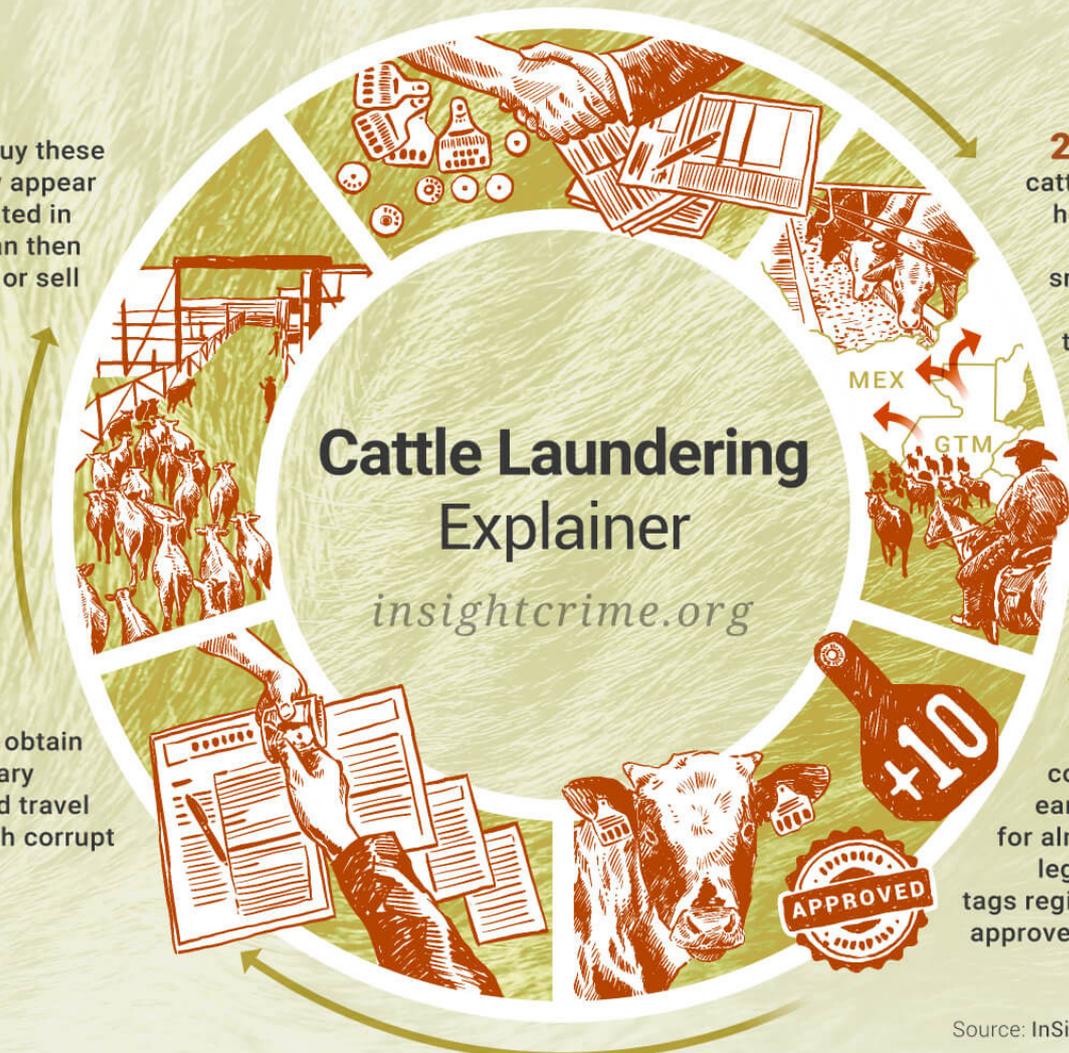
1. Cattle collection points near the Mexico-Guatemala border obtain ear tags through corrupt officials or via third parties who report an excess number of cattle.

2. Central American cattle with no ear tags, health documents or transit permits are smuggled across the border and brought to collection points.

5. Ranchers buy these cattle that now appear to have originated in Mexico, and can then sacrifice them or sell them to meat companies.

4. Traffickers obtain or falsify sanitary certificates and travel permits through corrupt officials.

3. Personnel at collection points sell ear tags to traffickers for almost 10 times their legal price. These ear tags register the cattle with approved production units.



May 2022

Source: InSight Crime investigations

151 InSight Crime interview, cattle rancher in Palenque, Chiapas, Mexico, 9 October 2021.

152 InSight Crime interviews, local ranchers in Veracruz and Chiapas, Mexico, 4-9 October 2021.

When InSight Crime contacted a local SINIIGA office in the state of Veracruz, officials said that they simply do not have the resources to do their job effectively. In fact, the system depends on ranchers self-reporting. But SINIIGA said they do not have the capacity to verify the information that ranchers provide them. “We have to trust them,”¹⁵³ a SINIIGA official lamented, referring to the number of cattle ranchers report.

The ear tag black market has also spawned other ways of getting fake tags for contraband cattle. When ear tags are distributed illegally, the identity of a producer is often stolen. This identity can then be used to register excess cattle, and thus excess earrings.¹⁵⁴ The scheme can be applied until the rancher files taxes, at which point the tax authorities will likely note the discrepancy.

Paperwork is also falsified. Transporters, for instance, obtain veterinary certificates attesting that the animal is free of diseases and that it has the necessary vaccines in order to be moved within Mexico. However, sources interviewed in Veracruz and Chiapas claimed that these certificates are forged with the complicity of veterinarians and authorized laboratories.¹⁵⁵ In the end, authorities said they were helpless.

“The irony is that everything comes in legally,” a government official in southern Mexico told InSight Crime. “I have no legal arguments for rejecting [contraband] cattle. [On paper], there is no legal violation.”¹⁵⁶

Commercialization – Meat Companies

As noted, cattle trafficked from Central America are mainly destined for the Mexican market and its supply chain to the United States. That legal meat market is largely dominated by the company SuKarne, which wields a tremendous amount of power in Mexico’s cattle industry and has the most sophisticated and agile system of sourcing cattle from various producers across the country.¹⁵⁷ SuKarne accounts for more than 70 percent of Mexico’s meat exports, according to the company’s website.¹⁵⁸ In 2021, the company won the Mexican government’s National Export Prize after exporting its meat products to 12 countries across four continents, with average annual earnings of about 20 billion Mexican pesos (around \$985 million).¹⁵⁹

153 InSight Crime interview, SINIIGA, Asociación Ganadera Local de Coatzacoalcos, Veracruz, Mexico, 6 October 2021.

154 InSight Crime interview, cattle rancher in Palenque, Chiapas, Mexico, 9 October 2021; Karina Andrew Herrera, “Así ingresa el ganado de manera ilegal desde Centroamérica a México,” *Televisa*, 15 February 2020.

155 InSight Crime interviews, local ranchers in Veracruz and Chiapas, Mexico, 4-9 October 2021.

156 InSight Crime telephone interview, local government official in Tabasco, Mexico, 14 October 2021.

157 InSight Crime interview, national official who works in the cattle industry, Mexico City, Mexico, 27 January 2022.

158 SuKarne, “Exportaciones,” 2022.

159 Informador, “Por su calidad, SuKarne recibe el Premio Nacional de Exportación 2021,” 3 February 2021.

Their control extends to our area of study. In the south of Veracruz, local authorities and cattle ranchers said SuKarne has a monopoly in the area, so they dictate virtually everything about the trade. “SuKarne is like a coyote, but bigger,” one local official, speaking on condition of anonymity, told InSight Crime.¹⁶⁰

The company also has a plant in Nicaragua, and is increasing its influence over other Central American markets, such as Belize and Guatemala.¹⁶¹

SuKarne’s main competitors in Mexico are medium-sized companies such as Grupo Gusi and Praderas Huastecas, who operate primarily in northern Veracruz and San Luis Potosí. But with SuKarne controlling more than two-thirds of Mexico’s beef exports, that leaves just 30 percent of the meat export market for its competitors to fight over.



A SuKarne collection point in Palenque, Chiapas.
Credit: InSight Crime.

What this means in practice is harder to discern because there are no judicial cases or known investigations into companies for purchasing contraband cattle. To be sure, once cattle are laundered, they can be bought by independent producers or the same meat companies that are responsible for fattening up the calves before sending them to slaughterhouses; there the meat is packaged and prepared for sale and export, rendering it impossible to trace.

In other words, the distance between the laundering process and the purchasing process gives large meat companies plausible deniability. If they or their affiliates purchase calves, these cattle have already been

outfitted with the proper documentation and tags to make it appear as if they originated in Mexico. This documentation makes it so that there is very little incentive to verify the cattle’s true origin or the authenticity of the paperwork. And if they supplement their supplies with processed meat from large meat packers, it is reportedly impossible to know its origin.

160 InSight Crime interview, municipal official, Acayucan, Veracruz, Mexico, 5 October, 2021.

161 Rubén Morales Iglesias, “Belize exports 486 head of cattle to Mexico on Tuesday”, Belize Breaking News, 12 April 2022.

Still, there are those who insist that companies know what they are buying. While there is no documented evidence that implicates meat companies in the purchasing of contraband cattle directly, there is a mathematical shortfall in domestic supplies that is not fulfilled by legal imports.¹⁶² And given the size and influence of these companies, it is hard to accept they do not know where the meat comes from.

On the ground, there is consensus. From local ranchers to union leaders and municipal and state police, all the sources questioned by InSight Crime said that such Mexican companies must buy contraband cattle. One national official involved in the cattle industry, who spoke to InSight Crime on condition of anonymity, argued that some of SuKarne's mid-sized competitors are not able to compete with the meat giant's dominance over the Mexican supply chain, and thus need to source cattle from Central America to continue being competitive and export to the United States.

However, several ranchers that work near the Mexico-Guatemala border said that SuKarne may also be buying contraband cattle, given that it operates several collection points in the southern region. This argument has been replicated by members of congress in the state of Tabasco¹⁶³ and a former contraband cattle buyer interviewed by InSight Crime.¹⁶⁴

Sources in Central America said the same about large meat companies in those countries. According to a study by the Universidad Centroamericana, for example, Nicaraguan companies like Carnic S.A. and Industria Comercial San Martín, and even SuKarne's collection centers in Nicaragua, also appear to source cattle produced in the bio-reserves.¹⁶⁵ The study said these companies marketed the meat in major cities and departmental capitals in the region.¹⁶⁶

Wittingly or unwittingly, the Honduran meat packaging plant Emghasa C&D, which is based in the municipality of Catacamas, just outside of the Río Plátano Reserve, also has been prone to marketing meat and cattle of illegal origin. Several residents interviewed by InSight Crime, some of whom had previously been employed by colonos, spoke of "sending the cattle to the packaging company in Catacamas," where most of the ranch owners are based.

As part of this investigation, InSight Crime reached out to each of these companies directly to get their response to these comments. None of them responded.

162 InSight Crime interviews, local authorities, ranchers and union leaders in Chiapas, Veracruz and Tabasco, Mexico, 4-10 October 2021.

163 Congreso de Tabasco, "[Diario de Debates. Acta No. 123](#)," 17 October, 2019.

164 InSight Crime interview, former cattle buyer in Benemérito de las Américas, Mexico, 1 November 2021.

165 Miguel Angel Navarrete Rivera, "Análisis de la cadena de la carne bovina proveniente de la Reserva Biológica Indio-Maíz y Territorio Rama Kriol," Universidad Centroamericana, February 2021.

166 Miguel Angel Navarrete Rivera, "Análisis de la cadena de la carne bovina proveniente de la Reserva Biológica Indio-Maíz y Territorio Rama Kriol," Universidad Centroamericana, February 2021.

Organized Crime

Cattle trafficking often overlaps with other criminal activities. Some criminal networks see the cattle business as an opportunity to secure the flow of drugs and money. Some are part ancillary criminal schemes such as land trafficking or timber trafficking. And some are predatory criminal groups, extorting all the criminal activities in their areas of operation, including cattle trafficking.

Drug Trafficking Organizations

Cattle ranching is a typical offshoot for drug trafficking organizations. The two are connected because they share something in common: they both require land. Cattle ranching offers drug traffickers physical territory, and this territory has practical, social and political implications. So prominent is the connection that the term *narcoganadería*, or narco-cattle ranching, has come to refer to the livestock activity within Central America's nature reserves.¹⁶⁷

To begin with, drug traffickers can use the space to receive, hide and traffic drugs. In the Mosquitia region of Honduras, informal roads have been built across the Río Plátano reserve, connecting La Mosquitia with the rest of the country. This serves both to move livestock and drugs.¹⁶⁸ According to sources consulted in the Choluteca department, traffickers smuggle drugs into the stomachs of cows in order to transport them to Copán and later to Guatemala.¹⁶⁹ This same dynamic has been reported on the border between Mexico and Guatemala.¹⁷⁰

Cattle ranching territory is often in areas that are strategically located along cocaine trafficking routes originating in South America. The land in the reserves is used to hide clandestine airstrips and to receive drugs arriving by air. In 2021, 15 clandestine runways were destroyed in La Mosquitia¹⁷¹ and six

167 La Moskitia En Peligro, "Carretera Ilegal en Honduras," 2021; Jennifer Devine, David Wrathall, Nate Currit, Beth Tellman, Yunuen Reygadas, "Narco-Cattle Ranching in Political Forests," *Antipode*, vol. 52, no. 4 (2020), pp. 1018-1038.

168 InSight Crime interviews, Miskito residents in Brus Laguna, Gracias a Dios, Honduras, November 2021; residents in Mocarón, Gracias a Dios, Honduras, November 2021; Santiago Previde, "How 'Narco-Highway' in Honduras Became National News," InSight Crime, 6 July 2021.

169 InSight Crime telephone interview, judicial authority in Choluteca, Honduras, 12 April 2021; local cattle rancher, Choluteca, Honduras, 9 April, 2021.

170 InSight Crime interviews, cattle rancher in southern Veracruz, Mexico, 4 November, 2021; former contraband cattle buyer, Veracruz, 1 November 2021; Rodrigo Soberanes, "Illegal cattle ranching deforests Mexico's massive Lacandon Jungle," *Mongabay*, 14 March 2018.

171 Proceso Digital, "Lista de Narcopistas destruidas este 2021," 13 December, 2021.

in Petén.¹⁷² According to a report by Guatemala's *elPeriódico*, armed groups protect these runways and have the capacity to confront authorities in the Laguna del Tigre Park, which sees the largest illegal cattle ranching activity in the country.¹⁷³

Cattle ranching is also a useful way to launder illicit proceeds. It involves buying land, building infrastructure, and buying and selling cattle, all of which help drug trafficking networks to legitimize their holdings.¹⁷⁴ They can also parlay the space into social and political power on a local and sometimes national level. The link between drug trafficking and cattle ranching is particularly visible in Honduras and Guatemala, where infamous drug trafficking clans have a long tradition of using the livestock industry to launder their illicit proceeds and obtain a certain status and territorial control where they operate.

Such was the case of the Mendozas and Lorenzanas.¹⁷⁵ Both operated, in part, in the Maya Biosphere Reserve. And in 2011, an InSight Crime investigation found that these families, as well as members of other local criminal groups, owned several cattle ranches in the department, some of which were in reserve areas.¹⁷⁶ Numerous members of both families have since been convicted of drug trafficking and other crimes, but the heirs of these clans still manage cattle ranches – often via third party owners – as well as drug trafficking operations in the area.¹⁷⁷ A 2016 report by the International Commission Against Impunity in Guatemala (Comisión Internacional Contra la Impunidad en Guatemala - CICIG) claimed that the Mendozas appropriated land to establish 28 cattle ranches in the region.¹⁷⁸

In Honduras, families like the Valle Valle and Rivera Maradiaga, or the Cachiros, started in the criminal world with stealing and smuggling cattle.¹⁷⁹ Authorities have also convicted numerous members of these families for drug trafficking and other crimes, but during a field investigation in Río Plátano, InSight Crime was able to verify that several individuals involved in the drug trafficking networks that emerged after the fall of these large clans monopolized land in

172 Natiana Gándara, “Abandonan aeronave en Ixcán, Quiché, con posibles vínculos al narcotráfico (en 2021 se contabilizaron al menos 20 hallazgos similares),” *Prensa Libre*, 29 December 2021.

173 José Manuel Patzán, “Petén, Izabal y Retalhuleu son puntos clave para las avionetas,” *elPeriódico*, 24 February 2021.

174 InSight Crime telephone interview, Jennifer Devine, professor at Texas State University, 20 January 2022.

175 InSight Crime profile, “Lorenzanas,” 2021; InSight Crime profile, “Mendozas,” 2020.

176 InSight Crime, “Grupos de poder en Petén: Territorio, política y negocios,” July 2011.

177 Óscar Martínez, “La frontera perdida en la selva,” *El País*, 12 August 2019; Max Radwin, “Guatemala Officials Say Organized Crime Largely Responsible for Forest Fires,” InSight Crime, 11 June 2020.

178 Comisión Internacional Contra la Impunidad en Guatemala (CICIG), “Impunidad y despojo en Petén: Caso Génesis,” 6 April 2016.

179 InSight Crime profile, “Valles,” 2020; InSight Crime profile, “Cachiros,” 2014.

the reserves for livestock production.¹⁸⁰ The people who live within the reserve say they know these people, but no one dares report them to authorities.

“Drug trafficking groups rule,” a local NGO leader in Río Plátano told InSight Crime. “These are lawless lands, it’s plata o plomo [money or a bullet].”¹⁸¹

Land Traffickers

Land traffickers are unscrupulous, politically-connected brokers who form a network of government officials, notaries, and security forces to usurp land. They then either develop the land themselves or resell that land to small and large settlers. Illegal livestock production within protected nature reserves could not occur without the complicity of these land traffickers.

In most cases, protected territories can legally only be occupied by communities that were granted land rights, which cannot be sold or exchanged.¹⁸² However, these traffickers routinely upend this system with the assistance of local officials. According to the Indio Maíz Civic Battalion in Nicaragua, for example, the land trafficking networks within the reserve sell lands in the municipality of El Castillo, just outside the forest. These networks are allegedly made up of local politicians and political power brokers in this area. Each manzana (plots of 0.7 hectares), the Battalion said, is valued between \$35 and \$380, depending on the quality and location of the land.¹⁸³

This dynamic is also evident in Bosawás,¹⁸⁴ where Sandinista government officials have been directly accused of being involved in trafficking land to politically-connected people. A 2020 investigation by El País, for example, found that several illegitimate “property titles” had been granted to settlers by middle- and senior-ranking officials, including the government coordinator of the Autonomous Region of the North Caribbean Coast.¹⁸⁵

A similar process plays out in Honduras. When InSight Crime visited the towns on the outskirts of Río Plátano, for instance, the team discovered there are individuals with connections to the mayor’s offices that obtain land permits and sell them to ranchers. These permits, however, are fake and usually obtained

180 InSight Crime interview, Wildress Wood, Pra Wänka organization, Puerto Lempira, Gracias a Dios, Honduras, November 2021.

181 InSight Crime interviews, Río Plátano residents, Gracias a Dios, Honduras, 3-13 November 2021.

182 Poder Judicial de Honduras, “*Ley de Propiedad, Decreto No. 82-2004*,” 29 June 2004; Normas Jurídicas de Nicaragua, “*Ley No. 28. Estatuto de Autonomía de las Regiones de la Costa Caribe de Nicaragua*,” Nicaraguan Congress; 1986.

183 Reserva Indio Maíz, “*Red vende tierras actuando a su gusto y antojo*,” 2021.

184 James Bargent, “*Nicaragua Strikes at Rampant Land Trafficking in Indigenous Territory*,” InSight Crime, 17 January 2014.

185 Wilfredo Miranda, “*La invasión de tierras arrincona a los indígenas de Nicaragua*,” El País, 23 February 2020.

informally, without legal documents. Once the settlers obtain the titles, though, they use them to justify the appropriation of Indigenous territories.¹⁸⁶

Land traffickers also take advantage of the connection between cattle ranching and drug trafficking. A recent academic investigation in the Maya Biosphere Reserve found that there are networks that specialize in land speculation in areas that are strategically close to the border with Mexico. These actors deforest and “prepare” the land to then sell it to drug traffickers or the cattle ranchers that work for them.¹⁸⁷

Illegal Logging and Timber Trafficking

Cattle ranching in nature reserves requires the clearing of vast amounts of forest, making it the main cause of deforestation of the reserves considered in this study.¹⁸⁸ Given that some high-demand tropical hardwoods, such as cedar and mahogany, can be found within the reserves, timber trafficking networks work almost in line with ranchers.¹⁸⁹

This connection can be made several ways. On the one hand, the relationship between the two activities occurs through land traffickers, who sell the cleared land to settlers and sell the timber that is cut down to timber trafficking networks. This is the case in Bosawás, where a 2017 investigation by Mongabay found that the individuals responsible for clearing the land to plant pastures sold wood to traffickers at prices of up to \$0.4 for 30 cm (per foot).¹⁹⁰

Another modality is that the same elites involved in cattle ranching also manage timber trafficking networks, as part of their diverse criminal portfolio. This has been particularly evident in Honduras. In Olancho, for example, the political class in the Catacamas municipality was made up of individuals dedicated to timber trafficking and cattle ranching for years. A 2020 investigation by InSight Crime found that these networks use their political connections to appropriate land within reserves, to market the precious timbers they extract, and to use

186 InSight Crime interviews, residents, environmental activists and Indigenous activists in Río Plátano, Puerto Lempira and Brus Laguna, Gracias a Dios, Honduras, November 2021.

187 Jennifer A. Devine, David Wrathall, Bernardo Aguilar-González, Karina Benessaiah, Beth Tellman, Zahra Ghaffari and Daria Ponstingel, “Narco-degradation: Cocaine trafficking’s environmental impacts in Central America’s protected areas,” *World Development* (2021), vol. 144.

188 WCS Newsroom, “[People and Wildlife Now Threatened by Rapid Destruction of Central America’s Forests](#),” *Wildlife Conservation Society*, 25 July 2017.

189 Héctor Silva Ávalos, “[The Logging Barons of Catacamas, Honduras](#),” *InSight Crime*, 18 September 2021.

190 Michelle Carrere, “[Cattle Ranching Devours Nicaragua’s Bosawás Biosphere Reserve](#),” *Mongabay*, 10 March 2017.

the land for cattle ranching.¹⁹¹ Sources consulted during the visit to Río Plátano for this investigation confirmed that this *modus operandi* continues to be used by businessmen and political elites in the departments near the reserve.



Deforested land in the Río Plátano Reserve. Credit: InSight Crime.

Predatory Criminal Networks

In Mexico, the connections between cattle trafficking and other criminal activities are more nebulous. Local sources in the cattle ranching industry consulted by InSight Crime in the Mexican states of Chiapas, Tabasco and Veracruz often spoke of “the mafia’s” involvement in cattle trafficking, although specific criminal organizations were rarely mentioned. Out of fear of using names, locals used terms like “the real bosses,” “those above,” and “greater interests,” to refer to actors involved in organized crime that have interfered in cattle trafficking and can even manage certain stages of the chain.

191 Héctor Silva Ávalos, “[The Logging Barons of Catacamas, Honduras](#),” InSight Crime, 18 September 2021.

A source in southern Veracruz, for example, mentioned that criminal groups illegally transport ear tags from one state to another.¹⁹² Others in the industry described how organized crime groups tax tractor trailers transporting contraband cattle through the areas they control. One rancher in southern Veracruz said that criminal groups in that zone operate checkpoints on the main highways and charge fees to those bringing contraband cattle from the Guatemala-Mexico border north through the region.¹⁹³ It's not clear how much those costs are, or whether it's a flat fee or some percentage based on the size of the truck and the number of animals being transported.

Some specifics have recently emerged. A suspected Familia Michoacana member known by the alias "El Vani," is alleged to have overseen a network of coyotes moving contraband cattle from Guatemala and into the Gulf state of Veracruz. At the time of his arrest in August 2021, El Vani was driving a luxury Mercedes-Benz vehicle and reportedly offered a nearly \$100,000 bribe to local police, shedding some light on the scale of profits to be made by somebody our sources said controlled "all of the contraband cattle" entering Veracruz from Mexico's southern border with Guatemala.¹⁹⁴

192 InSight Crime interview, local cattle ranchers in southern Veracruz, Mexico, 5 October 2021.

193 InSight Crime interview, local cattle rancher in southern Veracruz, Mexico, 4 October 2021.

194 Milenio, "Capturan en CdMx a 'El Vani', presunto integrante de La Familia Michoacana," 15 August 2021.

5

Challenges to Curb Cattle Trafficking

Although all countries have legal tools and regulations that are exhaustive on paper, cattle trafficking goes largely uninterrupted. There are several reasons for this. First and foremost, as noted above, is that it's almost impossible for authorities to prove the illicit origin of cattle once they have been adequately laundered into the legal system.¹⁹⁵

Second, the agencies working directly on protecting the environment and monitoring cattle production do not have the resources to cover enough ground to do so.

Authorities in the nature reserves are underfunded and, in some cases, unable to reach some of the deepest areas of the forest where criminal networks operate. For instance, when InSight Crime visited the Río Plátano reserve, the team had to travel for several days by river to reach the areas where cattle ranching was taking place. In those places, the Honduran Army battalion in charge of combating deforestation and other environmental crimes was not present, nor were any other regulatory authorities.

CONAP park rangers in the Guatemalan Maya Biosphere also told InSight Crime that they lack support from the government to tackle large-scale environmental crime. Even though they often do joint patrols with the Guatemalan Army, they are generally disadvantaged when facing powerful armed groups guarding cattle ranches and drug trafficking operations.¹⁹⁶

Meanwhile, SINIIGA, the Mexican agency in charge of registering livestock and providing identification earrings, also mentioned not having sufficient personnel and financial resources to verify that ranchers are accurately reporting the number of cattle they own.¹⁹⁷ In some cases, SINIIGA's offices can be up to four hours away from the areas where ranchers work, which makes it challenging to maintain consistent oversight.

195 InSight Crime telephone interview, Anuradha Mittal, Oakland Institute, Nicaragua, 25 March 2021.

196 InSight Crime telephone interview, CONAP official, Maya Biosphere Reserve, Guatemala, February 2021.

197 InSight Crime interviews, SINIIGA, Asociación Ganadera Local de Coatzacoalcos, Veracruz, Mexico, 6 October 2021; national official working in the cattle industry, Mexico City, Mexico, 27 January 2022.

Coordination among different government agencies involved in regulating the livestock industry is also insufficient. The institutions in charge of tracking cattle are primarily focused on sanitary risks and cannot prosecute or investigate any irregularities or illegal activities. As one former agriculture minister in Guatemala put it to InSight Crime, “it was very distressing for us to see [cattle trafficking], but all we could do was report it to the Army or National Police, it is their responsibility to act on it.”¹⁹⁸ Officials from SENASICA in Mexico,¹⁹⁹ VISAR in Guatemala²⁰⁰ and SENASA in Honduras²⁰¹ all mentioned similar concerns, lamenting that even though they are aware of cattle trafficking and illegal cattle ranching, all they can do is report it.

However, curbing cattle trafficking does not appear to be a priority for law enforcement and security forces. What’s more, it’s not even clear which institutions are actually responsible for dealing with the issue.

As previously mentioned, very few judicial investigations into cattle smuggling or illegal ranching - or in some cases not even a single one - were reported by the Attorney General’s offices in Mexico, Guatemala or Honduras (we were unable to obtain this data in Nicaragua). Security forces patrolling border regions deal more with undocumented migration and drug trafficking, and are not always active or present on main cattle smuggling routes.

“[Many producers] worry that their data will be misused and that their government is imposing further costs on them.”

When InSight Crime tried to reach out to Mexico’s National Guard and an Army base close to the border with Guatemala for an interview, the response from both institutions was that cattle trafficking simply was not their responsibility. And when arranging interviews with police forces in the border states, spokespersons mentioned that they deal with cattle rustling, but not cattle trafficking. It is also unclear to what extent customs agencies are involved in trying to regulate the issue. For instance, Mexico’s Secretariat of

198 InSight Crime telephone interview, Efraín Medina, current OIRSA director and former minister of Agriculture in Guatemala, San Salvador, El Salvador, 26 January 2022.

199 InSight Crime telephone interview, Francisco Javier Trujillo, Chief Director of SENASICA, Secretaría de Agricultura y Desarrollo Rural (SADER), Mexico City, Mexico, 19 April 2021.

200 Email correspondence between InSight Crime and Byron Gil, chief of Livestock Sanitary Protection at VISAR, 21 January 2022.

201 InSight Crime telephone interview, Juan Ramón Velasquéz, SENASA director, Tegucigalpa, Honduras, 10 February, 2022.

Finance and Public Credit (Secretaría de Hacienda y Crédito Público – SHCP), which oversees customs, did not report having identified any cases of cattle smuggling from Guatemala.²⁰²

One mayor in the south of Veracruz told InSight Crime that it “feels normal”²⁰³ to have cattle brought in from Guatemala irregularly, although it shouldn’t be, shedding light on the apparent indifference of local authorities to confront the problem.

Another challenge is that any country legally importing cattle or beef largely depends on the traceability system of source countries to determine the origin of the product. This means that if illegally-sourced cattle are successfully laundered into the legal supply chain at any point on the smuggling route, other countries would consider them clean. For example, SENASICA officials told InSight Crime that they cannot know for sure if cattle legally imported from Guatemala actually originated in that country; they simply have to trust the efficiency of Guatemala’s traceability system. 10 SENASA officials in Honduras mentioned the same concern over their cattle dealings with Nicaragua. If the cattle they receive are registered in Nicaragua’s traceability system, then they have to trust that the origin is legal.²⁰⁴

A further challenge to tackling the illicit cattle market is that the legal beef export industry is perceived by many ranchers as too costly, especially for those who manage small or mid-sized ranches. From Nicaragua to Mexico, authorities have mentioned that it has been challenging to get farmers to register their cattle and their facilities with the national traceability systems. Efraín Medina, the director of OIRSA, told InSight Crime that this is due to a general distrust in government institutions.

“[Many producers] worry that their data will be misused and that their government is imposing further costs on them,” he said.

Juan Ramón Velasquez, SENASA’s director, also stated that there is a general unawareness of the benefits of animal identification in Honduras,²⁰⁵ a view that Mexico’s SADER also shares.²⁰⁶

“Initially, some farmers see these regulations and controls as an extra cost that does not have any immediate benefits. It becomes more expensive and difficult for them to produce cattle. There needs to be a national strategy to train producers on why it is important to invest in traceability,” Velasquez told InSight Crime.

202 Information request filed to Mexico’s SHCP no. 0000600165221, 15 June 2021.

203 InSight Crime interview, mayor in the south of Veracruz, Mexico, 1 October 2021.

204 InSight Crime telephone interview, SENASA officials, Tegucigalpa, Honduras, 10 February 2022.

205 InSight Crime telephone interview, Juan Ramón Velásquez, Tegucigalpa, Honduras, 10 February 2022.

206 SAGARPA, “[Mexico’s Livestock Identification and Traceability Program](#),” SAGARPA, October 2017.

Moreover, taxes can be a burden to enter the legal market for international beef exports. For instance, for independent producers in Guatemala to export cattle to Mexico – where they will get a better price than in the domestic market – they have to pay up to 19 percent in taxes. A registered cattle company must pay up to 31 percent.²⁰⁷ These quantities are not necessarily fair when considering the costs of production, according to an OIRSA official interviewed by InSight Crime, who argued that this constraint has pushed many small and medium producers to export their cattle to Mexico illegally.²⁰⁸

Finally, corruption and organized crime play a significant role in all stages of the cattle trafficking chain, facilitating everything from acquiring protected lands to turning a blind eye to cross-border smuggling, enabling the laundering process and threatening those who attempt to report illegal activities.

The cattle industry is a billion-dollar business, and the amount of money involved brings with it corruption.²⁰⁹ In Mexico, for example, there are many groups of people around the country that deal in high-quality cattle worth a lot of money. As a result, veterinarians, inspectors, union leaders, and many other people in the supply chain can be corrupted by that money. To be sure, the disgraced former governor of Chihuahua state, César Duarte, allegedly used one of the local cattle rancher's unions in the capital to launder illicit proceeds he had stolen from the government. He reportedly went so far as using the union to make fake purchases of livestock equipment and animal feed, as well as acquiring cattle that later “disappeared” without any explanation.²¹⁰

Across the region, systemic corruption has fostered fear and distrust in government institutions, limiting the ability of citizens to report illicit activities. One rancher in Veracruz who spoke with InSight Crime, for example, mentioned that he had tried to denounce corruption within the SINIIGA system but decided not to continue with the process. “You never know whom you are talking to. It is very dangerous,” he explained.

Other ranchers in the area mentioned similar concerns, stating that “violence has been normalized and we cannot trust the authorities. We are panicking.”²¹¹ To be sure, some prominent ranchers who were outspoken about the illicit cattle trade in Mexico have been threatened and even killed.²¹² During InSight Crime's field investigations in the southeastern part of Mexico, few wanted to talk openly about cattle trafficking dynamics.

207 InSight Crime telephone interview, OIRSA official, San Salvador, El Salvador, 26 January 2022.

208 Ibid.

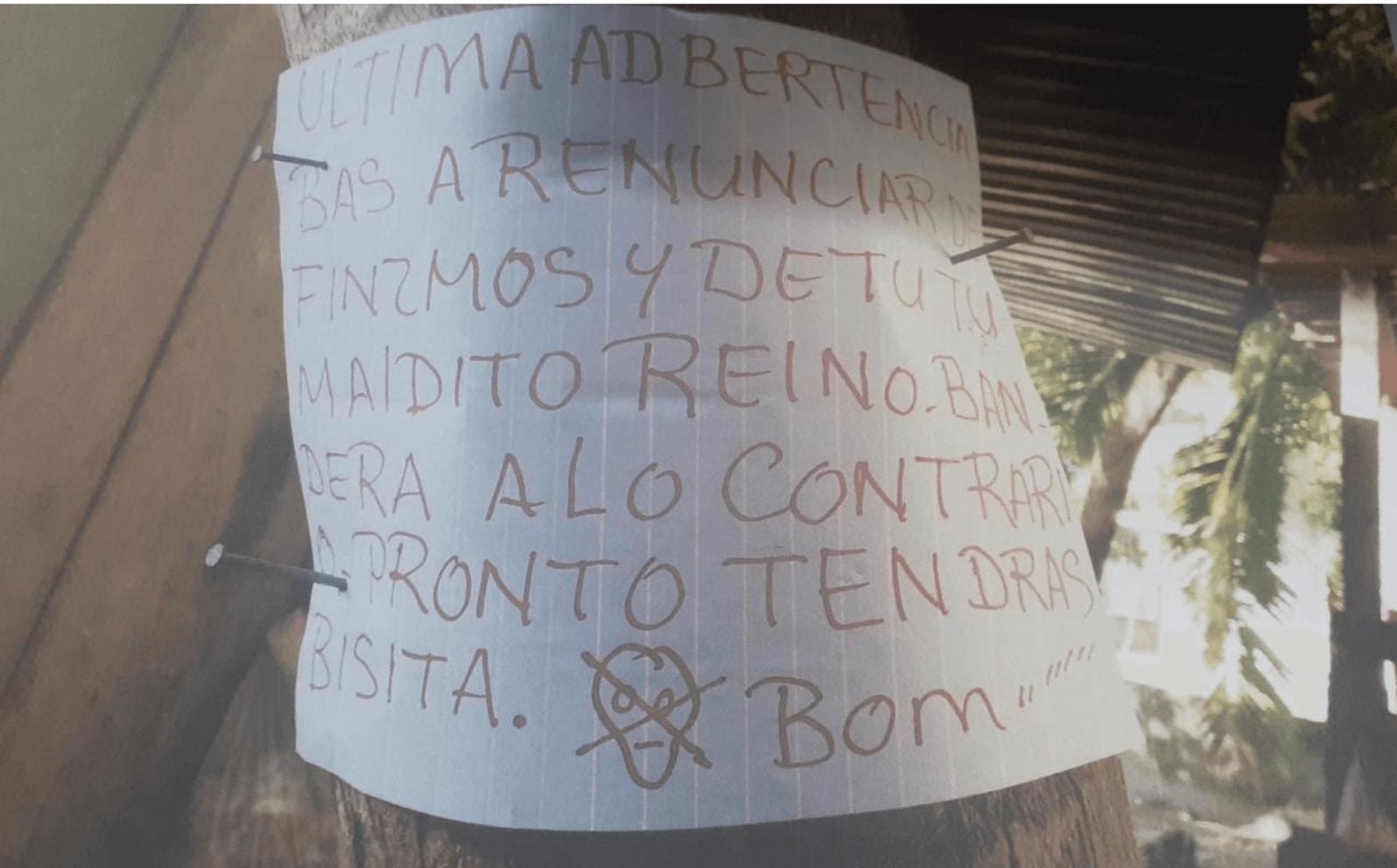
209 InSight Crime telephone interview, former cattle rancher's union leader in Chihuahua, Mexico, 26 April 2021.

210 Parker Asmann, “[Extradition of Mexico Governor Highlights Cattle, Money Laundering Nexus](#),” InSight Crime, 11 November 2021.

211 InSight Crime interview, cattle ranchers in the south of Veracruz, Mexico, 5 October 2021.

212 InSight Crime interview, cattle rancher in Chiapas, Mexico, 9 October, 2021; Aristegui Noticias, “[Asesinan a diputado local de Veracruz dentro de su rancho](#),” 9 November 2019; Gaspar Romero, “[Asesinan a un líder ganadero en Chiapas cuando denunciaba un robo](#),” Excélsior, 24 May 2011.

The situation in Central America's reserves is not different, as heavily armed criminal networks often become de-facto authorities in the territories where illegal ranching occurs. Members of Indigenous communities and environmental defenders are generally scared to protest or report these activities, as they receive constant threats to collaborate or give up their lands.²¹³ These threats often end up in killings, as evidenced by the cases of the Río Plátano and Bosawás reserves.



Threat received by Indigenous communities in Río Plátano, Honduras. Credit: InSight Crime.

213 InSight Crime interviews, residents of the Río Plátano Reserve, Gracias a Dios, Honduras, November 2021.

6

Opportunities for Intervention

If current policies remain in place without addressing the challenges mentioned above, a) traffickers will continue to smuggle cattle across borders and launder their byproducts into the legal supply chain; b) there will be continued risk of transmissible diseases which can harm legal beef production; c) drug trafficking organizations will continue to use the cattle industry as a vehicle to launder proceeds and cover their operations; d) Indigenous communities will continue to face forced displacements and targeted threats from criminal networks; and e) unregulated cattle ranching will advance further into the natural reserves of Central America, devouring some of the region's most valuable natural resources.

A comprehensive strategy must be implemented to promote international cooperation and bring together different government agencies and stakeholders. InSight Crime spoke to experts, government officials, cattle ranchers and local community leaders to get their perspective on addressing the trade in contraband cattle.

General Recommendations

Raise awareness about cattle trafficking

- As mentioned, curbing cattle trafficking is not among the current priorities of any government in the region. This may be due to a lack of understanding of the issue or because it may be considered a seemingly victimless crime. Therefore, educating and training border patrols, security forces, law enforcement and customs agencies about the violence, human rights violations, environmental degradation and links to organized crime that this illicit market features is one of the first steps towards tackling it. These institutions should also be trained on identifying illegally sourced cattle, current laws in place to confront this issue and what procedures must be followed.

- Governments and intergovernmental organizations should be encouraged to incorporate cattle trafficking and unregulated cattle ranching into their climate change agendas and use diplomatic pressure to demand relevant authorities in the region – including in the United States – be more responsible in where they source beef.
- Intergovernmental bodies should also pressure national governments to protect journalists and activists who report on the intersection between organized crime and environmental degradation, and those who hold elites accountable for directly or indirectly supporting the criminal networks involved.

Improve coordination among government agencies

- Working groups or committees that combine officials from food health and safety departments, police, armed forces, customs agencies and the Attorney General's Office should be established in each country considered in this study. These should be present along the main cattle trafficking routes identified and should have the jurisdiction to investigate and prosecute criminal activities related to the cattle industry. They should also consult with a board of advisors composed of cattle ranchers of all sizes, representatives of cattle ranching unions, Indigenous authorities, environmental activists and other relevant members of civil society.
- In Central America's forests, illicit cattle ranching is strongly related to cocaine trafficking. As some academics have previously argued, drug policies and conservation policies need to go hand-in-hand in these areas.²¹⁴ Park rangers need to count on sufficient support from security forces to face organized crime networks and to expand their presence in remote areas where these groups operate. Moreover, efforts should also be directed towards strengthening financial intelligence and money laundering units to target the assets of transnational criminal networks, which tend to utilize cattle trafficking to launder their proceeds.

214 InSight Crime interview, Jennifer Devine, Professor at Texas State University, 20 January 2022.

Promote free trade agreements and strengthen regulations regarding the international beef market

- The international cattle and beef trade should be as tariff-free as possible to reduce incentives to turn to the black market. Trade agreements between the United States and countries like Guatemala and Honduras should be promoted to strengthen the cattle industry in these countries – and by extension their regulatory systems – and minimize the need to smuggle cattle into Mexico to obtain better prices.
- Nonetheless, national governments, including the United States, should be more responsible in sourcing their meat products. Since at least the 1980s, the US government has been criticized for importing meat tied to deforestation.²¹⁵ The USDA should strengthen due diligence of meat companies approved for export and require all trade partners to be transparent on the origin of their meat. Besides meeting all sanitary requirements, these companies should also be obligated to show evidence that their cattle sourcing processes are not linked to environmental degradation or criminal activity. These same regulations should be applied by SADER in Mexico, MAGA in Guatemala, SAG in Honduras, and MAGFOR in Nicaragua.
- Governments in Mexico and Central America should work with the OIRSA to create a regional cattle-tracking system that allows different national authorities to share information and track the origin of cattle that are being traded. This should help increase the efficiency of traceability systems in every country and make the cattle trade more transparent. Internal and external institutions should carry out regular audits of this system.

Minimize opportunities for corruption

- Governments across the region – both at the national and local levels – should transition to digitizing all bureaucratic procedures to achieve more efficient and effective oversight, eliminating paperwork and decreasing opportunities for leniency. This would minimize the risk of falsifying or altering official documents and permits.²¹⁶

²¹⁵ Norman Myers, “The Hamburger Connection: How Central America’s Forests Became North America’s Hamburgers,” *Ambio* (1981), vol. 10 no. 1, pp. 2-8.

²¹⁶ InSight Crime interview, officer from Mexico’s national anti-corruption agency, Mexico City, 11 February 2022.

- The international community should continue to pressure governments in the region to strengthen transparency and comply with open government initiatives. For their part, national governments should push forward agreements and measures regarding corporate integrity.²¹⁷
- In a similar vein, the United States, European Union (EU) and international financial institutions, such as the International Monetary Fund (IMF) and World Bank, should continue to demand and prioritize anti-corruption efforts in Central America and Mexico. Elites should be held accountable by national governments and the international community for their complicity in supporting organized criminal networks, human rights violations and environmental destruction.

Specific Recommendations: Cattle Trafficking Chain

Production

- Intergovernmental bodies and national authorities should fund studies to take a census of the cattle that are raised illegally in the nature reserves of Central America. This would create a necessary tool to measure the scope of the problem and identify which areas need increased state presence.
- Empower local conservation agencies by increasing their budget and workforce, as well as providing more support from relevant security agencies to patrol the parks and counter heavily armed criminal organizations.
- Many areas of the reserves are largely governed by criminal actors. Local communities are at risk of being displaced, threatened, killed or forcibly hired by these actors to clear the forest, move cattle across the jungle and work the ranches. Therefore, it is essential for governments to distinguish the members of these communities from larger cattle ranchers and those involved in organized crime. Authorities should open more spaces for dialogue with community leaders to understand what conditions are leading to criminal governance and what sustainable socio-economic opportunities could be implemented in

217 Ibid.

these areas to offer alternative sources of income.²¹⁸ Working closely with communities would also allow governments to have a better understanding of the conditions inside the parks and Indigenous reserves where cattle ranching is concentrated.²¹⁹

- Regulatory authorities, as well as environmental and human rights prosecutors, should coordinate the expansion of their presence near nature reserves and Indigenous lands with local community members to encourage citizen reporting of environmental crimes.²²⁰
- Community forestry projects should be encouraged and protected to enhance local environmental governance.²²¹ Local campesinos who ranch cattle for their own subsistence could be offered incentives to either produce in a more sustainable way or get involved with other agroforestry projects. Moreover, in the buffer zones, ranching activities should be required to utilize silvopastoral systems, or the process of integrating trees and grazing livestock on the same piece of land.²²²
- Governments should explore the possibility of negotiating with larger cattle ranchers to move their production outside of the reserves by offering them few or no sanctions in return. A similar strategy was previously implemented in Guatemala, and succeeded in removing 40,000 head of cattle from the Maya Biosphere Reserve in 2011.²²³

Transport and Smuggling

- The presence of security forces must be strategically concentrated on the chokepoints of cattle trafficking routes to interrupt smuggling operations. As all criminal networks do, traffickers will likely respond by looking for new routes, so authorities must continuously monitor these movements and adapt when necessary. This strategy has previously worked in the Mexican state of Tabasco, where ranchers argued that

218 InSight Crime interviews, residents and Indigenous leaders in Río Plátano, Honduras, November 2021.

219 InSight Crime telephone interview, Lottie Cunningham, Center for Justice and Human Rights in the Atlantic Coast of Nicaragua, Nicaragua, 27 January 2022.

220 InSight Crime interviews, Indigenous leaders in Río Plátano, Honduras, November 2021.

221 InSight Crime interview, Jennifer Devine, Professor at Texas State University, 20 January 2022.

222 InSight Crime interview, head of Fundación Río, Indio Maíz, Nicaragua, 11 March 2021.

223 Télam, “Álvaro Colom: ‘En Centroamérica, el narcotráfico solo se lo para unidos,’” 14 July, 2011; Beth Tellman, Kendra McSweeney, Leah Manak, Jennifer A. Devine, Steven Sesnie, Erik Nielsen and Anayansi Dávila. “Narcotrafficking and Land Control in Guatemala and Honduras,” *Journal of Illicit Economies and Development* (2021), vol. 3 no. 1, pp. 132-159.

the smuggling route through the border crossing of Tenosique was severely weakened after the Army and customs agents increased their presence.²²⁴

- Rather than going after the easily replaceable workers and low-level actors of cattle networks, efforts should be focused on identifying and prosecuting the brokers who arrange trade deals among producers and buyers. Given that there is generally no communication between the latter, taking out the intermediaries would seriously disrupt the cattle trafficking supply chain.

Laundering

- In this report, we have identified that corruption is more likely to occur within the ear tag system and in municipal offices in charge of issuing sales letters and signing mobilization permits that are located close to the nature reserves. Therefore, relevant authorities in each country should conduct internal investigations into these sectors and sanction those officials who have operated illegally. Moreover, risk evaluations of the different institutions involved in the livestock industry should be continuously conducted to detect other areas that are vulnerable to corruption. Internal auditing offices in these institutions should either be created or strengthened if they already exist.²²⁵
- In the same vein, food health and safety agencies across the region should work closer with ranchers and the private sector to encourage the reporting of irregularities and corruption within national traceability systems.²²⁶
- To strengthen these systems, authorities should conduct targeted campaigns on the importance of animal identification and traceability in order to build trust between producers and the government. Incentives – possibly monetary – could also be offered for ranchers to participate in the tracing and identification systems.

224 InSight Crime interview, cattle rancher in Balancán, Tabasco, Mexico, 10 October 2021.

225 InSight Crime interview, officer from Mexico's national anti-corruption agency, Mexico City, 11 February 2022.

226 InSight Crime telephone interview, Juan Ramón Velásquez, SENASA director, Tegucigalpa, Honduras, 10 February 2022.

- Governments in Central America should also consider subsidizing some of the regulatory processes that cattle ranchers are required to go through to legally sell their livestock, in an effort to reduce the costs of production and encourage more producers to enter formal traceability systems.²²⁷
- In Mexico, SINIIGA's staff needs to be expanded to better equip the agency to adequately verify information provided by ranchers. The federal government should also consider deepening its relationship (either financially or bureaucratically) with SINIIGA to ensure oversight and continual improvements to the traceability system.
- In Honduras and Nicaragua, there needs to be more transparency with regards to accessing the national cattle registries so that authorities can be held accountable if there are any irregularities or documentation of cattle in areas where ranching is prohibited.²²⁸

Commercialization

- The international meat trade needs to be more transparent. Processing plants approved for export must demand their customers declare and provide hard evidence of the origin of the meat, and companies should guarantee their trading partners that the sourcing process was ethical and sustainable. This could be done by creating a certification system.
- Moreover, as with the prevalence of sanitary risks, the USDA should consider imposing fines or bans on companies that have inadequate sourcing processes.
- National economic competition and regulatory agencies should conduct studies of market concentration and promote policies that ensure equal competition among meat companies. This is especially relevant in the Mexican case, where SuKarne currently dominates the cattle industry.
- Finally, more research needs to be done – both by law enforcement and independent researchers – on the connections between political elites and meat companies in the region in order to better understand who benefits from the illicit cattle trade and what other interests are fueling this market.

²²⁷ InSight Crime interview, OIRSA officials, San Salvador, El Salvador, 26 January 2022.

²²⁸ InSight Crime telephone interview, Anuradha Mittal, Oakland Institute, Nicaragua, 25 March 2021.

Glossary of Abbreviations and Acronyms

APHIS	US Animal and Plant Health Inspection Service
CBP	US Customs and Border Protection
CICIG	International Commission Against Impunity in Guatemala (Comisión Internacional Contra la Impunidad en Guatemala)
CJNG	Jalisco Cartel New Generation (Cartel de Jalisco Nueva Generación – CJNG)
CNOG	Mexico’s National Confederation of Livestock Organizations (Confederación Nacional de Organizaciones Ganaderas)
CONAP	Guatemala’s National Commission of Protected Areas (Comisión Nacional de Áreas Protegidas)
FSIS	US Food Safety and Inspection Service
GIZ	German Agency for International Development
ICF	Honduras’ Institute for Forest Conservation (Instituto de Conservación Forestal)
INEGI	Mexico’s National Institute of Statistics and Geography (INEGI)
IPSA	Nicaragua’s Agricultural Protection and Health Institute (Instituto de Protección y Sanidad Agropecuaria)
MARENA	Nicaragua’s Ministry of the Environment and Natural Resources (Ministerio del Ambiente y Recursos Naturales)
MARN	Guatemala’s Ministry of the Environment and Natural Resources (Ministerio de Ambiente y Recursos Naturales)
NAFTA	North American Free Trade Agreement
NGO	Non-Governmental Organization
OIRSA	International Regional Organization for Agricultural Health (Organismo Internacional Regional de Sanidad Agropecuario)
OTR	Nicaragua’s Rural Titling Office (Oficina de Titulación Rural)
PGN	Mexico’s National Livestock Register (Padrón Ganadero Nacional)
PSG	Livestock Service Provider (Prestador de Servicios Ganaderos)
REEMO	Mexico’s Electronic Movement Record (Registro Electrónico de Movilización)
SADER	Mexico’s Secretariat of Agriculture and Rural Development (Secretaría de Agricultura y Desarrollo Rural)
SAG	Honduras’ Secretariat of Agriculture and Livestock (Secretaría de Agricultura y Ganadería)

SENASA	Honduras' National Service of Health and Food Safety (Servicio Nacional de Sanidad e Inocuidad Agroalimentaria)
SENASICA	Mexico's National Service of Health, Safety and Agri-Food Quality (Servicio Nacional de Sanidad, Inocuidad y Calidad Agroalimentaria)
SERNA	Honduras' Secretariat of Natural Resources and the Environment (Secretaría de Recursos Naturales y Ambiente)
SHCP	Mexico's Secretariat of Finance and Public Credit (Secretaría de Hacienda y Crédito Público)
SIAP	Mexico's Agri-Food and Fishery Information Service (Servicio de Información Agroalimentaria y Pesquera)
SINAT-GT	Guatemala's National System of Animal Traceability (Sistema Nacional de Trazabilidad Pecuaria)
SINIIGA	Mexico's National System of Individual Identification of Cattle (Sistema Nacional de Identificación Individual de Ganado)
TIF	Federally Inspected Meat Processing Plant in Mexico (Tipo Inspección Federal)
UNESCO	United Nations Educational, Scientific and Cultural Organization
UPP	Livestock Production Unit (Unidad de Producción Pecuaria)
USDA	United States Department of Agriculture
VISAR	Guatemala's Vice Ministry of Agricultural Health and Regulations (Viceministerio de Sanidad Agropecuaria y Regulaciones)



InSight Crime is a nonprofit organization dedicated to the study of the principal threat to national and citizen security in Latin America and the Caribbean: organized crime. For a decade, InSight Crime has crossed borders and institutions – as an amalgam of journalism outlet, think tank and academic resource – to deepen the debate and inform on organized crime in the Americas. On-the-ground reporting, careful research and impactful investigations are hallmarks of the organization from the very beginning.

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