

Southern Cone Human Trafficking – Frontier Crossing Typology

Three-site typological assessment of crossing modalities across the Southern Cone frontier · Argentina · Brazil · Paraguay

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01 EXECUTIVE SUMMARY

This report explores human trafficking infrastructure across three sites on the Southern Cone frontier between Argentina, Brazil, and Paraguay. The purposes of this report are to map out and corroborate exploitation patterns across the region and to independently produce OSINT reports. The assessment identifies and corroborates exploitation indicators across three distinct crossing modalities, shown through open source indicators including news, government sources, satellite imagery, and forced labour prosecution data.

The Lista Suja cross-reference against frontier municipalities found 13 entries documenting approximately 109 workers in conditions analogous to forced labour between 2022 and 2025, with livestock and ranching as the dominant sector. Site Alpha (Foz do Iguaçu / Lake Itaipú) — analyzed through multi-temporal Google Earth imagery and Sentinel-2 spectral bands — confirms persistent informal dock infrastructure at the reservoir shoreline, inconsistent with natural formation and consistent with established clandestine access. Site Charlie (Posadas / Encarnación) was verified using NDVI and Color Infrared (CIR) on Sentinel-2 imagery; across two acquisition dates, a persistent vegetation gap and a linear corridor inland from the riverbank are consistent with a vehicle access track outside formal inspection range.

Site Bravo (Ponta Porã) presented a structural finding of a different kind. The absence of any Lista Suja entries is itself analytically significant — the crossings most permissive to trafficking flow are simultaneously the least likely to generate prosecution records. No physical barrier exists at the border line, making it structurally unmonitorable at scale, a condition exploited by documented trafficking and narcotics networks.

The convergence of spectral indicators, enforcement data, and documented criminal network activity supports the assessment that the Southern Cone frontier remains one of the most structurally permissive trafficking environments in the region, sustained by geography, institutional capacity gaps, and the concealment afforded by the volume of legitimate cross-border commerce.

The methodology used involved different tools and approaches, given the nature of the sites and the overlapping of evidence. Firstly, journalism and the UNODC reports were used to understand the regional context and the characteristics of the trafficking purposes and routes.

In the second stance, Google Earth Pro was used as visual evidence for both formal and informal crossing points. Sentinel-2 L2A was used in the scope of hidden pathways that do not make direct contact with the official points of entry into the States. The NDVI (Normalized Difference Vegetation Index) layer was applied as it measures plant health by comparing how strongly a surface reflects near-infrared versus red light — healthy vegetation appears green, while bare soil, cleared land, and footpaths appear red or orange, creating a visible anomaly against surrounding vegetation. Color Infrared (CIR) makes healthy vegetation appear vivid magenta and any ground-level disturbance appear as a contrasting pale or beige feature. NDWI (Normalized Difference Water Index) maps the water-land boundary with precision, making irregularities, cleared banks, and informal embarkation points detectable. Each layer sees a different aspect of the same physical reality.

Finally, the released government file containing those prosecuted for the exploitation of people, Lista Suja, was used as a layer to establish a connection between the borders and the categorization of exploitative purposes.

i Satellite imagery: Sentinel-2 L2A imagery accessed via Land Viewer (EO Browser). Acquisitions compared across a 15-month interval spanning different Southern Hemisphere seasons. Three spectral bands analyzed: NDVI, Color Infrared (CIR), and NDWI.

i Lista Suja: Cadastro de Empregadores — Portaria Interministerial MTE/MDHC/MIR nº 18, 13/09/2024. Updated 6 October 2025; database refreshed 04/03/2026. Total entries: 669.

03 REGIONAL OVERVIEW

Women and children have long been the main groups vulnerable to trafficking, especially in regions where climate disasters are frequent, as well as displacement issues. The majority of cases are related to the exploitation of labour, with sexual exploitation being particularly prevalent (United Nations Office on Drugs and Crime, 2024). The main region for these cases remains the Americas, with a greater predominance in South America (United Nations Office on Drugs and Crime, 2024). The Tri-Border Area (TBA) is the main operating route in Latin countries, due to its geographical position. The Paraná River borders Brazil, Argentina and Paraguay, where informal docks are often used for organized crime and all segments of trafficking.

Regarding Brazil, organized crime groups are usually the perpetrators of crimes exploiting women and girls and trafficking them along major highways such as BR-116. They target all states in the south of the country for this purpose (U.S. Department of State, 2025b). It is often the case that Paraguayan men end up in factories in Rio de Janeiro (U.S. Department of State, 2025c).

However, one of the most common practices in Paraguay is to force children into labour due to debts owed by their parents. For women, the main way of trafficking is for drug transportation and sexual exploitation. In the digital era, social media is now also used as another way to access people as victims, such as blackmailing intimate content (U.S.

Department of State, 2025c). Agriculture, forced work and factories are the main sectors that victims of trafficking end up in Argentina, especially in harvesting and business (U.S. Department of State, 2025a).

Recent investigations by Paraguayan and Brazilian authorities revealed trafficking networks recruiting vulnerable Paraguayans with false promises of employment in Brazil, with victims allegedly destined for forced labour and servitude conditions near the Brazil–Paraguay border (G1, 2026).

Institutional dysfunction compounds the structural vulnerability of the corridor. Both Paraguay and Brazil are heavily affected by corruption, which enables criminal organisations to operate with relative impunity by exploiting poverty and weak state capacity. In Foz do Iguaçu, there are more than ten thousand Muslim residents, including a small Druze minority — a community whose presence has been linked to Hezbollah fundraising and logistical activity in the region. In Brazil, the case of Shukri Abu Baker — serving a sentence in the United States — and his brother Jamal, who allegedly held connections with Hamas and is currently in Syria, illustrate the overlap between transnational criminal and extremist networks in the TBA (Carneiro Filho, 2012).

CATEGORY	DESCRIPTION	EXAMPLES
Domestic OCGs	Groups composed exclusively of Paraguayan nationals	Rotela Clan
Foreign-led OCGs	Led by non-Paraguayans; nationality determines identity	Chinese, Nigerian, Colombian, Serbian networks
Transnational OCGs	Identifiable by name regardless of leadership nationality	PCC, Comando Vermelho
Freelancers	Individuals participating without formal OCG membership	Logistics, transport, fraud operators
State-linked actors	Corrupt officials enabling networks through protection	Politicians, police, judges, military

Despite being official crossings, weak oversight, corruption, and state neglect — alongside countless clandestine river ports — allow trafficking to operate largely in plain sight. Hezbollah's long-standing presence in the TBA is documented by Interpol, the US Treasury, and the Department of State; members and affiliates embed within the substantial Arab community and benefit from the black-market economy.

FIGURE – ANALYTICAL FRAMEWORK

Trafficking Operational Flow – Southern Cone Frontier

Five-stage model applied across Sites Alpha, Bravo, and Charlie. Each stage presents distinct observables for open-source collection.



		– Formal ports (concealment)	
		↓	
04	Destination	– São Paulo, Buenos Aires – Santiago (via long-haul) – International scam hubs – Rural agricultural zones – Urban domestic placements	ABSORPTION
		↓	
05	Exploitation Sector	– Sex trafficking (40% SA) – Forced labor — agri/garment – Domestic servitude – Online fraud operations – Illegal cigarette factories	ENDPOINT
NOTE Stage sequence is operational, not strictly linear. Crossing site selection (Stage 03) is driven by infrastructure permissiveness rather than geographic convenience — Site Bravo (Ponta Porã) presents no physical barrier, generating zero prosecution records despite high documented flow. Exploitation sector distribution follows UNODC (2024): forced labour 55%, sexual exploitation 40% in South America.			

04 SITE ANALYSIS

Three sites were identified across the Southern Cone frontier, each representing a distinct crossing modality with different analytical implications for satellite observation and documentary corroboration. Sites were selected to reflect the range of formal and informal infrastructure through which trafficking flows operate — from clandestine waterway access to high-volume bridge crossings concealed within legal commerce.

TABLE — SITE COMPARISON MATRIX

SITE	BORDER TYPE	CROSSING MECHANISM	ENFORCEMENT PRESENCE	SENTINEL APPLIED	LISTA SUJA CORRELATION	CONFIDENCE
ALPHA Foz do Iguaçu / Lake Itaipú	Reservoir (water)	Informal dock; concealment within high-volume formal bridge traffic	Bridge-limited; rural shoreline unsupervised	YES NDVI · NDWI	Indirect — Paraná state entries (Foz do Iguaçu, Alto Paraíso)	MOD
BRAVO Ponta Porã / P.J. Caballero	Open dry border	No physical barrier; continuous street grid across border line	Single Polícia Federal post; no barrier enforcement	NO No anomaly	Absent — zero entries; absence is the finding	HIGH
CHARLIE Posadas / Encarnación	River crossing (Paraná)	Informal riverbank access 7 km beyond inspection perimeter; small boat crossings	Bridge-limited; 7 km river corridor unsupervised	YES NDVI · CIR	Indirect — Mato Grosso do Sul corridor entries	MOD

SOUTHERN CONE HUMAN TRAFFICKING – TBA Corridor

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Sites

-  Site Charlie – Informal Path
-  Site Charlie – Puente San Roque González de Santa Cruz
-  Site Alpha – Lake Itaipú Shoreline
-  [Insert text]

-  Site Bravo – Ponta Porã

Map: Daniela Rutman • [Download image](#) • Created with [Datawrapper](#)

Fig. 1 – Southern Cone Human Trafficking · Frontier Crossing Typology · Site overview map

ALPHA · PRIMARY

International Friendship Bridge / Informal Docks – Lake Itaipú

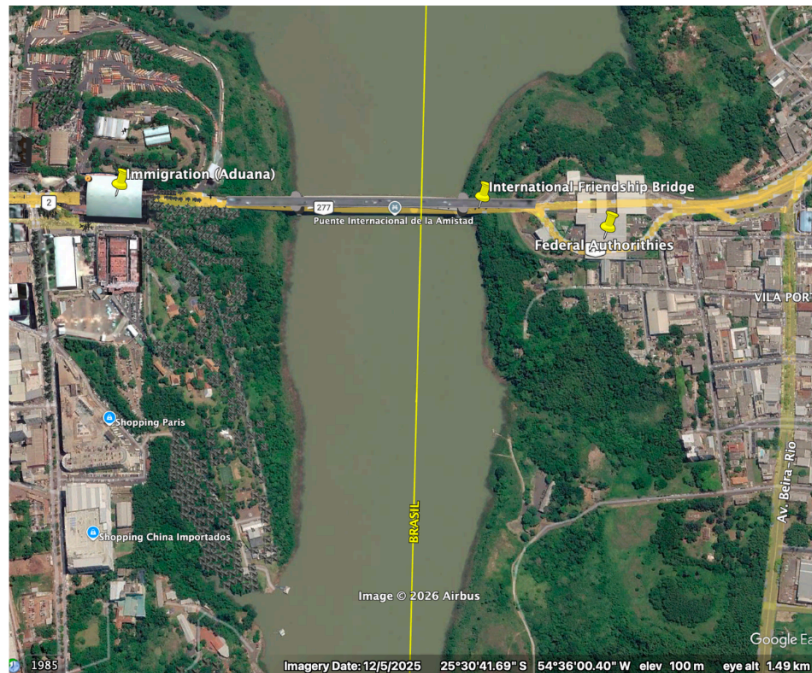
Brazil · Paraguay border – Foz do Iguaçu, Paraná · Formal bridge: ~25°31'S, 54°35'W · Informal docks: 25°35'51"S, 54°35'50"W (~5 km S)

GOOGLE EARTH PRO

SENTINEL-2 NDVI / NDWI

MULTI-TEMPORAL

CORROBORATED



Google Earth Pro · International Friendship Bridge (Ponte da Amizade) · Foz do Iguaçu, Brazil (left) – Ciudad del Este, Paraguay (right) · Formal crossing reference for Site Alpha · Informal dock A0I located ~5 km south along the reservoir shoreline

The International Friendship Bridge (Ponte da Amizade, ~25°31'S, 54°35'W) constitutes the formal reference crossing for this area, connecting Foz do Iguaçu, Brazil, to Ciudad del Este, Paraguay. However, the analytical focus of Site Alpha is the informal dock infrastructure documented approximately 5 km south of the bridge at 25°35'51"S, 54°35'50"W, along the Lake Itaipú reservoir shoreline. Despite the formal crossing infrastructure, the river corridor extends for more than 4,000 km, rendering constant surveillance of all access points operationally unfeasible — particularly in rural stretches beyond the bridge approaches ("Underworld Crossroads," 2024). The informal dock is consistent with unauthorized shoreline infrastructure documented in reporting on Lake Itaipú (Última Hora, n.d.). It cannot be excluded that the site may serve fishing or agricultural purposes without additional ground-truth corroboration.



Google Earth Pro · Site Alpha · Informal docks (25°35'51"S, 54°35'50"W) · Nov 2019 · Earliest available acquisition; shoreline access point identifiable at water's edge

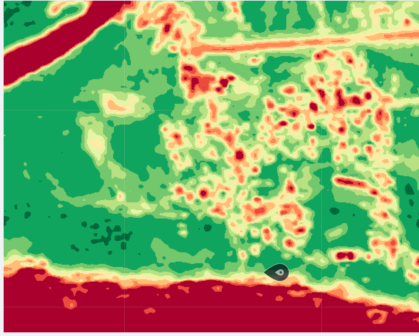


Google Earth Pro · Site Alpha · Informal docks (25°35'51"S, 54°35'50"W) · ~2021 · Shoreline access point persistent; exposed bank consistent with lower seasonal water level



Google Earth Pro · Site Alpha · Informal docks (25°35'51"S, 54°35'50"W) · Jun 2022 · Increased vegetation cover; shoreline access point structurally consistent across a 3-year span

- ◆ **Temporal finding:** Three Google Earth acquisitions spanning November 2019 to June 2022 show the shoreline access point persistent across a 3-year interval and multiple seasonal conditions — inconsistent with temporary or incidental use. The structural consistency of the configuration across that timespan supports characterisation as established informal port infrastructure rather than opportunistic access.



NDVI · 06 May 2026 · Sentinel-2 L2A · AOI 25°35'51"S, 54°35'50"W · Low-NDVI zone at shoreline (red) indicating bare or stressed land at the water's edge; inconsistent with surrounding riparian vegetation



NDWI · 06 May 2026 · Sentinel-2 L2A · AOI 25°35'51"S, 54°35'50"W · Water extent and shoreline interface; irregular vegetation-water boundary consistent with informal embarkation infrastructure at the lake margin

SPECTRAL ANALYSIS — 06 MAY 2026

NDVI: A low-NDVI zone is identifiable at the shoreline, indicating bare or stressed land at the water's edge. The signature is inconsistent with the surrounding riparian vegetation and is consistent with ground-level disturbance or cleared access — the type of footprint associated with informal dock infrastructure.

NDWI: The water-vegetation boundary at the AOI shows an irregular shoreline interface. The pattern is consistent with informal embarkation infrastructure at the lake margin rather than natural shoreline formation.

Combined interpretation: The spectral signatures reinforce the Google Earth temporal finding. Bare land at the shoreline persisting into the May 2026 acquisition, combined with the irregular water boundary, supports the characterisation of the site as an established informal access point rather than natural riverbank.

BRAVO · SECONDARY

Pedro Juan Caballero / Ponta Porã

Paraguay · Brazil border — Open dry border · Mato Grosso do Sul

GOOGLE EARTH PRO

TEMPORAL ANALYSIS

CORROBORATED



Google Earth Pro · Site Bravo · Avenida Internacional · Aug 2025 · Polícia Federal post visible directly on border line; no physical barrier present



Google Earth Pro · Site Bravo · Wide view · Aug 2025 · Both city street grids continue across the border without interruption

The site presents no physical barrier to cross-border movement. The international boundary is marked solely by the Avenida Internacional, a single avenue across which both city street grids continue without interruption. The only identifiable formal enforcement presence is a Brazilian Polícia Federal office directly adjacent to the border line. This configuration makes the crossing inherently unmonitorable at scale. The area has in fact been a focus point of investigations and properties were seized with the involvement of trafficking and illegal activities in operations such as Operation CAVOK by the Brazilian police, Polícia Federal (Polícia Federal, 2020).

ANALYTICAL NOTE

The **absence of Lista Suja entries for Ponta Porã** is itself analytically significant. One of Brazil's most documented informal crossing zones generates no forced labour prosecution record — consistent with the pattern of institutional neglect at open dry-border crossings that makes them operationally attractive to trafficking networks. The absence reflects inspection capacity constraints, not the absence of exploitation.

CHARLIE · TERTIARY

Posadas / Encarnación

Argentina · Paraguay – Paraná River crossing · Puente San Roque González de Santa Cruz

GOOGLE EARTH PRO

SENTINEL-2 NDVI / CIR / NDWI

MULTI-TEMPORAL

CORROBORATED



Google Earth Pro · Site Charlie · Overview · Puente San Roque González de Santa Cruz, formal customs and immigration posts marked · Informal access point 7 km downstream

Google Earth Pro · Site Charlie · Informal riverbank access point · Feb 2025 · "Path" marker visible inland from shoreline, consistent with vehicle track

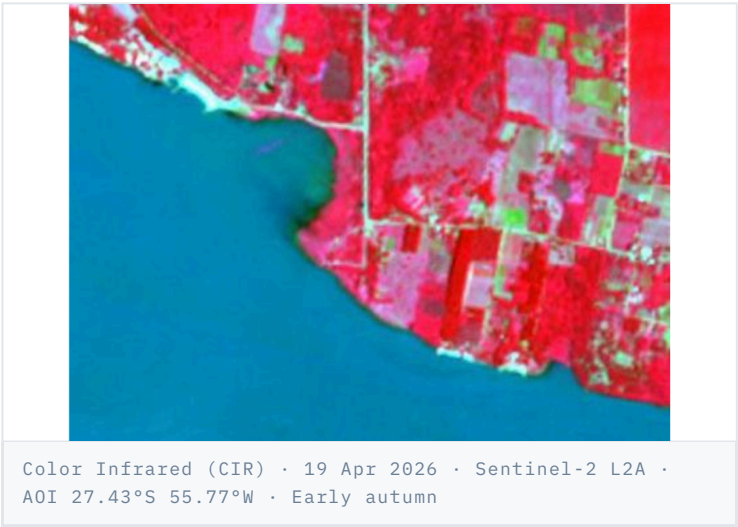
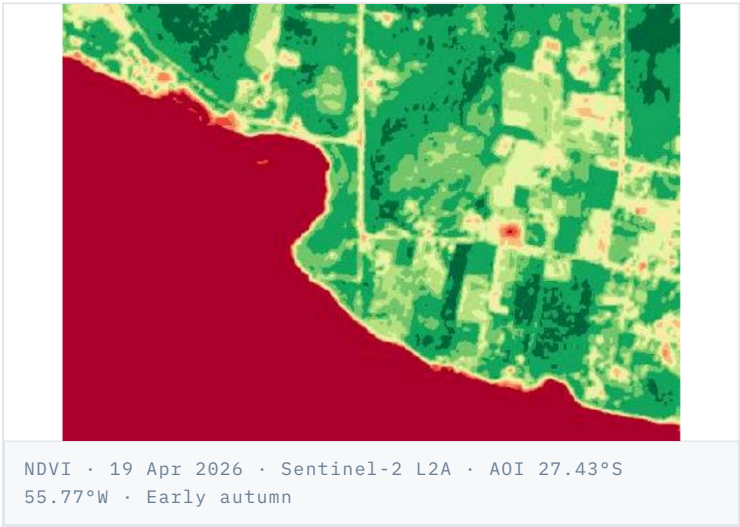
Unlike Site Bravo, where no physical barrier exists, Site Charlie has formal border infrastructure at the bridge crossing. However, the Paraná River corridor extends approximately 7 km beyond the inspection perimeter before the informal riverbank access point is reached. This configuration means formal enforcement is geographically limited to the bridge node — the broader river corridor remains structurally vulnerable to clandestine crossing, consistent with documented use of small boat crossings on the Paraná.

Formal bridge: 27°22'12.02"S 55°51'50.79"W · Informal point: 27°26'3.19"S 55°46'8.06"W

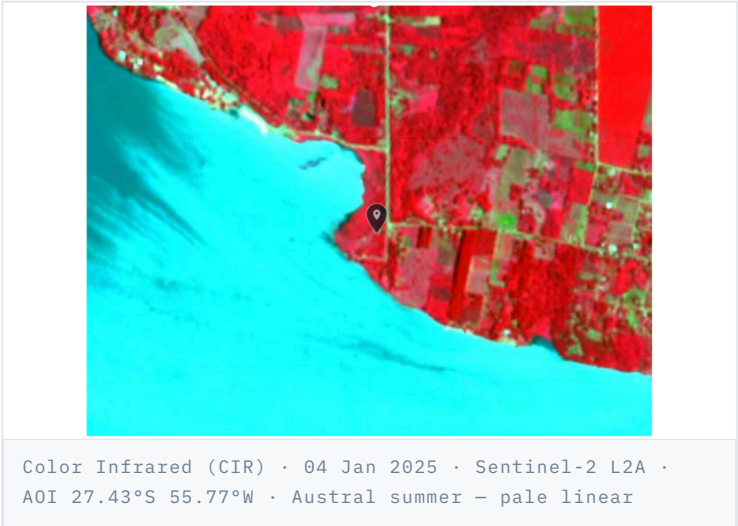
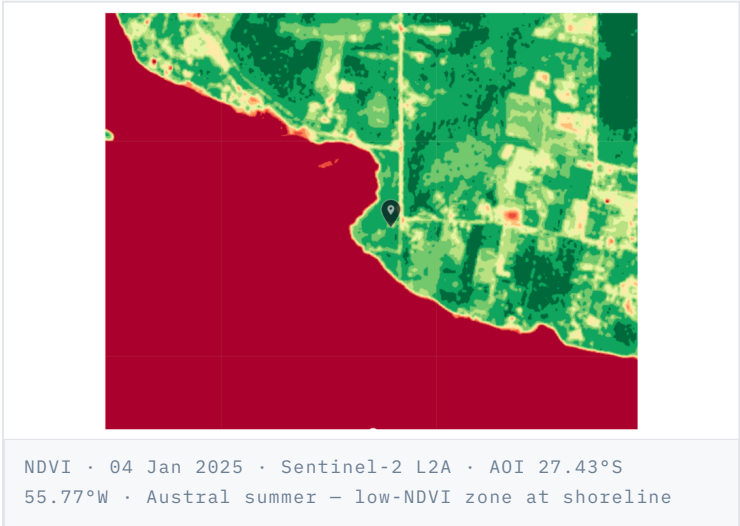
SENTINEL-2 L2A ANALYSIS – SITE CHARLIE

Methodology: Two Sentinel-2 L2A acquisitions compared across a 15-month interval spanning different Southern Hemisphere seasons (austral summer vs. early autumn). Two spectral bands analyzed per acquisition: NDVI and Color Infrared (CIR). AOI: 27.43422°S 55.76891°W.

APRIL 2026 ACQUISITION



JANUARY 2025 ACQUISITION



ANALYTICAL OBSERVATIONS

Four independent spectral analyses across two acquisition dates identify a consistent anomaly at the informal access point 7 km downstream of the formal Posadas/Encarnación crossing.

NDVI (both dates): A vegetation gap at the shoreline is inconsistent with surrounding agricultural land use. The low-NDVI zone (-1 to 0.1) measures 10.17 km² in the January 2025 acquisition, indicating extensive bare or stressed land at the water's edge — consistent with seasonal low-water conditions exposing more riverbank.

Color Infrared: A pale linear corridor is visible inland from the riverbank in the January 2025 CIR image, running through otherwise uniform agricultural plots. The geometry is inconsistent with field boundaries, which would appear sharper and more regular. The signature is consistent with a worn path or vehicle access track.

Seasonal note: January 2025 (austral summer) shows greater shoreline exposure than April 2026 (early autumn), consistent with Paraná River seasonal water level fluctuations. This variability is operationally significant: reduced water levels in summer months expand accessible riverbank, potentially increasing activity at informal crossing points during periods of lower hydrological visibility.

05 LISTA SUJA – REGIONAL CROSS-REFERENCE

Brazil's *Cadastro de Empregadores* — known as the Lista Suja (Dirty List) — registers employers formally found to have subjected workers to conditions analogous to slavery. Updated periodically by the Ministry of Labour (MTE/MDHC/MIR), the March 2026 edition contains 669 entries spanning 2018–2025 fiscal inspection actions. Cross-referencing this dataset against the project's three site municipalities and documented route corridor reveals a pattern of forced labour prosecutions that directly overlaps with identified trafficking nodes (Ministério do Trabalho e Emprego et al., 2026). The entries are dated 2022–2025; this temporal distribution reflects when inspections reached the properties, not when exploitation began. It is not possible to infer an increase or decrease in violations from the date pattern alone — the list is only updated when enforcement actions occur, meaning undiscovered exploitation generates no record.

CORUMBÁ CLUSTER – SITE ALPHA AREA (MS)

Five distinct Lista Suja entries in Corumbá municipality, all dated 2024–2025, constitute the most analytically significant finding of this cross-reference. Corumbá sits on the Bolivia-Brazil frontier — a separate segment from the three assessed sites, treated here as a regional indicator of frontier labour exploitation rather than site-level evidence. All five entries involve livestock or ranching operations — the dominant labour exploitation sector in the Pantanal border zone, where workers are recruited from Paraguay and Bolivia under false promises and held on remote fazendas outside formal inspection reach.

ID	EMPLOYER	LOCATION	WORKERS	SECTOR	YEAR
6	Airton de Araujo Gomes	Fazenda São José, Corumbá/MS	9	Livestock (0161-0/03)	2024

ID	EMPLOYER	LOCATION	WORKERS	SECTOR	YEAR
102	Carlos Alberto Tavares Oliva	Fazenda Rebojo, Corumbá/MS	4	Cattle ranching (0151-2/01)	2025
121	Claudinei Leite de Queiroz	Fazenda Santo Antonio, Corumbá/MS	1	Cattle ranching (0151-2/01)	2024
392	LLB Prestadora de Serviços Ltda	Fazenda Campo Alegre, Corumbá/MS	8	Animal husbandry (0162-8/99)	2024
494	Nilton de Araujo Gomes	Fazenda São José, Corumbá/MS	7	Livestock (0161-0/03)	2024

PORTO MURTINHO – SOUTHERN PY-BR CORRIDOR (MS)

Porto Murtinho, a secondary Paraguay crossing point south of the main TBA, registers two entries including a 2025 action — the most recent in the dataset. This corroborates the documentation of the southern Mato Grosso do Sul corridor as an active trafficking vector operating outside primary TBA inspection infrastructure.

ID	EMPLOYER	LOCATION	WORKERS	SECTOR	YEAR
123	Claudio Martinho Rojas	Fazenda Bandeirantes, Porto Murtinho/MS	7	Livestock (0161-0/99)	2022
419	Marcio Antonio de Carvalho	Arrendamento Fazenda Bahia dos Carneiros, Porto Murtinho/MS	7	Cattle ranching (0151-2/01)	2025

FOZ DO IGUAÇU / CASCAVEL – SITE ALPHA CORRIDOR (PR)

Paraná state produces entries at Foz do Iguaçu itself and along the BR-277 corridor to Cascavel — the main highway connecting the TBA to the Atlantic port of Paranaguá. The construction sector entry in Foz do Iguaçu is consistent with the documented pattern of Paraguayan labour exploitation in Brazilian construction at the TBA crossing zone adjacent to Site Alpha's formal bridge reference point.

ID	EMPLOYER	LOCATION	WORKERS	SECTOR	YEAR
388	Leonildo Antonio Mascarello	Canteiro de obra, Foz do Iguaçu/PR	1	Construction (4120-4/00)	2023
5	Alexandre Jucelino Zukovski	Cascavel/PR	1	Hardware/retail (4744-0/99)	2024
374	Kaio Cesar Rodrigues Rubio	Fazenda Santa Mercedes, Alto Paraíso/PR	13	Livestock (0119-9/06)	2024

CROSS-REFERENCE FINDING

The Lista Suja cross-reference identifies **13 entries directly overlapping with the project's primary frontier municipalities**, documenting at least 109 workers formally found in conditions analogous to slavery between 2022 and 2025. The geographic clustering is analytically significant in two respects.

First, Corumbá's concentration of five livestock-sector entries in a single municipality reflects the structural conditions that enable trafficking: geographic remoteness, weak labour inspection presence, and dependence on

informal cross-border labour flows. Livestock operations in the Pantanal border zone function as a documented absorption point for trafficked labour.

Second, the **absence of Ponta Porã** (Site Bravo) from the Lista Suja is itself a finding — consistent with institutional neglect at open dry-border crossings, the same neglect that makes them operationally attractive to trafficking networks.

Limitation: The Lista Suja captures formally investigated and prosecuted cases only. Given Brazil's known inspection capacity constraints, the dataset represents a floor, not a ceiling, of actual forced labour incidence in the corridor.

FRONTIER ENTRIES 13	WORKERS DOCUMENTED 109+
DOMINANT SECTOR Livestock / Ranching	MOST RECENT ACTION 2025 — Porto Murtinho

06 CRIMINAL NETWORKS

The PCC (Primeiro Comando da Capital) was founded in August 1993 at the Taubaté detention facility in São Paulo — a prison known for its severe conditions — following the 1992 Carandiru massacre, which the group instrumentalized to consolidate its founding discourse of "paz, justiça e liberdade" against a repressive state (Barros, 2023). The organisation operates through a decentralised cell structure of *sintonias* — coordinated units functioning both inside and outside prisons, with representation at regional, state, national, and international levels (Barros, 2023). This structure is operationally significant for the Southern Cone frontier: the sintonia model allows the PCC to coordinate cross-border drug flows with Paraguay, Bolivia, and Colombia without centralising operations in any single node, producing a configuration structurally resilient to targeted enforcement (Almeida, 2023). The documented functional division of illicit activities — including dedicated units for financial operations, narcotics trafficking, and legal defence — combined with the organisation's established connections to corrupt public officials, enables simultaneous operation across formal crossings and clandestine border infrastructure (Almeida, 2023).

Comando Vermelho is also a major player in the region, though with less operational reach than the PCC. Other groups are less influential, including smaller factions such as the BNC and PGC. The Rotela Clan is regarded as the PCC's principal domestic rival in Paraguay (Small Wars Journal, 2024).

The Rotela Clan presents a distinct but complementary threat profile within the same corridor. A domestic Paraguayan criminal organisation founded in 2007, the clan originated in Tobatí before establishing a presence in Asunción's informal neighbourhoods and across Paraguay's prison infrastructure (InSight Crime, 2020). Its geographic concentration is analytically significant for this report: the clan's documented presence in the Pedro Juan Caballero prison system maps directly onto Site Bravo's crossing zone — the same open dry-border environment characterised by the absence of physical barriers and no Lista Suja enforcement record. The subsequent expansion of the clan beyond its initially identified penitentiaries to most of Paraguay's most conflictive prisons further reinforces the picture of a network with territorial reach across the primary corridor nodes examined here (InSight Crime, 2020).

Brazilian Federal Police identified Paraguayan women trafficked for sexual exploitation in Paraná, with authorities suspecting the use of river crossings along the Paraná River as the primary corridor between Paraguay and Brazil. The same illicit routes associated with human trafficking in the TBA are consistently used for drug trafficking, arms trafficking, cigarette smuggling, and contraband — demonstrating the convergence of organised criminal economies across the corridor (Gazeta do Povo, 2026).

In addition, there have been reports linking the Lebanese group Hezbollah with the region as well. This was especially brought to light in recent operations such as Operation Trapiche, where individuals in Brazil connected to the group were investigated on the grounds that they were aiding in planning attacks against Jews in Brazil and recruiting for the group (Terrorism, Transnational Crime and Corruption Center, 2024). The most explicit documented case of Hezbollah money laundering in the TBA is that of Assad Ahmad Barakat, who operated Hezbollah's fundraising and money laundering network from the Galería Page in Ciudad del Este — directly adjacent to the Site Alpha formal crossing zone. Barakat used a portfolio of legitimate businesses, including real estate and duty-free retail, to channel funds to the organisation. He was designated by the U.S. Treasury's Office of Foreign Assets Control (OFAC) as a Specially Designated Global Terrorist on June 10, 2004 (Counter Extremism Project, n.d.). In 2018, Argentine authorities separately froze assets of the broader Barakat Clan following a detected \$10 million laundering attempt at a casino in Iguazú — again at the Site Alpha crossing reference point (JTA, 2018).

07 ASSESSMENT

The overall region indicates that the current formal enforcement points and authority present in the surrounding area are not sufficient for the extensive territory, especially in rural areas and river basins, and that bribery may be used as a way to conceal crimes. In South America, the pattern seen is that women and girls are often targets for trafficking and exploitation, while men are usually subjected to forced labour, especially with the promise that Brazil will bring better opportunities in the bigger cities.

It is also noticeable that oftentimes these victims come from rural areas, as those in agricultural fields have less access to schools and education and are compelled to work to support their families. A factor that also has to be brought to light is the fact that while there is the presence of official border structures, there is a long-standing culture of bribery in the three countries.

Three analytical findings from the site-level and documentary evidence warrant specific assessment. First, the concentration of five Lista Suja livestock-sector entries in Corumbá — a single municipality on the Bolivia-Brazil border — is not incidental. Remote fazendas in the Pantanal border zone are structurally suited as labour absorption points: geographic remoteness, dependence on informal cross-border recruitment from Paraguay and Bolivia, and limited inspection reach combine to produce a documented pattern of workers held in conditions analogous to slavery that are only formally identified through targeted operations. Second, the Paraná River seasonal water level variation documented at Site Charlie carries operational implications — reduced water levels in austral summer months expand accessible riverbank, potentially correlating with higher clandestine crossing activity during periods of lower hydrological visibility. Third, Alpha, Bravo, and Charlie each represent a distinct crossing modality. Evidence is consistent with networks exploiting each; whether these specific sites constitute an operationally integrated system is not established by this assessment alone. Formal bridge infrastructure at Site Alpha facilitates concealment within high-volume commercial flow; the open dry border at Site Bravo enables frictionless individual movement outside formal inspection perimeters; and the river crossing at Site Charlie provides a clandestine modality available to

networks using the frontier. This is corroborated by a documented case: a criminal organisation dismantled by Brazilian authorities in November 2023 used the Paraguay-Brazil land corridor to traffic Paraguayan workers — transported blindfolded by road across the border — into clandestine cigarette factories in Minas Gerais state, while simultaneously using truck routes to move the finished contraband product hidden among legitimate goods. The same network thus exploited the corridor for both labour trafficking and goods smuggling through the same crossing infrastructure, demonstrating in practice the multi-stream operational model that the three-site analysis identifies as structurally available (OCCRP, 2023).

KEY FINDING

The cross-referencing of Lista Suja data with site-level observations further reinforces the geographic concentration of exploitation in states bordering the Southern Cone frontier. The presence of both informal access points and high-volume formal crossings within the same region means that trafficking networks have structural flexibility — capable of adapting their operational methods depending on enforcement presence and seasonal conditions.

! **Structural vulnerability:** The absence of Lista Suja entries for Ponta Porã (Site Bravo) reflects inspection capacity constraints, not the absence of exploitation. Open dry-border crossings that are most permissive to trafficking flow are simultaneously the least likely to generate prosecution records — a structural gap that is unlikely to close without dedicated enforcement resources at informal crossings.

CONFIDENCE ASSESSMENT

CLAIM	CONFIDENCE	RATIONALE
Site Alpha informal dock infrastructure consistent with clandestine access	Moderate	Multi-temporal spectral and Google Earth indicators corroborated by open source reporting; agricultural or fishing use cannot be excluded without ground truth
Site Bravo constitutes a structurally unmonitored crossing exploited by trafficking networks	High	Confirmed by law enforcement operations (Operation CAVOK); open border structure visually and documentarily verified; Rotela Clan presence at Pedro Juan Caballero documented
Site Charlie vehicle access track outside formal inspection range	Moderate	Spectral signatures consistent across two acquisition dates and two bands; alternative land use (agricultural track) cannot be ruled out without additional collection
Corumbá Lista Suja cluster reflects systematic forced labour absorption in the Pantanal border zone	High	Five formally adjudicated entries in a single municipality across multiple inspection actions; pattern consistent with documented Pantanal labour trafficking literature
Southern Cone frontier sites represent distinct crossing modalities consistent with trafficking network exploitation	Moderate	Analytical synthesis supported by network documentation and site-level findings; direct observation of system-level coordination is not available through OSINT alone

LIMITATIONS

Despite the correlation and corroboration of the sites with news, government data, and the long documented activity in the region, it is not possible to confirm trafficking activity through open source methods alone. Satellite imagery can establish structural indicators consistent with illicit movement, but cannot confirm the nature or intent of activity taking place at observed locations. Similarly, the Lista Suja data establishes patterns of forced labour exploitation by geographic area but does not directly identify trafficking routes or the movement of victims. Ground-truth verification, access to classified law enforcement reporting, and human intelligence collection would be required to produce conclusive findings. It is also worth noting that open source data may reflect structural biases — formal and urban crossing points are more likely to be documented than remote or rural ones, which may contribute to an underrepresentation of activity in more isolated areas of the corridor.

FORWARD INDICATORS

Observable changes in open source data would confirm or challenge the assessments produced here. At Site Alpha, persistence of the low-NDVI shoreline signature in future Sentinel-2 acquisitions would strengthen the characterisation of established informal infrastructure; its disappearance would warrant reassessment. At Site Bravo, any Lista Suja entry for Ponta Porã in a future database update would confirm that the current absence reflects inspection capacity rather than the absence of exploitation, and would warrant targeted follow-up collection. At Site Charlie, cross-referencing Paraná River water level data from Brazil's Agência Nacional de Águas (ANA) against trafficking reporting in the Posadas/Encarnación corridor during summer months would allow assessment of the proposed seasonal activity correlation. More broadly, new law enforcement operations in the Corumbá livestock sector, or the expansion of Lista Suja entries into previously unrepresented frontier municipalities, would provide updated baseline data for continued monitoring of the Southern Cone frontier.

CONCLUSION

NET ASSESSMENT

The multi-source OSINT assessment of the Southern Cone frontier demonstrates that trafficking infrastructure operates across a spectrum of formality — from fully clandestine riverbank access points to high-volume formal bridge crossings — with each modality presenting distinct vulnerabilities that conventional border enforcement is structurally ill-equipped to address alone.

The convergence of satellite indicators, prosecutorial data from the Lista Suja, and documented criminal network activity produces a coherent picture of a region where trafficking is sustained by geography, institutional capacity gaps, and the concealment that comes with the volume of legitimate commerce. Notably, the concentration of Lista Suja entries in Mato Grosso do Sul and Paraná directly corroborates the site-level observations at Sites Bravo and Alpha respectively, reinforcing the analytical value of cross-referencing enforcement data with geospatial indicators across disciplines.

While no single open source is sufficient to independently confirm trafficking activity, the convergence of multiple indicators across all three identified sites supports the overall assessment that the Southern Cone frontier remains

one of the most structurally permissive trafficking environments in the region, and one that warrants continued open source monitoring.

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