



Full Length Article

Tracing territorial-illicit relations: Pathways of influence and prospects for governance

Laura Ross Blume^{a,1}, Laura Aileen Sauls^{b,c,*}, Christopher A.C.J. Knight^a^a Department of Political Science, University of Nevada-Reno, 1664 N. Virginia St., Reno, NV, 89557, USA^b Department of Geography, The University of Sheffield, Winter Street, Sheffield, S3 7ND, UK^c Clark University Center for the Study of Natural Resources Extraction and Society, George Perkins Marsh Institute, Clark University, 950 Main Street, Worcester, MA, 01610, USA

ARTICLE INFO

Keywords:

Governance
Territory
Natural resources
Illicit economies
Drug-trafficking
Central America

ABSTRACT

Recent research increasingly illustrates that illicit economies, especially drug production and trafficking, may result in environmental destruction as well as violence and human rights abuses in remote, rural places. At the same time, the idea of titling forest lands collectively, especially to Indigenous Peoples, has emerged as a key measure to halt deforestation, protect biodiversity, and mitigate against climate change. A focus on the conditions under which titling can achieve these outcomes, specifically on governance and institutions, may underestimate the degree to which illicit activities play a major role in influencing socio-ecological and political-economic possibilities in new territories. Drawing on a review of the literature and a case study of the adjacent Miskitu Indigenous regions in Honduras and Nicaragua, we propose several potential pathways through which collective land titling may influence the functioning of illicit economies, and vice versa, and thus potential constellations of territorial governance. We identify and provide examples of five key pathways: Coexistence, Cooperation, Corruption, Competition, and Confrontation. These pathways reflect underlying political and institutional conditions within a given place and are dynamic across space and time. With the Muskitia in mind, we outline how the role of the state can significantly influence the functioning of Indigenous institutions and narco-trafficking, as well as the ways in which these two interact, troubling the scalar and spatial dimensions of “local” governance in this region and more broadly.

1. Introduction

Since the late 1980s, Indigenous, Afro-descendent, and forest communities in Central America have increasingly achieved rights to land and natural resources, including through collective land-titling and community forest management (González, 2015; Offen, 2003). At the same time, narco-trafficking activity has expanded throughout the region, which has attracted militarized interventions alongside a vast flow of cocaine and cash through these zones (Magliocca et al., 2019). These two trends implicate governance of rural spaces in different ways. The first explicitly realigns formal rights and responsibilities over land use and environmental outcomes, in part based on the hypothesis that local, and in particular Indigenous, communities will be more effective stewards of nature, especially forests (Larson & Lewis-Mendoza, 2012; Pacheco et al., 2012). Narco-trafficking, on the other hand, has been

shown to increase deforestation and forest degradation in Central America and is associated with violence and insecurity (McSweeney, 2020; Wrathall et al., 2020). How illicit economies, such as narco-trafficking, affect the governance of and environmental outcomes in of community-owned or -managed lands has only recently received attention (Devine et al., 2021; McSweeney et al., 2017; Tellman et al., 2021), and variations in interactions between emerging territorial authorities and these economies generally remain undertheorized.

This paper cautiously draws attention to the co-spatiality of collective – or territorial – land titling and illicit economies to suggest some of the ways that titling processes may influence illicit activity, and vice versa. The paper contributes to a growing literature about the influence of the narco-economy – and related interdiction campaigns – on community and Indigenous rights and on forest outcomes. We ask if and how the implementation of territorial titling processes influences ongoing

* Corresponding author. Department of Geography, The University of Sheffield, Winter Street, Sheffield, S3 7ND, UK.

E-mail addresses: lblume@unr.edu (L.R. Blume), l.a.sauls@sheffield.ac.uk (L.A. Sauls), caknight@unr.edu (C.A.C.J. Knight).

¹ Co-first authors.

narco-trafficking operations, and in turn, the implications of these shifting operations for governance of these newly titled spaces. In doing so, we do not romanticize nor vilify any actors from the outset, instead recognizing that the governance of land and resources in rural, marginalized areas is dynamic and, at times, messy, and that authority and legitimacy evolve through and in opposition to the state (De Castro et al., 2016; Larson & Petkova, 2011).

More broadly and at a global level, we see a range of illicit actors impacting territorial governance and rights due to their presence in the same geographic locations. These dynamics often materialize in frontier zones, thinking both geopolitically as at borders and in terms of moments of contestation over socio-political and economic relations around resource control (Rasmussen & Lund, 2018). In these spaces and moments, changes in property rights, including through state-sanctioned processes of collective land titling, represent unstable re-workings of authority and power that provide illicit actors with room to maneuver (Kelly & Peluso, 2015). Recent work by Ballvé (2020) and McSweeney (2020) helpfully historicize and locate narco-economies in frontiers, where state-building projects intended to incorporate spaces, people, and resources often instrumentalize illegality and the need for security to rationalize intervention. We observe such frontiers of illicit-territorial overlap from illegal logging in Mexico and Indonesia (Gonzalez-Duarte, 2021; Setyowati & McDermott, 2017) to coca production in Colombia and Peru (Dest, 2021; van Dun, 2014) to illicit gold mining in Panamá and Ghana (Colectivo Darién, 2021; Wilson et al., 2015); however, the nature of relations between illicit and territorial actors varies with material, spatial, and historical conditions.

This article draws upon our experiences undertaking fieldwork in the binational Muskitia and a literature review on the intersection of illicit economies and territorial governance to offer an initial theorization of how illicit actors influence governance in collectively titled rural areas. The Muskitia, running along the easternmost borders of Honduras and Nicaragua, has seen its multi-ethnic Indigenous and Afro-descendent populations receive title to approximately 5.3 million hectares since 2008 (Bryan, 2019; Herlihy & Tappan, 2019). Moreover, this frontier zone holds vast forests, including state lands protected as extensive biosphere reserves, gold and other mineral reserves, and off-shore oil (Bebbington et al., 2018; Mittal, 2020).

The region has also experienced a variable yet persistent rate of drug-trafficking, which here is conducted by loose-networks of *transportistas* (“transporters”) who primarily move cocaine along the supply chain from Andean producer countries towards major retail markets (e.g., North America). While typically less reliant on direct territorial control as compared to some illicit actors (e.g., coca producers), *transportistas* still require places in which to operate and to potentially launder their earnings (Blume, 2021; Devine et al., 2021). Interdiction efforts have pushed them into increasingly rural spaces. *Transportistas*’ interest in rural lands can impact Indigenous territorial priorities, particularly as military and development assistance efforts intervene in these regions with the official purpose of curtailing the trade (Ballvé & McSweeney, 2020; McSweeney et al., 2017).

Based on our assessment of the reviewed literature and analysis of observed relations from our fieldwork, we theorize five potential pathways through which the formalization of territorial authorities might influence illicit actors’ strategies, with concomitant governance effects: (1) Coexistence, (2) Cooperation, (3) Corruption, (4) Competition, and (5) Confrontation. We suggest how and under what condition each of these pathways might emerge, including attention to geographic factors, regional trends, and the important role of state policy. These relations are not static – individual characteristics, economic trends, national political conditions, and stressor events such as natural disasters or political unrest may influence the likelihood or prominence of a given pathway over time. Nonetheless, these pathways provide an initial framework explaining how illicit economies can influence land titling and reform processes, with implications for governance of land and resources.

1.1. Theorizing territorial and criminal governance

This article places the interaction between criminal organizations and emerging authorities over land and resources in the context of evolving theorizations of governance and territory. The decentering of governments in studies of governance has provided important insights into the ways in which relations of authority and legitimacy emerge over time (Cochrane & Duffy, 2003). As Agnew (2013, p. 1) argues, understanding governance requires looking “beyond formal government into the realm of various forms of authority exercised by agents other than states at and across a variety of geographical scales.” Further, while the right to territory is a key claim of Indigenous organizations, unpacking what constitutes territory, beyond lines on a map, provides important insights for tracing potential pathways of influence between criminal organizations and Indigenous and community-based organizations. In this section, we outline the emergence of key themes in governance, particularly of land and natural resources and by other-than-state actors, and in territory, bridging discussions from political geography and political ecology.

In studies of natural resources and land, and increasingly in studies of criminality and illicit economies, researchers explicitly expand their analyses to include other-than-state agents, practices, and processes in explaining political, socio-economic, and ecological outcomes (De Castro et al., 2016; Lessing, 2020). Larson and Petkova (2011, p. 87), define governance as “*who makes decisions and how decisions are made*, from national to local scale, including formal and informal institutions and rules, power relations and practices of decision making” (emphasis in original). In the context of natural resource governance, whether and how community and local-scale institutions – the formal and informal rules on who can use, access, manage, and restrict resources – achieve the conditions for sustainability have generated considerable research, including a range of analyses of key factors that underpin such resource use (Cox et al., 2010). Some geographers argue that efforts to define the parameters of and produce designs for more effective institutions underestimate the complexity and overestimate the transferability of institutional forms (Cleaver & Koning, 2015), and instead focus on how institutional fuzziness is more the norm than are clear rules regarding resource use (Agrawal et al., 2008; Cleaver, 2002). These views of governance can encompass the changing constellations of actors that make decisions or influence decision-making through and outside of formal institutional arrangements and across scales. Examining governance from this perspective also enables analysis of the roles illicit actors play in a range of decision-making processes.

While state and criminal groups are traditionally positioned as in conflict with one another, recent scholarship indicates that state-criminal relationships can range from collaborative to conflictive and that criminal groups emerge in relation to the state and local populations, across scales (Arias, 2020; Barnes, 2017; Duran-Martinez, 2018). The idea of “criminal governance” has emerged to explain how illicit actors may become potential providers of services and enforcers of rules, whether complementing or conflicting with different segments of the state or communities (Blume, 2021; Lessing, 2020; Magaloni et al., 2020). Illicit organizations may seek to cultivate “positive relations with social groups they depend on for protection and build functional, mediated, and varied connections with noncriminal actors” (Arias, 2006, p. 300). Further, in the context of democratization and decentralization in much of Latin America since the 1980s, local political elections have gained salience as means to influence governance through more formal channels, drawing finance and attention from criminal groups (Casas-Zamora, 2013). Thus, criminals can become important players in making or enforcing rules including related to land and natural resources, especially – but not exclusively – where land control is key to criminal strategies (Abello-Colak & Guarneros-Meza, 2014).

Authors in political geography have significantly re-engaged the concept of territory over the past decade. Rather than a bounded,

homogeneous space over which state power extends, “territory is necessarily porous, historical, mutable, uneven and perishable,” according to Painter (2010, p. 1094). Elden (2010) suggests that territory encompasses land, as a relation of property, and terrain, as a relation of power, and that these relations are historically, geographically, and politically produced. Halvorsen (2018, p. 785) brings these Anglophone concepts into conversation with Spanish interpretations of *territorio*, suggesting a dialogic definition of territory as “the appropriation of space in pursuit of political projects.” From this perspective, multiple territorial projects may conflict, overlap, and entangle as both the idea and the practice of territory function to challenge hegemonic concepts of state power as well as re-inscribe it.

In the context of Latin America, the so-called ‘territorial turn’ highlights the political-juridical titling of collective property to primarily Indigenous and Afro-descendent communities (Offen, 2003). Here, territories are spaces within yet apart from the overarching state, and primarily link identity-based land rights claims with new institutions distinct from the prescribed national and sub-national jurisdictional forms (Anthias & Radcliffe, 2015). For some authors, these “territories of difference” provide spaces through which historically marginalized groups may pursue non-capitalist political projects and non-extractive human-environment relations (Escobar, 2008; Halvorsen, 2018; López Sandoval et al., 2017).

However, the tensions produced by ideas of territory as a jurisdiction, a political technology employed by the state to exert control through property, or as the site of alternative socio-ecological-political projects play out in conflicting visions for territorial governance. In those areas designated by the state as the territory of minority groups, newly elevated territorial authorities must comply with external requirements (from the state or international donors) and internal expectations (from members of the communities that compose a delineated territory), and their authority is thus ripe for contestation (Galeana, 2020; López Sandoval et al., 2017). State-recognized forms of territory may merely reinscribe, make legible, or create new forms of marginalization and disenfranchisement in the service of capitalist/neoliberal projects (Bryan, 2012; Vela-Almeida, 2018). Grydehøj and Ou (2017) further argue that focusing on territory as necessary to indigeneity or collective rights can undermine legitimate claims to cultural and socio-ecological difference. Territories as demarcated zones of exception may provide marginalized groups the opportunity to enact alternative political projects, but within constraints imposed by the state and other invested actors.

The operation of illicit economies in emerging territories reinforces that those who make decisions, and how, about land and resources will likely reflect a range of formal, informal, and power-laden interests and practices. Between the growing involvement of criminal groups in politics, the militarization of counter-narcotics approaches in the context of neoliberal reforms, and ongoing state claims to natural resources (e.g., subsoil, marine), the interests in play in governing territory go far beyond those institutions with legal rights on paper. As Paley (2015, pp. 120–121) argues, “the backdoor reasoning for the drug war is the strengthening of the neoliberal state, which is committed to macroeconomic stability and the protection of corporate interests.” Even as states have titled collective property, they have pushed reforms that are opening up land markets, which have allowed corporations and illicit actors to engage in land grabs with little oversight of and few repercussions (Aguilar-Støen, 2016; Bull, 2016). Especially where state motivations for titling may be a means of ‘fixing’ Indigenous Peoples in place in order to facilitate investment and specific kinds of economic activities (Anthias & Radcliffe, 2015), illicit activity as a pretext for state intervention can clearly limit the possibilities for more transformative forms of territorial governance.

2. Background and methods

2.1. Research & analysis methodology

Our analysis is based on two core parts: 1) a case study derived from qualitative fieldwork undertaken by two of the authors in the Muskitia,² and 2) a literature review examining relationships between collective titling processes/territory and illicit economies. The first two authors’ doctoral dissertation fieldwork provides the data for our case study and the inspiration for this article. Between 2015 and 2020, these authors conducted research in (1) Gracias a Dios, Honduras (both authors), and (2) the North Autonomous region of the Caribbean Coast of Nicaragua (RAACN) (both authors) and (3) the South Autonomous region of the Caribbean Coast of Nicaragua (RAACS) (Blume). During fieldwork, Blume focused on questions related to criminal governance. She conducted participant observation and spoke with over 200 individuals, including both current and former drug-traffickers as well as community leaders and politicians (Blume, 2021, 2022). Sauls conducted participant observation with Indigenous networks in the region, including both the Indigenous umbrella organization in Honduras, MASTA (Miskitu acronym for “Unity of the Miskitu People”), and the Miskitu political party in Nicaragua, YATAMA (Miskitu acronym for “Sons/Children of Mother Earth”), as well as nearly 50 interviews related to environmental governance and land titling (Sauls, 2020). Both authors also analyzed documents from Indigenous groups, NGOs, government agencies, as well as newspaper and social media reports related to land rights and illicit activity in the region.

The two first authors’ principal fieldwork periods and research sites coincided, leading them to discuss the significant geographic overlap between the trends they had come to investigate and the need to consider both phenomena in conjunction. In doing so, the authors realized that the relations they might expect between Indigenous authorities and narco-traffickers – based on known academic literature and media coverage – were not always in play in the region; further, there was notable variation in the ways these groups related to each across space and time. Turning to the literature to explain these varied relations provided some limited insights but necessitated a more thorough search.

For the literature review, primarily conducted by Knight, we first used a University Summons engine and then Web of Knowledge to search for English-language, peer-reviewed articles through the end of 2021, that included a combination of keywords related to our two core concepts, collective titling/territorial rights and illicit economies/criminal governance on any country or region. Full details of the searches and the resulting articles are available in Appendix A. Based on papers’ titles, abstracts, and keywords, and then a review of the full texts, we identified 19 as providing direct or relevant evidence addressing our question. We also identified an additional nine papers as relevant and included them, for a total of 28 papers (see Appendix A).

Drawing on our field observations and qualitative data, we identified provisional types of relations between territorial and illicit actors. Through the literature search, we then sought external evidence for those categories of relations as well as potential additional ones. What we call pathways of influence are ideal types, for the purpose of better theorizing potential interactions between these actors; however, we ground each proposed pathway in directly observed data. Given the limited number of directly relevant articles returned in the literature search, we also considered how evidence on criminal governance and communities, state-illicit relations, and territorialization in regions of high illicit activity may add to our theorization of territorial-illicit interactions.

² The Muskitia is commonly spelled Mosquitia in Spanish. In the article we use the Miskitu spelling.

2.2. Case study background

This paper is grounded in and draws evidence from the binational Muskitia region of Central America, named after its largest Indigenous group, the Miskitu, with a population of approximately 180,000 people (Herlihy, 2016). The region was controlled by the British rather than the Spanish until the late 19th Century, leaving a distinct legacy for Indigenous relations with the post-colonial governments of Honduras and Nicaragua (Larson & Lewis-Mendoza, 2012; Mollett, 2011). It also is home to significant drug-trafficking activity in forest-rich zones (McSweeney, 2020) and to two major processes of Indigenous land titling.

While each side of the Muskitia has experienced a titling process since 2000, the evolution of Indigenous land rights and their legal relation to the state have differed. In Nicaragua, the formalization of relative autonomy for the eastern part of the country as the RACCN and RACCS resulted from a post-war peace agreement. These zones compose half of the national territory, but are home to less than 20 percent of the population. Through 1987's Statute 28, the RACCN and RACCS officially became jurisdictions nested within the Government of Nicaragua; however, only with the passage of Law 445 in 2003, did the government recognize Indigenous and Afro-descendent collective property claims, to be administered as *Gobiernos Territoriales Indígenas* (Indigenous Territorial Governments, or GTIs) (Finley-Brook, 2016). Over more than a decade, Nicaragua formally recognized 23 Indigenous and Black territorial governments, composed of community representatives elected following procedures and timelines established by their respective constituent communities (Larson & Lewis-Mendoza, 2012). Despite the exclusive land and self-governance rights promised by these titles, community leaders claim that the promises of Law 445 remained unfulfilled (Bryan, 2019). Contentious electoral politics in the country combined with reticence on the part of the Government to devolve power within the Autonomous Regions have hampered the GTIs, leading to clashes between Indigenous political parties and the increasingly consolidated state as well as to ongoing illegal land colonization (González, 2016; Mittal, 2020).

On the Honduran side of the Muskitia, 40 years of MASTA advocacy resulted in the promise of territorial land titling from the post-coup Government of Honduras (Galeana, 2020). However, this promise was not accompanied by sweeping changes in law or constitutional amendments, but by a series of donor-supported projects to define collective property rights, grant titles, and formalize Indigenous authorities. Between 2012 and 2016, the Honduran Government granted titles to 12 Miskitu *Concejo Territoriales* (Territorial Councils, or CTs) as well as to smaller Indigenous and Afro-descendent communities in the region (Herlihy & Tappan, 2019). CTs, composed of a small group of biennially elected community representatives serving as a type of trustee, should have exclusive land rights and the capacity to set local resource access and use rules. However, the slow pace of change to legislation around forests, fisheries, and benefits-sharing means that municipalities in cooperation with issue-specific national agencies still hold greater *de facto* power over resource use than the CTs with legal rights.

At the same time as these respective titling processes have been unfolding, *transportistas* have increasingly operated in the Muskitia (McSweeney et al., 2014). The Muskitia's expansive and inconsistently monitored coastline and waterways, porous land border, and sparsely populated forests has made it an attractive transshipment point for cocaine moving via plane and boat from Andean producer countries northwards. While cocaine trafficking is the dominant illicit economy, *transportistas* also smuggle marijuana, primarily from Jamaica, into the region for local consumption. The region's retail drug markets for cocaine, crack, and marijuana are small and there is no major drug cultivation or production in the Muskitia (Blume, 2022).

3. Pathways for influence

This section details five pathways we theorize could explain the mutual influences of illicit actors (particularly narco-traffickers) and territorial authorities (in the Muskitia, GTIs and CTs). The frontiers constituted by collective titling processes also enable illicit economies' operations, suggesting a need to explore the various pathways through which these two sets of actors may interact, with what implications for local populations and impacts on natural resources and their governance. In the subsequent sections, we expand upon what these pathways might look like, what conditions are necessary for each pathway to emerge, and their implications. We draw primarily on examples from our fieldwork in the Muskitia but include evidence from the literature reviews as relevant. While we present them as separate, we recognize that the pathways are blurry along their edges and that changing conditions may shift the likelihood of a pathway in a given territory. We use 'territorial authority,' following the nomenclature of the CTs and GTIs in the Muskitia, to reference the legally sanctioned representative bodies of Indigenous titled lands, but also in recognition of the explicit territorializing projects enacted through collective rights processes.

3.1. Coexistence

First, we posit a pathway in which titling has no significant impact on illicit economies *and* illicit operations do not impact the territorial project. The coexistence pathway results in titling and illicit operations continuing as they would have in the absence of the other. Coexistence requires a clear separation between illicit actors and territorial authorities, so the two cannot already be intertwined. Further, the implementation of titling and the empowerment of territorial authorities cannot alter the pre-existing governance power dynamics around illicit markets. This may result from territorial authorities having limited *de facto* power. Numerous examples from Colombia, Central America, and the Philippines show that, despite legally recognizing the rights of communities, the state does not necessarily guarantee enforcement. These 'paper' territories are unlikely to impact the functioning of illicit markets (Everingham et al., 2014; Hagen & Minter, 2020; Larson & Petkova, 2011). Alternately, territorial authorities may not have the will to challenge the presence of illicit actors in their territory, especially where operations are low-level, not linked to violence, and produce some economic benefit for community members. When either state-trafficker or state-community relations produce lower levels of narco-violence, coexistence may also be likely, as territorial authorities are less likely to oppose illicit operations (Blume, 2021).

In some cases, geographic factors inform the likelihood of this pathway: inland, non-border, remote areas without significant forest resources or road access are often less attractive for trafficking. In spaces with limited, rather ad hoc trafficking, titling may not directly impact traffickers' operations in that territory, and trafficking may not clearly threaten territorial authorities. The node of the illicit supply chain in question may also make coexistence more or less likely; transport functions, especially when decentralized like in the Muskitia, require less direct territorial control than cultivation, as evidence from Colombia suggests (Vélez & Lobo, 2019). Even in those parts of the Muskitia characterized by heavy trafficking activity, illicit actors are more sporadically present in territories.

We initially conceptualized this pathway as a sort of 'null hypothesis' where titling had no impact on trafficking and vice versa. Fig. 1



Fig. 1. The coexistence pathway.

illustrates this relation through a clear separation between illicit actors and territorial authorities and the solid borders around them. However, even in these spaces of coexistence there are potential indirect impacts (illustrated with the dotted line). For instance, interdiction efforts by the state may adversely affect territorial authorities; the mere presence of traffickers often attracts state attention and can lead to militarization. While ostensibly targeting narco-trafficking, militarization shifts the balance of power in civic spaces as well, increasing state surveillance of Indigenous groups and increasing the potential for criminalization (Duffy, 2006; Vélez & Lobo, 2019). Thus, we determined that the term coexistence best captures how these groups share space with little direct interaction.

Throughout the Muskitia we found several cases of coexistence. In both Honduras and Nicaragua, territories that offer fewer opportunities for transport of illicit cargo or for money laundering are lower priorities for trafficking-related land grabbing (McSweeney et al., 2017). The Muskitia region also highlights why coexistence is the closest pathway to 'no impact' possible, due to the indirect impacts trafficking generates. In both countries, the state commonly justifies militarization within Indigenous territories as essential to counter-narcotics efforts, installing military outposts and unevenly enforcing state rules, which may not reflect territorial authorities' priorities, such as prohibitions on small-scale logging. Despite militarization, coexistence between traffickers and territorial authorities may persist, particularly if traffickers see the territorial authorities as being disconnected from the state's counter-narcotics efforts. Therefore, as with many of our pathways, coexistence depends in part on the actions of the state.

3.2. Cooperation

In the second pathway, the relationship between traffickers and authorities is cooperative, even mutually supportive. For territorial authorities, demonstrating an ability to deliver services and goods to their communities legitimizes them. Stronger narco-territorial relations may bolster the titling process because territorial authorities are able to deliver more of what their constituency expects and needs, especially where these authorities see their role as representative and responsive to their communities. Moreover, this narco-support can provide territorial authorities with greater autonomy vis-a-vis the state and external donors. If traffickers support the processes of building legitimacy and extending authority, especially in the emerging stages of the territorial governance process, they may find relatively willing partners within territorial authorities.

This pathway also requires that illicit actors benefit in some way from engaging with territorial governance. Traffickers may see the new territorial organizations as counterweights to the state, and if traffickers do not have previously collaborative relations with state actors, supporting territorial authorities may be a means of enhancing their operations and securing a form of localized protection. Alternatively, traffickers working in their native communities may sympathize with Indigenous causes and want to embolden Indigenous authorities. If both traffickers and territorial authorities have somewhat adversarial relations with the state, the potential for cooperation increases.

This symbiotic relationship is depicted in Fig. 2, where illicit actors

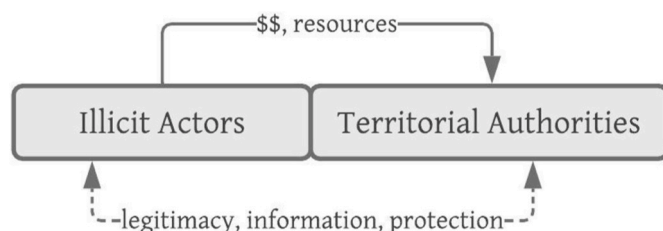


Fig. 2. The cooperation pathway.

bolster the territorial authorities via financial and material resources. In Fig. 2, both illicit actors and territorial authorities are distinct from each other (illustrated again by their solid borders), but the fact that they are adjacent reflects their closer working relations. The bi-directional arrow of immaterial benefits – e.g., legitimacy, protection, and information – reflects the mutually supportive and collaborative nature of the relationships in this pathway.

In the Muskitia, we find cases of traffickers providing support for community and territorial assemblies (*asambleas*), such as providing free or discounted transportation for participants. Inter-community travel in the region depends on the riverine and coastal networks with irregularly scheduled connections, so an *asamblea* can be a significant financial and logistical undertaking. Traffickers typically have access to vehicles and gasoline, making them well situated to help address this need. Traffickers may also provide money or other forms of support to the CTs. For instance, we documented a case of a prominent narco-family providing a cow for the traditional meal for attendees of an *asamblea*.

The literature provides many examples of community support to illicit actors, though more limited cases of territorial authority-illicit actor cooperation. Where economic opportunities are scarce, illicit economies may provide welcome cash influxes (Blume, 2021; Gustafson et al., 2018). As Gillies et al. (2019) note, in frontiers, illicit economies can help elevate the standard of living, and so militarized state approaches to security and counter-narcotics that ignore the importance of human development and brokering trust fail to address the embeddedness of illicit economies. Moreover, counter-narcotics efforts, such as the destruction of drug crops through aerial spraying, can diminish the welfare of local peoples, making them more likely to turn to non-state service providers (Abello-Colak & Guarneros-Meza, 2014). This pathway is certainly not exclusive to Central America, as cases from Brazil to Indonesia indicate (Arias, 2006; Bakker, 2015).

3.3. Corruption

In the third pathway, traffickers provide financial and other resources to territorial authorities; however, unlike in the cooperation pathway, this is not collaborative due to shared goals or common adversaries. Rather, this pathway assumes that the collective titling process introduces a new set of formal authorities into a territory and generates a new set of obligations for criminal actors operating there. It produces new clientelist-type relations between the territorial authorities and illicit actors. This pathway assumes that the newly legitimized territorial authorities have some level of control over their demarcated zones, since traffickers are unlikely to devote resources to corrupting authorities who have no real control over the space in question or with limited significance to their operations. In places where traffickers previously worked with other state actors and where the titling process transfers power and responsibilities to a new set of territorial authorities, traffickers may seek to corrupt these new actors in comparable ways to how they previously corrupted state actors. Even if territorial authorities do not have the capacity to effectively prohibit illicit operations, traffickers may see value in trying to corrupt territorial leaders whose relations with state enforcement agencies might seem more cooperative.

This pathway also assumes the new territorial authorities will be

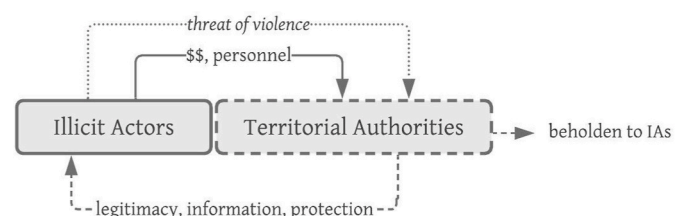


Fig. 3. The corruption pathway.

corruptible, as illustrated by the dashed (as opposed to solid) border around them in Fig. 3. This corruption can manifest as traffickers funding the campaigns of specific individuals, with the understanding that once elected they will help protect narco-operations and interests, or it could manifest as individuals already linked to the narco-industry joining the new territorial governments (as illustrated in Fig. 3, with the arrow showing money and personnel flowing from the illicit actors to territorial authorities). In contrast to the cooperation pathway, corruption does not result in the sharing of resources in any altruistic or community-improving ways. Rather, it is individualistic, and reinforced by the threat of violence. As a result, while the exact manifestation of the corrupt relation between territorial authorities and traffickers may vary, the corruption pathway results in individual leaders or councils becoming to some degree beholden to illicit actors.

As Fig. 3 illustrates, legitimacy, information, and protection flow only towards the illicit actors, as opposed to symbiotically. Thus, this pathway ultimately reduces the territorial authorities' autonomy and capacity – or inclination – to respond to community needs and/or external requirements and expectations, such as from the state or international donors (Galeana, 2020; Gillies et al., 2019). As territorial authorities lose internal and/or external legitimacy due to the perception that their leadership does not represent the community and does not use resources in an appropriate, fair, or efficient manner, corruption undermines their effectiveness in advocating to the state on behalf of their constituency. Moreover, it raises the potential for dispossession as compromised leaders become more likely to sell lands or permit illegal activities within their communities (Finley-Brook, 2007).

Much of the literature on rural illicit economies focuses on the degree to which illicit actors aim to bribe, co-opt, or blackmail individuals within the state to avoid detection or to gain access to territory and resources (Bull, 2016; Van Dexter & Visseren-Hamakers, 2020; Weisz Argomedo, 2020). However, we have been surprised by the general lack of evidence of this pathway in the Muskitia directed toward territorial authorities, which seems to be a result of state policy. In Nicaragua, the increasing consolidation of decision-making power in the central government and ruling Sandinista party has translated into little incentive for traffickers to try to corrupt GTI leaders, who may already be beholden to party politics (Blume, 2022). While in the Honduran Muskitia there are limited instances of prominent community members linked to narco-activity later becoming involved in territorial governance, we generally find that the lack of enforcement capacity instilled in the new territorial authorities, and their sometimes-adversarial relation to the state, makes their leaders less attractive targets for corruption. As a result, it was more common to observe illicit actors merely coexisting in the same space or opting for other means of influencing or engaging with the territorial authorities. As the next pathway notes, the prevailing influence of municipal, as opposed to territorial, authorities in Honduras commonly directs traffickers' focus there.

3.4. Competition

In this fourth pathway, traffickers seek to undermine or control new territorial authorities. This pathway takes two main forms, but both result in illicit actors seeking influence, power, and/or legitimacy through a competing or alternative territorial authority. In the first manifestation of this pathway, traffickers may increase support for municipal officials where municipalities and territories are in conflict over resource governance, and both make claims of being the legitimate authority. By lending their support to the municipality, which previously had authority over key spaces or resources, traffickers seek to undermine the power of the new governing bodies. This is most likely in spaces where traffickers had some prior relationship with the state. Through increasing support for and bolstering an existing, competing jurisdiction in the area in question, traffickers offset potential threats to smooth operations.

The second way this pathway develops is when territorial authorities

appear to be powerful enough to pose a threat to illicit actors' interests and these new authorities are not susceptible to corruption tactics (illustrated in Fig. 4 by the solid line bordering the territorial authorities). As a result, traffickers seeking to use the titling system to gain access to territorial control or legitimacy may set up and fund fraudulent and/or parallel authorities using the legal apparatus provided by the titles, forming territorial authorities that are responsive or beholden to traffickers' interests. These approaches are also not mutually exclusive, depending on the power and resources available to the illicit actors; they may both increase support for a local (municipal) government and simultaneously form a parallel territorial authority.

How traffickers compete with the new territorial authorities will depend largely on prior narco-state relationships and the extent to which the state protects the titling process. When traffickers have previously established relations with the state and the state itself engages in land grabbing or otherwise undermines titling efforts, competition may ensue, especially in the form of traffickers supporting competing, previously established authorities (e.g., municipal governments) (Hagene, 2019; Sylvander, 2021). In these scenarios, the government may publicly support territorial projects but fail to enforce the property-type rights related to them (Hagen & Minter, 2020; Larson et al., 2016). The state may in fact benefit from such narco-competition scenarios (Dest, 2021).

Regardless of the exact means of doing so, this pathway results in illicit actors funneling money, as well as possibly their own members, into alternative territorial authorities, as is illustrated in Fig. 4. These alternative territorial authorities are highly susceptible to narco-influence (illustrated by the dotted border in Fig. 4) because they are either formed by illicit actors (in the case of parallel bodies) or perceive their power as threatened or reduced by the creation of competing jurisdictions (in the case of funding municipal governments or other previously existing governance bodies). In exchange for the illicit support, alternative authorities provide legitimacy and protection. They then compete with and undermine the internal and external legitimacy of the representative territorial authority. This pathway erodes the credibility of territorial authorities and the titling process as well as the *de facto* power of the titles by sowing confusion and fomenting distrust. As a result, territorial authorities become unable to pursue territorial projects or goals of autonomy, over time leading to the potential dissolution of legal territorial authorities or even dispossession, with the attendant rupture of socio-ecological relations.

We observed several examples of competition on the Honduran side of the Muskitia. As a Miskitu NGO worker in Honduras told Blume, the CTs "offer way less [to traffickers] than mayors." The CTs' lack of *de facto* authority has motivated traffickers in Honduras to renew their attentions to municipal authorities, which historically are key sources of information regarding counter-narcotics operations. Given that municipalities and the new CTs have contested resource authority claims in the region, the traffickers' support for the municipal governments further tips the scale against the nascent, un(der)-funded CTs. While less common, we also found evidence of traffickers creating their own parallel structures using the newly formed legal CT format. In one instance, a prominent trafficker created and funded a separate territorial council to undermine a CT they perceived as hostile, and then claimed that theirs was the "real" CT by registering their council with the state before MASTA could hold an *asamblea* as required by its bylaws. In these cases, traffickers' recognition of the persistent power of non-Indigenous authorities, from local to national, vis-à-vis effective control of land and resources speaks to the ongoing challenge for Miskitu territorial governance.

3.5. Confrontation

The final pathway is confrontation. In this pathway, territorial authorities and illicit actors are separate and antagonistic, and the threat or act of violence key (Fig. 5). Confrontation is likely the most often

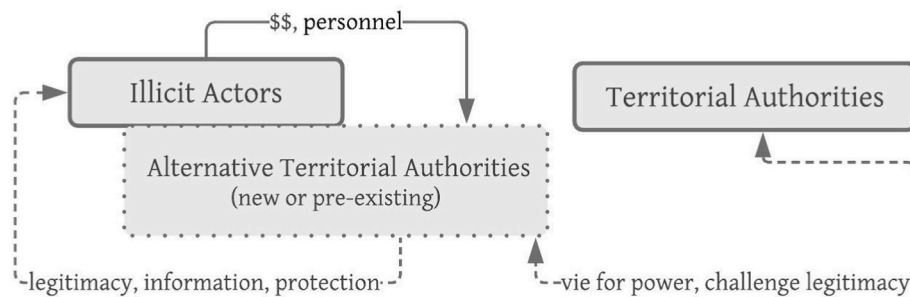


Fig. 4. The competition pathway.

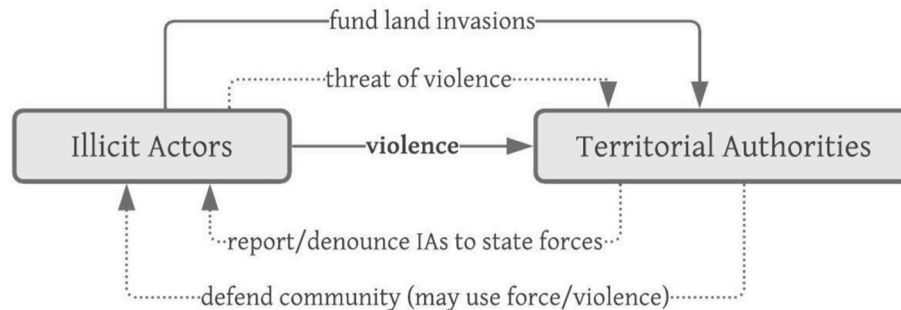


Fig. 5. The confrontation pathway.

characterized in popular media and academic literature (Butt et al., 2019; Glazebrook & Opoku, 2018; Herrera & Martinez-Alvarez, 2022). In this pathway, illicit actors may see formalized territorial rights (titles) as threats to their continued operation and react by threatening or enacting violence against specific territorial leaders or entire communities. This is most likely to occur when the control of land is essential to illicit operations and the new territorial authorities threaten traffickers' operations (Altamirano Rayo, 2021). This pathway may be a last resort and/or result from prior pathways failing (e.g., in the corruption pathway there is the threat of violence should territorial authorities fail to uphold their bargains with illicit actors). This pathway may also arise if territorial authorities that previously co-existed with illicit actors begin to denounce (legally and/or publicly) illicit activities in their territories or enhance monitoring and control activities to stop land invasions, illegal clearings, narco-transport landings, etc. (Huezo, 2017).

For territorial authorities to be able to effectively halt illicit operations in their zones, they almost always need some level of state support. However, confrontation is also conceivable in cases where there is collusion between state and illicit actors and the state's interests do not align with the full implementation of territorial rights (Sylvander, 2021). Especially in spaces with extensive narco-trafficking, the state may use the co-located operation of illicit actors with territories to criminalize Indigenous leaders, thus justifying state violence (Glazebrook & Opoku, 2018). Sometimes, as Lessing (2020, p. 14) argues, when state-trafficker alliances prevail, states "rely on COs [criminal organizations]' coercive force to neutralize third-party threats," which Koivu (2018) notes has clear 'state-building' benefits.

Traffickers may organize and fund land invasions to assert control over territory and/or launder illicit income – creating an illegal market for land, forcibly dispossessing communities, and eliminating constituency claims on land (Tellman et al., 2021; Wrathall et al., 2020). In the face of communities' disapproval of illicit activities and ongoing failure of the state to halt them, territorial authorities may attempt to take matters into their own hands and resist illicit incursions (Vélez et al., 2020). However, for communities to resist illicit activities, the community must have some power to confront or stop criminal actors – or

enough desperation to attempt to do so. In examining Indigenous community resistance to narco-intrusions in Mexico, Ley et al. (2019) find that more cohesive and connected Indigenous communities with stronger communal institutions are better able to resist traffickers. On the other hand, drug-trafficking contributes to the erosion of community trust and cohesion, weakening responsiveness (Valdivia & Okowí, 2021; Vélez & Lobo, 2019).

While confrontation in the Muskitia is not ubiquitous, territorial authorities have directly challenged narco-traffickers, and traffickers have perpetrated violence to achieve their means, especially in places where narco-funded land-grabbing occurs. In both countries, territorial authorities have repeatedly denounced ongoing deforestation and illegal land uses to local and national authorities, with little effect. In one Honduran case, the president of a CT publicly denounced the lack of state action and warned that they would initiate their own process of *saneamiento* (literally cleansing, see Sylvander, 2018) if the government continued to stall while forests were cleared and rivers polluted by *narco-ganadería* (McSweeney et al., 2017). When the government failed to act, the CT mobilized their territorial defense committee to expel illegal settlers – using weapons reportedly seized from an illegal arms stash – and ended up in a confrontation with the national military. In another Honduran territory, young men organized a territorial vigilance committee and explained that they were impatient to mount an effort to expel illicit actors responsible for deforestation; however, given the likelihood of violence and ongoing efforts to negotiate with the government, MASTA purportedly asked them to stand down. Recent reports indicate that deforestation – and threats of violence against Indigenous Peoples – have continued in this zone (Mukpo, 2021). Violence in the face of land grabbing is also common in Nicaragua, with potentially thousands of refugees and internally displaced people fleeing the border region since the mid-2010s (Herlihy, 2016; Mittal, 2020).

Finally, the militarization of the region has contributed to additional state-trafficker violence, with communities caught in-between, leading to a general sense of precarity. The belatedly well-documented case of the US-funded and DEA-orchestrated killings of uninvolved community members in the Honduran village of Ahuas speaks clearly to this tragic trend (Blume & Sauls, 2022). As evidence from our literature review

indicates, communities well beyond the Muskitia may not be active or originating participants in the conflict, but rather caught in the middle of the violent struggles between state and illicit actors, including over control of land (Dest, 2021; Grajales, 2011; Herrera & Martínez-Alvarez, 2022).

4. Discussion

The five pathways elaborated above reflect an initial framework for explaining the potential relations between narco-traffickers and Indigenous, Afro-descendant, and community territorial authorities in a post-titling context. We have presented these pathways of possible interaction and influence between illicit actors and territorial authorities to highlight distinct ways that criminal networks and territorial projects can interact. Yet, to be clear, these are ideal-types, and the reality is admittedly blurred – these pathways may overlap in the same space and their likelihood may change over time given shifting socio-ecological and political-economic conditions.

Moreover, while the conditions for each pathway are partly dependent on the illicit actors and territorial authorities, the state plays an undeniable role in shaping these dynamics and influencing or limiting the possible pathways of interaction. For example, the mere existence of illicit actors in a space can result in militarization (e.g., the indirect impacts that illicit actors have on territorial authorities in the coexistence pathway, or an exacerbating force in the confrontation one). If this militarization occurs gradually or is somewhat sporadic, coexistence and even cooperation may still be possible. Cooperation is more likely when both illicit actors and territorial authorities are in opposition to or simply neglected by the state. In the corruption pathway, the state must have devolved enough power to the territorial authorities to make them relevant to the illicit actors, and we suggest that this most often occurs in contexts where illicit actors previously had working relationships with the state. For competition, the state's support of territorial authorities does not extend to full devolution, and there remain competing claims over land and resources that allow traffickers to choose to bolster authorities that are more susceptible – or friendly – to their pressures. In instances where the state's support of new territorial authorities appears only on paper, illicit actors can be convenient partners in undermining Indigenous or community political projects, either through competition or direct confrontation. The state may also scapegoat illicit actors for their own perpetration of violence in these contested spaces as well as use them to justify the criminalization of Indigenous leaders and community defenders (Colectivo Darién, 2021; Dest, 2021).

Through outlining these pathways, we found that while the violence and corruption more popularly associated with illicit economies are indeed significant problems for many communities, this relationship is certainly not universal. In some cases, illicit actors may be strong allies of territorial rights processes, bolstering the legitimacy of traditional and emerging territorial authorities or providing alternate types of security (Bakker, 2015; Blume, 2021; Santamaría & Carey, 2017). That traffickers and territorial authorities may coexist peacefully or even cooperate does not suggest that the state's criminalization of territorial and environmental defenders has any merit. Instead, this type of relationship can reflect the state's lack of power – or interest – to enforce rights that it has itself assigned, and a view by territorial authorities that they can better meet the legitimate needs of their constituents if aligned with traffickers. Pre-existing socio-economic conditions (including the role of the illicit in the local economy), the type and geographic breadth of illicit economy in question, the identities of the traffickers vis-a-vis communities, traffickers' demand for land and resources, and the relation of the state to both the illicit economy as well as to titling processes and new territorial authorities will all influence the likelihood of one of these pathways playing out, with clear implications for the potential forms of territorial governance.

These pathways do not indicate path-dependency. Rather, they represent potential relations that may shift over time, especially given

the substantial role of the state in shaping the operations of illicit economies and in reinforcing, or not, territorial rights. Instead of 'wild west' zones, absent state presence and control, the cases and literature we examine suggest that state actions vis-à-vis frontiers clearly structure trafficker (or illicit economy) and territorial relations (Ballvé, 2020; Ballvé & McSweeney, 2020; Weisz Argomedo, 2020). Military presence for interdiction – perhaps the most visible, and violent, of state functions in many of these regions – as well as its strategic absence, such as in the lack of response to territorial authorities' pleas to stop illegal land-clearing, fundamentally bound the possibilities for territorial-trafficking relations (Aguilar-Støen, 2016). The structure and functioning of local government institutions vis-à-vis the central government and emerging territorial authorities also influence potential pathways. For example, in highly centralized and increasingly politically consolidated Nicaragua, territorial authorities are fairly toothless and essentially enroled into state lines of authority, while in Honduras, the continued strength of municipalities (including their receipt of funds from resource extraction, even as the titles could have shifted this distribution) creates an adversarial challenge to the evolution of strong CTs (Blume, 2022).

The case of the Muskitia provides more evidence for some of the pathways elaborated above than others: cooperation, competition, and confrontation are – perhaps surprisingly – more likely than corruption given the political conditions in place upon titling and the existing relationships between traffickers and the state. For many territories, coexistence is the key pathway we observed, largely because of the geographic limitations of *transportista* operations. While in rural drug-producing zones like the Andes, traffickers may require greater control of territory for cultivation, in rural transshipment regions, the impermanence of much of the trafficking infrastructure leads to a lighter touch (Blume, 2021; Grajales, 2011). Even if certain locations provide more important sites for trafficking, especially along the coast, *transportista* operations themselves require movements and flows. As such, much of the effort to achieve territorial control, and thus a move out of the coexistence pathway, comes from either the rise of local or territorial authorities whose preferences threaten ongoing operations, or from trafficker efforts to launder money via land-grabbing, impacting community resource access. Further, while we observed cooperative behavior in some cases in the Muskitia, we also note a tension between the positive inclination of territorial authorities for specific traffickers and their wariness of trafficking overall, given the linkages between trafficking and illegal land sales, deforestation, and increased local drug use (Devine et al., 2021; Tellman et al., 2021). A move away from coexistence or cooperation may also relate to increasing trends toward militarization and/or criminalization in a region.

5. Conclusion

The pathways of influence described above provide a framework through which we have begun conceptualizing the governance of land and resources in the context of multiple and sometimes contradictory licit and illicit territorial projects co-located along frontier spaces. In the places of greatest concern for our work, Indigenous territorial projects have official state sanction but not necessarily support, whilst narco-territorializations enjoy some level of state complicity despite being coded as illicit. Moreover, the reality that both collective titling initiatives and illicit economies exist in the same geographic spaces hinders the alternative political projects of marginalized groups. While in some cases it is traffickers who seek to undermine territorial authorities, it is often the state as well. The mere presence of criminal activity has been used as the justification for militarized intervention in Indigenous and Afro-descendant communities, at the same time as these governments win applause for "progressive" efforts to grant Indigenous Peoples more *de jure* authority over their lands and resources. The perception that illicit economies are inherently violent offers a convenient scapegoat to multinational corporations and state actors who perpetrate violence

against territorial leaders and forest defenders, and the collusion between state-illicit actors further threatens territorial projects (Butt et al., 2019; Santamaría & Carey, 2017). In examining how territorial titles and drug-trafficking interact, we illustrate that multiple pathways for influence exist, besides the popularly described corruption and confrontation.

Our experiences in the Muskitia speak to the fact that while regional trends may influence relations between territorial authorities and traffickers, such as the sheer volume of drugs flowing through the region over time or the amount of interdiction funding in play (Magliocca et al., 2019; McSweeney, 2020), the likelihood of the above pathways emerging is both highly place-dependent and structured by differential state relations with both the illicit economy and territorial processes. Narco-trafficking can have significant and negative impacts on Indigenous communities and the ecosystems upon which they depend – this is clear from both our review of the literature and in the case of the Muskitia. However, often it is the role of the state (as opposed to illicit actors) that determines the degree to which these relations result in violence and destruction. In part, as we suggest, this differential impact relates to the fact that along different nodes of illicit supply networks, illicit actors have different needs in terms of territorial control, and thus influence over the land and resources that constitute them (Blume, 2021; Wrathall et al., 2020). In the Muskitia, we observe less confrontation or corruption, both of which we expect might be more likely in spaces where illicit operations demand more extensive territorial control. Understanding the fluidity and particularities of these pathways would benefit from neighborhood-scale research, allowing a deeper dive into rooted connections between territorial governance and illicit actors as well as outcomes in the landscape (Abello-Colak & Guarneros-Meza, 2014).

These pathways problematize narrow analyses of how illicit actors impact collective and territorial projects when they operate in the same spaces. We find that a formal title is only effective in shaping territorial outcomes to the degree that it indicates the power of the titleholders to make decisions about land and resources in practice; however, as the case of the Muskitia indicates, increasing militarization as the main form of state presence may in fact actively undermine the emergence of

territorial governance despite formal collective ownership. In a context where resource-rich lands coincide with these incentives, and interdiction campaigns provoke new rent-seeking opportunities, territorial authorities may see their options for enacting their alternative political projects limited, with concomitant effects on environmental outcomes. The pathways elaborated above suggest that ongoing prohibitionist policies contribute significantly to limiting the possibilities for territorial governance, and therefore for Indigenous and community-led conservation and avoided deforestation. We offer this framework for future analyses of overlapping geographies of illicit economies and territorial projects, including of other geographies and other supply chains, but also to policy processes concerned specifically with what governance means in practice post-titling.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Acknowledgments

The authors first wish to thank their research partners and friends in the Muskitia for their contributions to this work. Secondly, this paper grew out of conversations across several years, and improved based on feedback from Nicholas Barnes, Rebecca Bell-Martin, Andrew Davis, Francis Massé, Eduardo Moncada, Fernando Montero, and colleagues in the Department of Political Science at the University of Nevada-Reno. We also thank the three anonymous reviewers whose insightful comments substantively improved the article. Funding: This work was supported by the Boston University Graduate Research Abroad Fellowships, the Inter-American Foundation Grassroots Development Dissertation Fellowship (2016), P.E.O. International Scholar Award (2018), a Foreign Language Area Studies Fellowship for Miskitu (2016), the Graduate School of Geography and the George Perkins Marsh Institute at Clark University, and the American Association of Geographers' Latin America Specialty Group.

Appendix 1

Part A: Literature Review Methodology for Summons and Web of Knowledge

The first literature search was conducted on Onesearch, a University Summons search engine between February 1, 2021, and April 10, 2021. This search, utilizing key terms relating to land or illicit activity (Appendix Table 1), yielded 516 initial pieces published prior to 2020, which, after filtering for peer-reviewed articles exclusively, resulted in 237. From these 237 articles, Knight systematically assessed each article's Title, Abstract, Keywords, and Introduction for relevance to related search terms. Many of the initially excluded articles included those which, for example, focused on microbiology, marine biology, museum studies, medicine, or medical procedures. An article was classified as 'related' if it had one term from each column of Appendix Table 1 in the article, of which there were 38. Of the 38 'related' articles, we excluded many because they did not examine titling or land control, focused exclusively on tracking an illicit product but not on relations to the community or governance, etc. Nine articles were ultimately identified as directly addressing the question of the interaction between collectively titled/Indigenous authorities and illicit actors or as providing evidence that could help explain the relations between these actors.

To complement the findings of the first search, a second search was conducted in January 2022, on Web of Knowledge, which was intended to check the breadth of articles available in Summons. The search was conducted in the same systematic fashion. Utilizing the same key terms, a total of 238 items was filtered down to 218 after excluding non-peer-reviewed sources. Article Titles, Keywords, and Abstracts were reviewed and included based on their use of one term per group in the table below, which resulted in 45 pieces. After a full review of these papers, 13 results assessed factors relating to protected areas, land titling, community lands, or Indigenous land rights interactions with trafficking, smuggling, criminal activity, etc. Of these 13, we determined that five articles provided evidence that directly related to our questions and that were not previously included as a result of the Summons search. Further, an additional search with the same terms was conducted for all articles published between the beginning of 2020 and the end of 2021, which resulted in 67 items, of which 18 were relevant based on title, abstract, and keywords. Of those, an additional five provided direct or supporting evidence of the relations of interest. The same exclusions from the Summons search apply. Below are the combinations of search terms used in the Summons search as well as the parameters used in the Web of Knowledge search.

Based on the more recent publication of special issues on rural lands, environment, and illicit economies and our broader reading, we identified an additional nine directly relevant papers. Aiming to build the strongest evidence base possible for the relations between illicit actors and territorial authorities, we incorporated these nine papers along with those that came up in the two searches. The second half of this Appendix includes an

annotated bibliography of all 28 articles deemed to be core literature or direct evidence related to the relations we are interested in, and ultimately of the pathways we have presented.

Appendix Table 1. . Search Term Combinations

These terms were identified based on a series of conversations between the authors and a review of literature they were already aware of. Each term from Group 1 was searched with each term from Group 2 to try to maximize possible results. In the Summons search, each term from Group 1 was manually searched sequentially with each term from Group 2, due to the limitations of the search engine. For Web of Knowledge, the allowed Boolean search functions enabled the authors to search all fields (title, abstract, keyword, text) for any combination of the terms in a single search.

	Group 1	Group 2
1.	"land rights"	"criminal activity"
2.	"Territorial governance"	"illegality"
3.	"Indigenous governance"	"illicit economies"
4.	"Collective land rights"	"narco-trafficking"
5.	"Collective titling"	"Drug trafficking"
6.	"Forest governance"	"Drug cultivation"
7.	"Rural areas"	"Criminal governance"
8.	"conservation"	"Coca cultivation"

Part B: Annotated Bibliography of Core Literature & Evidence

This section provides an annotated bibliography of the 28 articles deemed to best meet the parameters of the searches and provide evidence by the authors. After each citation, we provide a brief summary of the article, focusing on how it is relevant to our proposed pathways. We also report which literature review resulted in the article being included (if applicable, "N/A" means the article was already known to one of the authors or was published after the systematic literature reviews).

1. Altamirano Rayo, G. (2021). State Building, Ethnic Land Titling, and Transnational Organized Crime: The Case of Honduras. *Latin American Research Review*, 56(1), 50–66. <https://doi.org/10.25222/larr.450>

Summary: This article asks why the Honduran state would provide an Indigenous group titles to significant territory and argues that this move is seen by the state as a means of bolstering security "to win the war on drugs" (60). This article offers some evidence from Honduras of locals supporting narco-traffickers given the lack of economic alternatives in the region (suggestive of cooperation). Altamirano Rayo suggests that the creation of Concejos Territoriales (CTs) creates new lines of government within Honduras and thus extends state power into the everyday in a way that will fight drug-trafficking (which does not correspond with the understanding that the authors of this manuscript have of the juridical nature of the CTs). (Search: Web of Knowledge).

2. Arias, E. D. (2006). The Dynamics of Criminal Governance: Networks and Social Order in Rio de Janeiro. *Journal of Latin American Studies*, 38(2), 293–325.

Summary: Arias examines the cooperation of citizens in the Favelas of Rio de Janeiro with criminal organizations. Maintaining positive relations and contacts within the community prevent criminal organizations from feeling the repression of the state and offer them a form of protection. This article offers evidence of how criminals and communities can form symbiotic and cooperative relations. Criminal actors almost depend on their relationship with a community for the success of their operations and, therefore, criminal actors may provide positive incentives to continue their 'relationship'. While focused in an urban setting and not explicitly about land rights, this article is foundational in the need to consider criminal organizations impact on local governance. (Search: Summons).

3. Bakker, L. (2015). Illegality for the general good? Vigilantism and social responsibility in contemporary Indonesia. *Critique of Anthropology*, 35(1), 78–93. <https://doi.org/10.1177/0308275X14557092>

Summary: *Ormas* are organizations within Indonesian society that typically claim they represent 'the voice of the people' and advocate on their behalf. Bakker notes instances of threats (and use) of violence by *ormas* to prevent foreign groups from seizing Indigenous lands. They cooperate with communities, because often they are part of the interwoven community fabric and while they may be seen as 'dangerous', they protect the interest of their communities. These groups offer evidence of the cooperation pathway; in areas of state weakness, communities may foster collaborative relationships with informal and/or illicit actors. *Ormas* also offer, albeit to a lesser extent, evidence of the confrontation pathway in the form of violent community resistance to land invasions. (Search: Both).

4. Blume, L.R. (2021). Narco Robin Hoods: Community support for illicit economies and violence in rural Central America. *World Development*, 143, 105464. <https://doi.org/10.1016/j.worlddev.2021.105464>

Summary: This article offers evidence of both the cooperation and confrontation in marginalized communities along the Caribbean coast of Central America, though not explicitly about territorial governance or titling. It argues that marginalized, rural communities with limited state capacity and pervasive corruption are the most likely to have cooperative relationships with traffickers. It notes also that state interdiction efforts often stifle

economic activity while traffickers may offer tangible benefits to communities. While mostly offering evidence of the cooperation pathway, the article also highlights the different structural and individual factors that may result in more narco-violence in communities. (Search: N/A).

5. Butt, N., Lambrick, F., Menton, M., & Renwick, A. (2019). The supply chain of violence. *Nature Sustainability*, 2(8), 742–747. <https://doi.org/10.1038/s41893-019-0349-4>

Summary: The authors directly address how illicit actors and economies are tied to the murder, displacement, or land denial of Indigenous communities. This violence is evidence of repeated confrontations with local authorities and communities, as mentioned in the confrontation pathway. This piece also highlights the corruption of the state and corporations in perpetuating violence against communities and their leaders. It highlights the role impunity plays in perpetuating and continuing these cycles of violence. This is suggestive of how the corruption pathway can result in or eventually lead to direct confrontation and violence. (Search: Summons).

6. Colectivo Darién (2021). Trafficking as settler colonialism in eastern Panama: Linking the Americas via illicit commerce, clientelism, and land cover change. *World Development*, 145, 105490. <https://doi.org/10.1016/j.worlddev.2021.105490>

Summary: The authors' account highlights the active use of confrontation by illicit actors in efforts to dispossess and displace Indigenous communities, or violently remove them from their land, concluding that "multicommodity trafficking is settler colonialism" (p. 8). This article offers clear evidence of the confrontation pathway. The authors note that the media's emphasis on crime in Indigenous communities and the dominant narratives blaming them for drug trafficking contributes to the criminalization of these entire communities, undermines the legitimacy of their leaders, and enables capitalist expansion in these spaces. (Search: Web of Knowledge).

7. Dest, A. (2021). The coca enclosure: Autonomy against accumulation in Colombia. *World Development*, 137, 105166. <https://doi.org/10.1016/j.worlddev.2020.105166>

Summary: Focused on coca cultivation in Colombia, this article is suggestive of the ways that criminal organizations that have a greater need to control land (i.e., for cultivation as opposed to trafficking) are more likely to resort to direct forms of violence. This article provides evidence for our confrontation pathway, documenting how a local community council is hindered by the threat of violence from 'invisible foreign benefactors' [drug traffickers] if communities were perceived as a threat to their control. (Search: N/A).

8. Devine, J. A., Wrathall, D., Aguilar-Gonzalez, B., Benessaiah, K., Tellman, B., Ghaffari, Z., & Ponstingel, D. (2021). Narco-degradation: Cocaine trafficking's environmental impacts in Central America's protected areas. *World Development*, 144, 105474. <https://doi.org/10.1016/j.worlddev.2021.105474>

Summary: The authors directly address the issues of narco-trafficking's impacts on Indigenous and peasant populations through land dispossession, which erodes traditional or customary governance in these regions. The narco-traffickers receive illegal land titles from the state (suggestive of the corruption pathway), and launder money through cattle ranching. Moreover, these traffickers need to control land and forceful intrusion into protected areas is evidence of the confrontation pathway. (Search: Web of Knowledge).

9. Devine, J. A., Wrathall, D., Currit, N., Tellman, B., & Langarica, Y. R. (2020). Narco-Cattle Ranching in Political Forests. *Antipode*, 52(4), 1018–1038. <https://doi.org/10.1111/anti.12469>

Summary: Drawing on a case study of Guatemala, this article provides evidence for our corruption and confrontation pathways as Indigenous populations are given an ultimatum to sell or be killed, and then are violently dispossessed. This is a clear illustration of our confrontation pathway as the authors document narco-traffickers' efforts to forcibly take and clear land to use for either clandestine runways or cattle ranching to launder money. Moreover, the authors highlight how multinational corporations' use of cattle from the region perpetuates these cycles of violence and dispossession and calls for greater scrutiny of the United States role. (Search: Web of Knowledge).

10. Finley-Brook, M. (2007). Indigenous land tenure insecurity fosters illegal logging in Nicaragua. *International Forestry Review*, 9(4), 850–864. <https://doi.org/10.1505/ifer.9.4.850>

Summary: This article makes the case that titling alone is not enough and offers evidence from the case of Nicaragua. Despite the logging industry's legal nature, multitudes of actors will apply for permits, begin logging, then expand out into illegal areas (such as Indigenous land, conservation spaces) and conduct unapproved activities. The state, including some official Indigenous leaders (*sindikos*) either allow this to happen through inaction or are complicit, through corruption and benefit to the detriment of the community. (Search: Web of Knowledge).

11. Finley-Brook, M. (2016). Territorial "Fix"? Tenure Insecurity in Titled Indigenous Territories. *Bulletin of Latin American Research*, 35(3), 338–354. <https://doi.org/10.1111/blar.12489>

Summary: Despite Indigenous communities' establishment of emerging territorial governments, there is a lack of land security due to corruption within the state in favor of third parties, such as *colonos* (settlers) and other state entities. In some cases, emerging territorial authorities (GTIs) may also be engaged in corruption around illegal land sales, which leads to environmental degradation and displacement. This article primarily offers evidence of how the state can corrupt and undermine territorial projects that it simultaneously claims to support. (Search: N/A).

12. Glazebrook, T., & Opoku, E. (2018). Defending the Defenders: Environmental Protectors, Climate Change and Human Rights. *Ethics and the Environment*, 23(2), 83–109. <https://doi.org/10.2979/ethicsenviro.23.2.05>

Summary: These authors call attention to the murders of activists who are 'environmental defenders', which is confrontation in the most literal sense. The article highlights the case of Berta Cáceres in Honduras and explores patterns in the targeting of environmental and territorial defenders. The article also highlights government collusion and how corruption plays a role in the deaths of activists. (Search: Summons).

13. Gonzalez-Duarte, C. (2021). Butterflies, organized crime, and "sad trees": A critique of the Monarch Butterfly Biosphere Reserve Program in a context of rural violence. *World Development*, 142, 105420. <https://doi.org/10.1016/j.worlddev.2021.105420>

Summary: This article draws on the case of butterfly conservation in Mexico, highlighting how, in the context of ongoing narco-related violence and counter-narcotics militarization, the conservation program has undermined communal forest and land management. Offering evidence of confrontation, this article notes how communal land (ejido) leaders are often threatened or killed due to illicit economies. It also offers evidence of community resistance, and the great risks that such efforts entail. (Search: N/A).

14. Grajales, J. (2011). The rifle and the title: Paramilitary violence, land grab and land control in Colombia. *The Journal of Peasant Studies*, 38(4), 771–792. <https://doi.org/10.1080/03066150.2011.607701>

Summary: This article focuses on how the state, criminal organizations, and paramilitaries compete for land and engage in land grabbing, resulting in the dispossession of peasants and Indigenous people from their land. It offers clear examples of the confrontation and competition pathways, highlighting how this dispossession often occurs through violence, such as assassinations and threats, or through crafting false 'community associations' to claim land (to then get the resources, such as palm oil, on that land). (Search: Summons).

15. Grajales, J. (2013). State Involvement, Land Grabbing and Counter-Insurgency in Colombia. *Development and Change*, 44(2), 211–232. <https://doi.org/10.1111/dech.12019>

Summary: This article focuses on the confrontational nature of land grabbing in Afro-Indigenous communities in Colombia. Criminal organizations that decide to diversify their assets often go after land with valuable resources, and in the case of Lower Atrato, Colombia, these land grabs are typically associated with palm oil production. Criminal groups forcefully take these assets, causing violent land dispossessions. The paper references Santos's Victim Law, which mentions, "This law interprets land grabbing as a consequence of the actions of criminal entrepreneurs, who use violent coercion and corruption in order to seize and accumulate land" (p. 212). Even when communities receive land titles, they cannot necessarily prevent criminal organizations from illegally and violently grabbing their lands. (Search: Summons).

16. Gustafson, K., Sandstrom, T., & Townsend, L. (2018). The Bush War to Save the Rhino: Improving Counter-poaching Through Intelligence. *Small Wars and Insurgencies*, 29(2), 269–290. <https://doi.org/10.1080/09592318.2018.1435220>

Summary: This piece offers evidence of cooperation as well as corruption in the context of illicit wildlife poaching in Africa. Gustafson explains that there may be community support and/or participation in illicit activities and that while this is often under the threat of violence (which would make it fall more within our corruption pathway), that this can also be seen as illicit actors providing capital flow into a community, which in turn, can provide jobs and foster community support, making communities then less likely to give up information on poachers. (Search: Web of Knowledge).

17. Herrera, J. S., & Martinez-Alvarez, C. B. (2022). Diversifying violence: Mining, export-agriculture, and criminal governance in Mexico. *World Development*, 151, 105769. <https://doi.org/10.1016/j.worlddev.2021.105769>

Summary: This article states that Indigenous communities that hold land rights to resource rich lands are at risk for increased violence, often employed by mining or other extractivist corporations. Criminal organizations in this paper are hired by companies to exploit, intimidate, or even kill Indigenous people and other marginalized communities for monetary gains, actively reflecting how intertwined the 'licit' and 'illicit' economies and actors are. This article highlights our confrontation pathway, as well as shows how illicit actors can be convenient allies for states or private actors seeking to undermine community resistance. (Search: N/A).

18. Huezio, A. (2017). Eradication without prior consultation: The aerial fumigation of coca in the black communities of the Colombian Pacific. *Canadian Journal of Latin American and Caribbean Studies*, 42(3), 375–399. <https://doi.org/10.1080/08263663.2017.1378406>

Summary: This article is about Colombia's highly problematic aerial fumigation of coca, and its socio-environmental consequences. The issues with aerial eradication are tied into the long history of discrimination against Indigenous and Afro-Descendent communities in Colombia. Moreover, since the demobilization of the FARC, a power vacuum has been left in their place, resulting in violent confrontation as armed groups compete to try to fill this void. The author notes how this has led to the killings of activists and political figures. (Search: Summons).

19. Huezio, A. (2019). Contested natures: Coca, the War on Drugs, and ecologies of difference in Colombia's Afro-Pacific. *Journal of Political Ecology*, 26, 305–322. <https://doi.org/10.2458/v26i1.23060>

Summary: This article touches upon previous themes of his 2017 piece, where there is a power vacuum in rural parts of Colombia. Huezio references the murders of environmental defenders and the displacement of Indigenous and Afro-descendent communities, while these communities continuously try to resist coca cultivation, largely in part due to the coca aerial eradication campaign proposed by the government. This offers evidence of confrontation, and specifically efforts at community resistance, as well as shows the important role the state places in mediating illicit-territorial relations. (Search: Web of Knowledge).

20. Ley, S., Mattiace, S., & Trejo, G. (2019). Indigenous Resistance to Criminal Governance: Why Regional Ethnic Autonomy Institutions Protect Communities from Narco Rule in Mexico. *Latin American Research Review*, 54(1), 181. <https://doi.org/10.25222/larr.377>

Summary: This article draws on the cases of Indigenous regions in the two Mexican states of Guerrero and Chihuahua, both areas with significant narco-trafficking and drug cultivation, to explore communities' ability to resist narco-intrusion. The authors argue that communities with a history of mobilization and where village-level Indigenous customary traditions have been scaled up into regional ethnic autonomy regimes are better able to resist the corruption and violence of organized criminal groups. (Search: N/A).

21. McSweeney, K., Richani, N., Pearson, Z., Devine, J., & Wrathall, D. J. (2017). Why Do Narcos Invest in Rural Land? *Journal of Latin American Geography*, 16(2), 3–29. <https://doi.org/10.1353/lag.2017.0019>

Summary: The authors provide insights into how rural landscapes are altered in favor of criminal organizations and narco-trafficking by laundering money through ill-gotten lands. The article highlights how narco-traffickers grab land by attempting to buy out peasants and Indigenous people, thus dispossessing them, or forcefully conduct business to buy out the land (evidence of confrontation), or forge papers with signatures of landowners, or the previously deceased. Corruption comes into play when narcos go to 're-title' land in countries such as Honduras, where nearly 80% of land is improperly titled, and officials look the other way. This allows for easy payoffs or bribes to get land 'retitled.' (Search: Summons).

22. Tellman, B., McSweeney, K., Manak, L., Devine, J. A., Sesnie, S., Nielsen, E., & Dávila, A. (2021). Narcotrafficking and Land Control in Guatemala and Honduras. *Journal of Illicit Economies and Development*, 3(1), 132–159. <https://doi.org/10.31389/jied.83>

Summary: The authors illustrate how narco-traffickers in Guatemala and Honduras may use their influences to destroy or assimilate land authorities into their own structure. This inherently means there is a form of competition between original territorial authorities and those that the criminal network props up or subsumes (evidence of our competition pathway). Additionally, narco-traffickers will bribe people to sell their land, bribe the government, or use threats to achieve their end goals (evidence of corruption). The article also shows how threats can lead to violence and the dispossession of communities' lands. (Search: N/A).

23. Valdivia, F. del R., & Okowí, J. (2021). Drug trafficking in the Tarahumara region, northern Mexico: An analysis of racism and dispossession. *World Development*, 142, 105426. <https://doi.org/10.1016/j.worlddev.2021.105426>

Summary: Focusing on the Indigenous Rarámuri community in Mexico, this article shows how community-criminal relations can shift towards confrontation and increase the degree of social control that criminal groups have. As a result of the sustained threat of violence, the Rarámuri are continuously displaced, and their autonomy has been eroded. (Search: N/A).

24. Van Dexter, K., & Visseren-Hamakers, I. (2020). Forests in the time of peace. *Journal of Land Use Science*, 15(2–3), 327–342. <https://doi.org/10.1080/1747423X.2019.1699614>

Summary: This piece is an ethnographic study conducted in Putumayo, Colombia, that seeks to explain the high rates of deforestation in the region after the peace agreement in 2016. In a transition towards 'peace', forests and livable landscapes have changed dramatically, often in conversion to cattle ranching. This piece offers evidence of confrontation; land grabbing through killings and intimidation of community/social leaders can also be traced back to Indigenous land loss, for illicit actors to use land as financial collateral. (Search: Web of Knowledge).

25. Van Dun, M. (2014). Exploring Narco-Sovereignty/Violence: Analyzing Illegal Networks, Crime, Violence, and Legitimation in a Peruvian Cocaine Enclave (2003–2007). *Journal of Contemporary Ethnography*, 43(4), 395–418. <https://doi.org/10.1177/0891241613520452>

Summary: In Upper Huallaga, Peru, the strong presence of the cocaine industry has resulted in communities' coexisting and cooperating with traffickers. For criminal organizations to survive, most saw the need to adapt to the socio-political climate in a region in an effort to keep operations continuing and control the illegal industry. The article also offers evidence of corruption between politicians and illicit actors as well as limited evidence of confrontation. (Search: Web of Knowledge).

26. Vélez, M. A., & Lobo, I. (2019). Challenges of Organised Community Resistance in the Context of Illicit Economies and Drug War Policies: Insights from Colombia. *Journal of Illicit Economies and Development*, 1(1), 72–79. <https://doi.org/10.31389/jied.15>

Summary: This article addresses the open, violent confrontation faced by and resistance efforts of Afro-descendent communities in Colombia. Some of these communities have decided to eradicate illicit crops in their territory and, as a result, their community leaders were threatened and/or faced assassination attempts. Community members ultimately had to seek private forms of security and although they may have an active role in anti-drug policy, they face incredible challenges in doing so. (Search: Summons).

27. Vélez, M. A., Robalino, J., Cardenas, J. C., Paz, A., & Pacay, E. (2020). Is collective titling enough to protect forests? Evidence from Afro-descendant communities in the Colombian Pacific region. *World Development*, 128, 104837. <https://doi.org/10.1016/j.worlddev.2019.104837>

Summary: These authors argue that community titles and strong collective governance may positively impact deforestation efforts throughout Colombia as communities can define their own rules for natural resources and gain the ability to expel private companies and illicit actors. However, despite gains, communities argue that the state has not provided the tools or equipment necessary to protect against illegal deforestation. This article speaks to one of our core questions about the impact of collective titling and connects to work by Finely-Brook on how titles alone are insufficient. The article also offers additional evidence of community resistance to illicit actors. (Search: N/A).

28. Wrathall, D. J., Devine, J., Aguilar-González, B., Benessaiah, K., Tellman, E., Sesnie, S., Nielsen, E., Magliocca, N., McSweeney, K., Pearson, Z., Ponstingel, J., Sosa, A. R., & Dávila, A. (2020). The impacts of cocaine-trafficking on conservation governance in Central America. *Global Environmental Change*, 63, 102098. <https://doi.org/10.1016/j.gloenvcha.2020.102098>

Summary: Drug-trafficking organizations often employ corruption or violence to shape existing conservation and community institutions. In doing so, they undermine the legitimacy and access to resources of conservation and community actors and influence governance regimes. In Guatemala, Costa Rica, and Honduras, almost all people interviewed in the piece mentioned that leaders, public officials, and others have been murdered by narco-traffickers (clear evidence of confrontation). Corruption is also abundant between politicians who are funded or heavily influenced by trafficking organizations to provide access to land. Additionally, this article offers limited evidence of cooperation in contexts where traffickers are seen as preferable to state officials, and specifically park rangers, who are seen as alienating people of their resources though restrictive forest and fauna regulations. (Search: Web of Knowledge).

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