



WORKING PAPER

Potential risks to women’s land rights from climate actions: Exploring matrilineal communities in Colombia, Costa Rica, and Panama

Celine Salcedo-La Viña, Anamaria Martinez, Patricia Quijano

CONTENTS

About this working paper	2
Introduction	2
Methods	3
Findings	3
Moving forward: Mitigating risks	14
Appendix A: Case study partners	17
Glossary	17
Endnotes	18
References	22

Working Papers contain preliminary research, analysis, findings, and recommendations. They are circulated to stimulate timely discussion and critical feedback, and to influence ongoing debate on emerging issues.

Suggested Citation: Salcedo-La Viña, C., A. Martinez, P. Quijano. 2024. "Potential risks to women's land rights from climate actions: Exploring matrilineal communities in Colombia, Costa Rica, and Panama." Working Paper. Washington, DC: World Resources Institute. Available online at doi.org/10.46830/wriwp.23.00056.

HIGHLIGHTS

- Global action to combat climate change often relies on Indigenous Peoples and local communities' (IP&LC) lands, such as the Global Biodiversity Framework's 30x30 Target, Reducing Emissions from Deforestation and Forest Degradation in Developing Countries (REDD+), among others.
- Land tenure systems are gendered, hence the opportunities and risks of climate action will be borne differently by women and men. In matrilineal communities where women's land rights have strong social legitimacy, potential risks faced by women make for a compelling study of the intersection of land tenure, gender, and climate action.
- This paper explores how the failure to account for differential tenure systems and the gender context, combined with inadequate consultation processes, can risk eroding the traditional land entitlements and important social support structures enjoyed by women in matrilineal tenure systems.
- The essential roles played by Indigenous women in their communities and the centrality of secure land tenure to these roles require climate action to mitigate risks and ensure land rights for women.

ABOUT THIS WORKING PAPER

This paper examines three Indigenous matrilineal communities—or those in which kinship or lineage and inheritance systems are based on the maternal line—to identify potential risks to tenure security faced by women from climate actions, broadly defined as actions to combat climate change and its impacts. The communities are the Wayuu in Colombia, where wind parks are being developed; the Bribri in Costa Rica, where REDD+ negotiations with Indigenous Peoples are ongoing; and the Guna in Panama, where climate-induced relocation is pending. The research reveals that the women in the three communities face land tenure risks from the way climate actions are being implemented. Potential risks include the loss of their land entitlements, disruption of land-based livelihoods, and the erosion of matrilineal culture. A key contributory factor to heightened risks for women is inadequate consultation processes characterized by information and power asymmetries that fail to consider the community's traditional land tenure, governance systems, and culture. The paper ends with some recommendations on how to mitigate risks and ensure more equitable outcomes.

INTRODUCTION

There is growing cognizance by the international community of Indigenous Peoples and local communities' (IP&LC) land rights as a critical enabler of global climate goals. For example, IP&LC secure land tenure is highlighted as a significant contributor to achieving forest and biodiversity targets under the Glasgow Leaders' Declaration on Forests and Land Use and the Global Biodiversity Framework's 30x30 Target.¹ Global mitigation initiatives such as Net Zero by 2050 and Reducing Emissions from Deforestation and Forest Degradation in Developing Countries (REDD+) are often anchored on IP&LC lands, forests, and resources (Finn 2022; Cannon 2023; O'Neill et al. 2023),² whereas Indigenous knowledge and land management practices are endorsed by UN bodies such as the Intergovernmental Panel on Climate Change (IPCC) as key to strengthening climate adaptation efforts (UNCCN 2022). Yet, while essential to tackling the climate crisis, these global climate goals and initiatives also constitute another demand on IP&LC lands, exerting pressure on their tenure systems and governance, impacting tenure security, risking displacement and loss of livelihoods, and threatening cultural survival (Dunne and Quiroz 2024). Because land tenure systems are gendered—in that access and control of land are differentiated by gender—the opportunities and risks of climate actions that rely on Indigenous lands will be experienced

differently by women and men.³ Thus, to be equitable, strategies for the distribution of benefits and burdens in climate actions must address existing gender dynamics.

This paper explores gendered tenure outcomes of proposed climate actions, defined as actions or initiatives to combat climate change and its impacts (Sustainable Development Goal [SDG] 13; EUR-Lex n.d.).⁴ It will focus on the land tenure of women in matrilineal systems, defined as societies in which kinship or lineage is traced from the maternal line, and ancestral land is transmitted from mother to daughter (Shenk et al. 2019; Surowiec et al. 2019; FAO and IWGIA 2020).⁵ Indigenous matrilineal systems present a compelling entry point for study on the intersections between land tenure security, gender equity, and climate action because of the social legitimacy of women's land rights in these systems, where women's access and control over land and associated benefits are socially derived and secured regardless of legal recognition. Research shows that women's roles in matrilineal societies tend to be poorly understood, if not ignored or dismissed by external actors, which can lead to the erosion of women's land rights, even when no shift away from matrilineality occurs (Stege et al. 2008).

This paper investigates the experience of and risks to women's land tenure security in the context of specific climate actions. Two of the case studies relate to mitigation: wind park development and REDD+ (Wayuu in Colombia and Bribri in Costa Rica, respectively), and one relates to adaptation: climate-induced relocation (Guna in Panama). All three communities have faced challenges over the years brought on by development and commercial interests (e.g., mining, plantation agriculture, tourism) exerting pressure on their land tenure and governance systems. The climate actions presently being implemented pose further risks to those systems. Research reveals that matrilineal societies are more likely to transition away from matrilineality into other kinship and descent systems (patrilineal, bilateral) due to external influences and pressures, compared to patrilineal systems (Shenk et al. 2019), though this has not occurred so far in any of the three communities studied here. Delving into how the implementation of climate actions can potentially impact the tenure systems, women's land rights, and social networks and support systems in each of the three communities, the paper also suggests some ways to mitigate tenure risks and highlights what commitments to land tenure recognition can mean in practice. The paper is intended to form part of WRI's continuing research into Indigenous and women's land rights and participation in governance. This research theme is vital given the proven linkages between women's rights to land and productive assets and a wide range of benefits including improved family nutrition and health, food sovereignty, children's schooling, and more (UNHRSP 2017).

METHODS

This working paper applies a case study methodology, exploring three Indigenous matrilineal communities in Latin America where climate actions are being implemented. The focus on Latin America is based on WRI's ongoing research of Indigenous land and resource rights in the region and the donor's geographic priorities. The studies are exploratory and preliminary, elucidating the ways in which the lack of attention to Indigenous tenure systems and cultures by policymakers and implementors can potentially result in gendered risks and outcomes. Based on literature reviews, field visits to the three communities, and interviews with over 30 key informants, conducted between January 2023 and 2024,⁶ the authors examined the structure of the matrilineal tenure systems and the specific climate actions being implemented to understand the implications for women's land rights. The matrilineal systems of the three communities face many challenges, but in this analysis the authors focus on climate action as a potential source of change.

In each case, WRI partnered with a local organization to do interviews on the ground, organize field visits, provide feedback on drafts, and guide substantive accuracy.⁷ These organizations were formed by community members to address land tenure and cultural survival. They are, as follows:

- Indigenous Organization of La Guajira Yanama (Organización Indígena de la Guajira Yanama; YANAMA) in Colombia
- Association of Bribri Indigenous Women of Talamanca (Asociación de Mujeres Indígenas Bribri de Talamanca; ACOMUITA) in Costa Rica
- National Coordinator of Indigenous Women of Panama/Olowaili (Coordinadora Nacional de Mujeres Indígenas de Panamá/Olowaili, CONAMUIP/Olowaili) in Panama (see Appendix A for organizational descriptions)

This paper synthesizes the findings from each study, with a set of recommendations to mitigate potential risks moving forward.

Limitations: This paper is exploratory and presents a preliminary inquiry to help illuminate connections or associations between relevant factors, for example, the nature of community consultations and engagement in climate actions and gendered risks and outcomes for land tenure in matrilineal communities. It does not seek to establish causation between those factors and gendered risks and outcomes. The climate interventions studied are ongoing, and the active engagement of women and men in the communities (in different degrees) may yet mitigate gendered risks and produce more equitable outcomes. This paper also does

not interrogate the completeness of women's land rights—in terms of access, control, use, benefit, and management—given that the three communities have been experiencing tenure shifts driven by external influences (e.g., mining, commercial agriculture, armed conflict, land encroachment), and women are actively redefining their land tenure and status within the community. Finally, due to time and data constraints, the paper does not examine intersectional factors, (e.g., age, class, ethnicity, religion), which may result in divergent outcomes for different women in the community.

FINDINGS

The Wayuu, La Guajira, Colombia

The Wayuu is the biggest Indigenous group in Colombia with over 380,460 people, representing 20 percent of the country's Indigenous population (DANE 2021). Their ancestral territory is in La Guajira, Colombia's northernmost department or state. It is one of the poorest and most isolated regions, with weak state presence and a lack of basic services (water, electricity, roads, schools, health care) (Gonzalez et al. 2018; FAO and IWGIA 2020). The 1991 Constitution recognizes Indigenous lands as a special territorial regime called *resguardos indígenas* (Indigenous reservations), which were first established during the Spanish colonial period (Arts. 63 and 329).⁸ The Wayuu have collective title to Resguardo Wayuu Alta y Media Guajira (Upper and Middle Guajira), encompassing several municipalities and two-thirds of La Guajira (totaling 1.06 million hectares [ha]).⁹ The recognition of *resguardos* confers upon the Wayuu autonomous territory that is inalienable, imprescriptible, and unattachable, which they can manage according to their vision and culture. The Wayuu have codified their customary law in the Wayuu Normative System, which is recognized by the state (Ministry of Culture Resolution No. 2733 of 2009).¹⁰ The normative system requires prior informed consultation for any development initiative undertaken by the state and the primacy of Wayuu customary law in dealings with non-Wayuu individuals or entities.¹¹

Matrilineal tenure. The Wayuu people of La Guajira organize their society around matrilineal clans and extended family territories or homelands that are delineated by ancestry markers like cemeteries, cultivation plots, and specific trees. Within their homelands, the Wayuu live in dispersed settlements called *rancherías*, ranging from 50 to 300 inhabitants, which share communal resources like water (*jagueyes* or artificially formed reservoirs) and corrals for their goats (Gonzalez et al. 2017). *Rancherías* and *jagueyes* have limited accessibility due to lack of roads and infrastructure (Rasolt 2019).

Affiliation with a clan (*eirruku*) attaches to members from the moment of birth and is passed down through maternal descent. Under the Wayuu theory of procreation, only women can “magnify” or “multiply” an *eirruku*, and their land tenure system and territorial dynamics are centered on women as clan originators (Pers. Comm. 2022, 2023f). There are presently about 30 clans, each with its own territory. There is no determined residence rule, although it is common for a group of maternal siblings and cousins of both sexes to live in nearby dwellings within a *rancheria*. However, couples may also live near the husband’s family, based on opportunities for subsistence, close family ties, or polygamy. Postmarital residency does not in itself mean establishing permanent residence, which remains in the maternal territory and is reasserted through periodic visits and seasonal residence.¹² While land inheritance and rights follow the maternal line, men hold major decision-making powers regarding clan land (Pers. Comm. 2022). Sons can also inherit from mothers, although nieces have precedence. Men cannot buy land, but families may make concessions to private entities or the government for specified periods. There have been exceptions and challenges to traditional inheritance rules through the years due to greater integration into mainstream society (see *Challenges* below) (Mancuso 2006; FAO and IWGIA 2020).

Livelihoods-wise, the Wayuu traditionally practice semi-nomadism across La Guajira, following seasonal patterns for agriculture and grazing livestock. The region’s semi-arid climate limits agriculture to subsistence, with pastoralism being the main economic activity. Men hold primary roles in herding, and, for those living in coastal areas, fishing. Women manage most agricultural tasks including marketing and production and sell traditional handicrafts such as bags (*mochilas*), woven hammocks, and bracelets (FAO and IWGIA 2020).

Land governance. The Wayuu do not have a centralized organization that represents their collective vision and interests as a people. They have a decentralized system characterized by political autonomy and social reciprocity. Wayuu clans have a leader and a head of the family, called “*alaula*” or uncle, who is an older male who is usually monolingual. The *alaula* is the knowledge-holder of clan territory, its boundaries, oral history, and lineages. He has authority over monitoring ancestral lands and natural resources, controlling access of strangers, giving advice on minor conflicts, and making decisions based on family consensus. However, control of trespassers is a challenge, especially armed actors—rebel groups, paramilitaries, and those engaged in illegal activities¹³ (Medina 2014; Premauer and Berkes 2015; Pers. Comm. 2023g). Another authority in Wayuu lands is the *pal-abrero* or *pütchipüüi*, charged with resolving intra- and interclan conflicts. The *palabrero* is the interpreter of Wayuu ancestral justice and an impartial mediator figure (MinCultura n.d.).

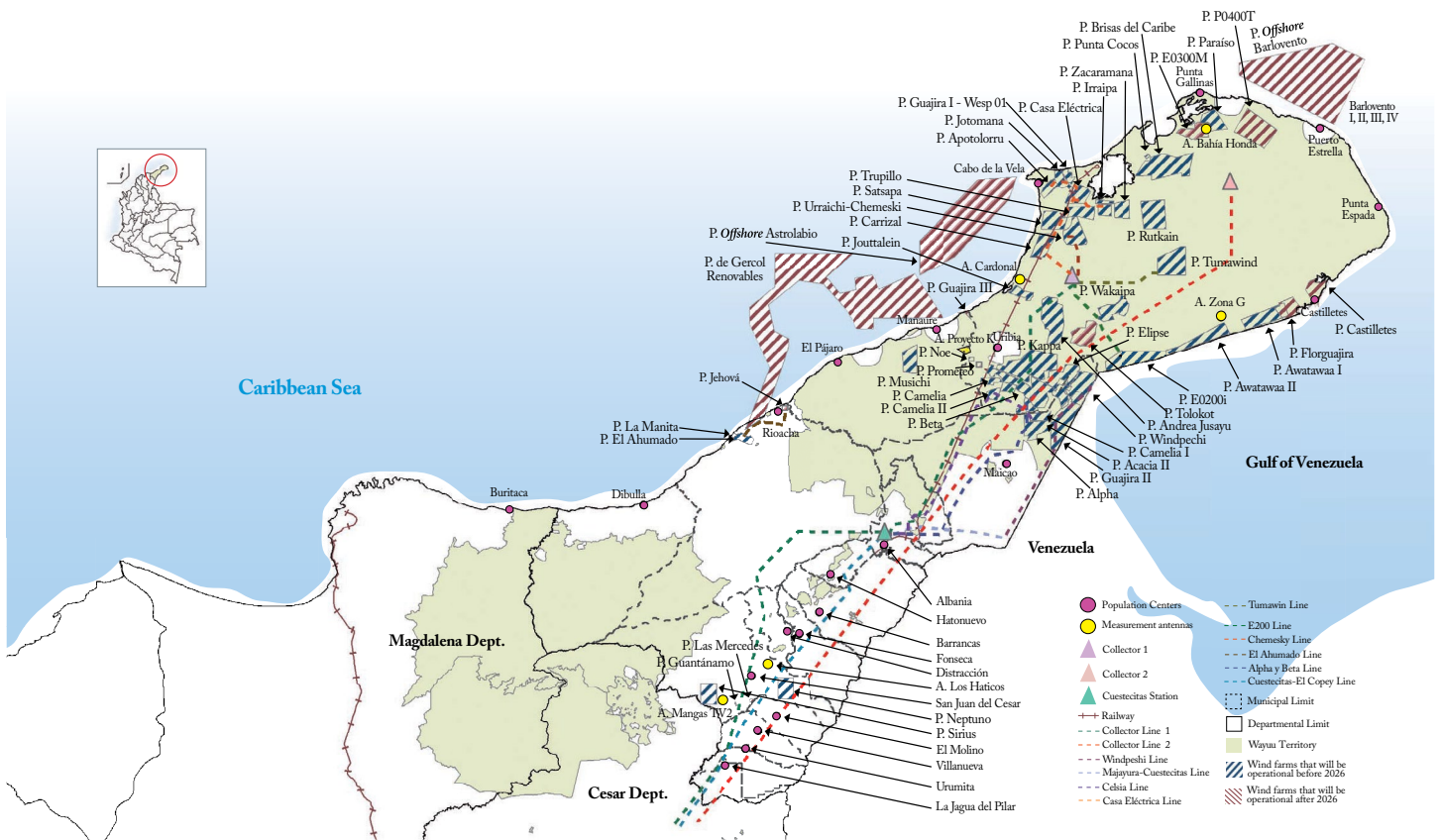
Wayuu lands also have state-recognized traditional authorities (under Decree No. 1088 of 1993) who are mandated to represent Wayuu clans and mediate with the state on their behalf, with some bypassing ancestral leadership (Polo 2017; Sánchez 2021). Women typically do not hold formal leadership positions, although they have formed organizations to lead collective actions and advocate for Wayuu rights.¹⁴

Challenges. The importance of clans in determining Wayuu identity has diminished over the last few decades, replaced by a gradual nuclearization within Wayuu families (Ángel 2022). Currently, the Wayuu matrilineal system operates within a context marked by urban migration; extractive projects such as the El Cerrejón coal mine—the largest open-pit coal mine in Latin America; and Colombia’s long-lasting armed conflicts, which have caused displacement, weakening of cultural identity, and environmental destruction.¹⁵ Since the 1980s, with the arrival of multinationals and paramilitaries in Wayuu territory, women have played key roles as intermediaries with the outside world and as defenders of Indigenous rights (Pers. Comm. 2022, 2023g). They have been targeted by paramilitaries and illegal actors who attack Wayuu internal leadership and cohesion through sexual violence and hurting the honor of Wayuu men (GTMH 2010; Medina 2014). Despite this, Wayuu women’s leadership has strengthened as women gained increased access to education, media, and international networks to organize themselves and advance Wayuu causes (Medina 2014).

Climate Action: Colombia’s wind energy program in La Guajira

La Guajira peninsula boasts one of the highest concentrations of wind resources in the country, with wind speeds double the global average (9 meters/second [m/s]), making it an attractive location for wind power generation. The Colombian government has prioritized wind power from La Guajira as a crucial component of its renewable energy strategy through the installation of 2,500 wind turbines, according to the Ministry of Mines and Energy (Ministerio de Minas y Energía; MME)¹⁶ (Rubiano 2022; Torrado 2022). Under Decree No. 2164 of 1995 resguardos are subject to easement established by law,¹⁷ including for infrastructure projects of national or regional interest, conditioned upon prior consultation with community authorities and the issuance of an environmental license, determining the corresponding compensation, benefit, and participation (Art. 23). Nonconventional energy projects are deemed projects of strategic national interest under the Energy Transition Law (Law No. 2099 of 2021), granting investors the right to occupy any territory essential for the project (González 2022; Ulloa 2023). As of January 2024, there are 48 wind park projects in various stages of development across La Guajira, individu-

Figure 1 | Location of wind projects in La Guajira



Source: Barney 2023, 55. (Some place names and terms in Spanish translated to English by Authors.)

ally negotiated by a project proponent with Wayuu clans and families, although only two are currently in operation (Guajira I 20 megawatts [MW], and Joutkai 32 MW). Wind parks have attracted significant investments exceeding Col\$10 billion and are expected to generate approximately 11,700 direct and indirect job opportunities for the region. The majority of wind parks are planned for Wayuu territory in Upper and Middle Guajira, and would affect at least 288 Indigenous communities (see Figure 1; González and Barney 2019; MME 2023; Vega-Araújo et al. 2023).

Colombia's Constitutional Court has ruled that prior consultation (*consulta previa*), culturally adapted, is mandatory for the issuance of environmental licenses for any project in resguardos (Constitutional Court Sentence SU-123 2018; Vega-Araújo et al. 2024). Additionally, the MME has required wind park developers to allocate 1 percent of energy sales to initiatives directly impacting the quality of life for communities within the projects' sphere of influence (Torrado 2022).

Community participation is restricted to consultation, but there is a lack of clear institutional guidelines to make it inclusive and meaningful. Corpoguajira, the regional environmental agency responsible for overseeing these projects, lacks the resources and capacity to ensure meaningful community engagement, with only a small fraction of its staff (5 out of 113) dedicated to renewable energy issues (González 2023; Monsalve 2023). The Wayuu and their advocates report that the consultation processes have been inadequate, often rushed and lacking in cultural sensitivity, characterized by massive power imbalances.¹⁸ Project developers often fail to provide the information communities need to make properly informed decisions. There are cases where companies arrived in rancherías offering supplies such as small livestock, materials for handicraft-making, solar panels, and food in exchange for signatures, and then used these signatures as evidence of consultation (González and Barney 2019). In many communities, support for the wind parks is driven by poverty (Vega-Araújo et al. 2023).

Wind companies have displayed a lack of awareness of the Wayuu's land tenure system, some assuming from a Western mindset that whoever is inhabiting the land is the owner. But then the ancestral landowners may appear and assert their claim. This happened in the case of the Jepírachi wind farm, the first in La Guajira. Two clans fighting for control of ancestral land resulted in an operational stoppage lasting several months (Rubiano 2022; Pers. Comm. 2023e, 2023g). The absence of standards and safeguards for community compensation and benefits for wind and other extractive projects disadvantages communities in negotiations permeated by knowledge and power asymmetry and extreme poverty. Negotiated benefits can vary widely. A group of 16 communities who consented to a 1,500-hectare wind farm on their lands agreed to in-kind compensation in the form of combined community projects per year—running water, electricity, health center (what should be public services), and a smaller amount in projects per month for each community (20–40 people) from the time the company receives its environmental license to the time project construction commences. In another project, the affected communities will receive cash compensation, among other items, at a value per installed megawatt, updated each year with the consumer price index (Noriega 2020; Monsalve 2023).

Inadequate consultations have triggered interclan disputes that have sometimes turned violent, causing delays or even the indefinite suspension of some projects (Monsalve 2023; Vega Araújo et al. 2023). At least nine people have been killed and six communities displaced since 2019 from conflicts sparked by wind park projects (González and Barney 2019). Conflicts have arisen because companies—unknowingly or purposefully—negotiated with leaders not considered rightful and unauthorized by the family or community, or with state-appointed authorities, or with members of the paternal line who are not landowners instead of the recognized ancestral clan authorities (alaula) (Noriega 2020; Monsalve 2023). In one Wayuu community, the nephew of a community leader negotiated and accepted payment from the company for land bordering the ancestral cemetery, which family members subsequently opposed. In the Jouktai and Guajira I wind farms, nearby communities that would be affected by the wind farm were left out of consultations (Dalmases and Sánchez 2021; Monsalve 2023). In some cases, state-appointed authorities fail to adequately communicate the results of consultations to the communities, fueling concerns of inequitable distribution or misuse of funds by community leaders (Pers. Comm. 2023e). The wind park projects have revived confrontations between members of different clans, causing displacement (González and Barney 2019; Rubiano 2022). The simmering violence has led to military deployment in Wayuu lands as requested by companies (Torrado 2022).

Similar conflicts occurred when oil companies arrived in the region in the 1970s, and clans violently disputed control over different portions of the land, with some ending up in exile. Likewise, the arrival of coal companies in the 1980s resulted in the eviction of at least five communities from their ancestral territories, and although they received some compensation, they were never resettled, and many ended up drifting to precarious lives in nearby cities (Balch 2013).

Implications for women's land rights

Loss of ancestral land. Conflict and displacement both result in the loss of ancestral land. For women, this means the loss of specific ancestral property they are entitled to under the matrilineal tenure system. They also lose the support system provided by the extended matrilineal families in rancherías. Finding enough land to resettle will be challenging for displaced groups. Even if land is available, land acquisition is typically governed by statutory systems that favor privatized, individual ownership and titles, especially in and around urban areas. This can precipitate a transition away from the matrilineal system that is anchored on collective ownership. Women are also less able to purchase land on their own as they often have lower income and educational levels, and lack access to credit or proper identification documents needed to purchase land (Posas 2013; Roberts 2021). Finally, should the displaced group return to their territory, reclaiming ancestral land that has been converted to other uses (including wind farms) or occupied by someone else will be immensely challenging and a source of conflict (Pers. Comm. 2022). The loss of land tenure security by women will have intergenerational impacts, as their daughters and other descendants will be moved out of the matrilineal system, and the use and distribution of resources will follow nontraditional practices.

Disruption of livelihoods and culture. Wind projects have led to changes in traditions, particularly in the context of matriliney, where land tenure security benefits are established for the maternal kin. This contrasts with project proposals suggesting benefits for all, without regard to specific cultural entitlements (Pers. Comm. 2023e). Consultations are conducted, not with ancestral authorities, but with state-appointed authorities who do not necessarily belong to the matrilineal clan. Prioritization of interests and distribution of benefits generally do not correspond to traditional matrilineal cultural traditions or structures. Previous experiences with megaprojects in La Guajira (e.g., coal mining) demonstrate the potential risks, not only of loss of territorial control and disruptions to land-based traditional livelihoods, but also of a decline in Indigenous communities' political and cultural autonomy (Guerra 2011). A shift away from heritage practices such as pastoralism to nontraditional economic activities such as project employment risks diluting

Figure 2 | La Guajira's semi-arid landscape



Source: Authors 2022.

of traditional values and practices within the community (González and Barney 2019; Rubiano 2022). Territorial fragmentation can result in restrictions on movement that can further isolate communities and hinder the preservation of cultural traditions. A woman leader lamented that the arrival of outsiders, project employees, and migrants seeking opportunities perpetuates a culture of machismo, or dominating masculinity, in which women often play secondary roles and matriliney is weakened (Pers. Comm 2023f).¹⁹

Violence against women leaders. The conflicts engendered by the wind park projects have also resulted in the killing of women leaders.²⁰ The death of Aura Esther García, a Wayuu woman leader, shows a potential link between three energy companies and an unidentified armed group interested in controlling a wind park area (Barney 2021). Another case, an interclan conflict for control of land, ended in the eviction of a clan and the killing of another woman leader. According to her niece, the rival clan took her clan's land to bolster their own claim for compensation from an energy company (González 2023; Rogozenska 2023). Attacks toward men and women activists have been constant throughout Colombia's armed conflict and the development of megaprojects, such as the El Cerrejon coal mine or the strategic port of Bahía Portete in Uribia, La Guajira. Within the context of generalized impunity and weak rule of law, Wayuu women have been subject to attacks by paramilitaries and even by rival clans in an effort to break internal cohesion and spread terror, contributing to displacement and the loss of land and cultural identity, potentially eroding the matrilineal tenure system (Medina 2014). Despite these challenges, women forge ahead to defend the social fabric of the Wayuu (Duro 2018).

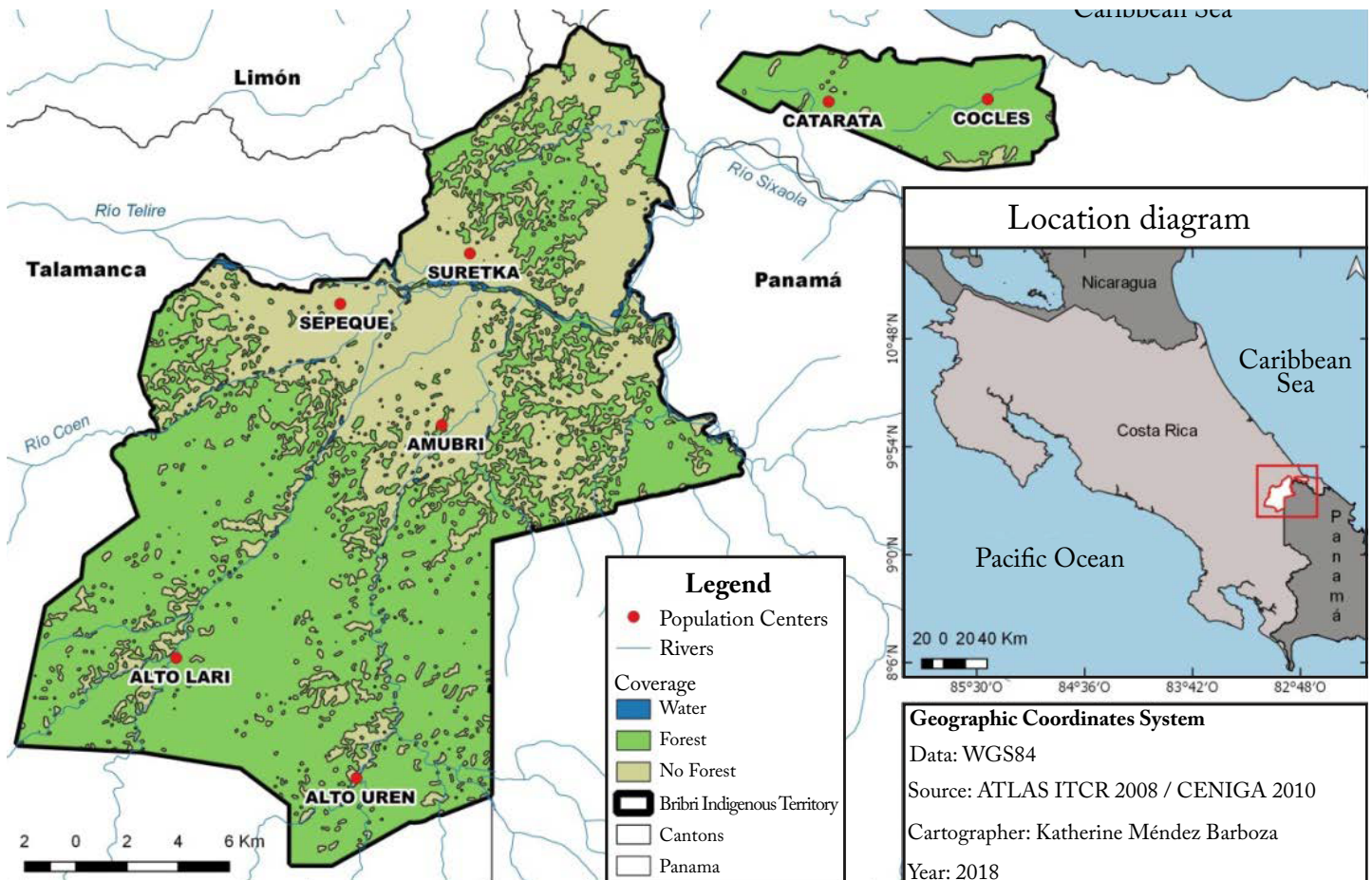
The Bribri, Talamanca, Costa Rica

The Bribri are the largest Indigenous community in terms of territory and membership in Costa Rica, with more than 11,000 members (Solano 2002), dispersed in four territories: Salitre, Cabagra, Këköldi, and Talamanca. Their close relationship with land and natural resources, as well as their customs, systems, and traditional practices, have allowed them to conserve and sustainably use their forests (see Figure 3; MINAE 2020). The Bribri are agriculturists, traditionally growing staples such as maize, beans, cacao, and yuca (cassava). They also hunt, fish, gather wild foods, and keep poultry and occasionally cattle (MyS et al. 2014).

Costa Rica's recognition of Indigenous land rights was first established under Law No. 45 of 1945, which declared *terrenos baldíos* (untitled lands) occupied by Indigenous Peoples (IPs) as their inalienable property and mandated the creation of a commission to establish the borders and manage Indigenous lands. It was not until 1956 that Indigenous lands were first delineated, and only in 1973 that the first Indigenous reserves were officially established by decree. Meantime, extensive portions of those lands were occupied by non-Indigenous settlers (Blau 2017; Mosley 2018). In 1977, the Indigenous Law of Costa Rica (Law No. 6172) created 24 Indigenous reserves (*reservas indígenas*), including the Bribri reserves, declaring them inalienable, imprescriptible, nontransferable, and exclusive to their Indigenous inhabitants, to be governed according to Indigenous traditional structures and laws. The law provides that non-Indigenous settlers living in good faith in *reservas indígenas* will be relocated by the state in other similar lands or their land would be expropriated and returned to the Indigenous community. However, decades later the return of Indigenous lands remains uncompleted. About half of Bribri territory continues to be occupied by non-Indigenous settlers, while in other Indigenous reserves it ranges between 10 percent to 75 percent (Chacón 2005; Malcolm 2020; Brown 2022).

Matrilineal land tenure. Traditional Bribri society is organized by clans or extended family along the maternal line. In Talamanca, there are about 25 familial clans and more than 6,800 Bribri (Solano 2002). Land is held as a form of clan property, passed down through the maternal line, while forests are collectively owned and considered sacred (Porrás and Picado 2016). Anyone linked to the line, including husbands of women of the clan, acquire use rights to farmland, which is held for one's lifetime. The Bribri practice matrilineal residence, in which a man moves to his wife's clan land after marriage (Blau 2017; Pers. Comm. 2024).

Figure 3 | Map of Bribri Territory in Talamanca showing forest cover



Source: Marín-Herrera et al. 2021, 10. (Some place names and terms in Spanish translated to English by Authors.)

Governance. The Indigenous Law allows the Bribri to create traditional community structures as their own organizational system, but to acquire legal personality, the law's implementing regulations require them to organize in each territory through a public interest entity called the Integral Development Association (*Asociación de Desarrollo Integral*; ADI) under the Community Development Act (Law No. 3859, 1967).²¹ The ADI consists of a general assembly (GA) of members, board of directors (*junta directiva*), and executive secretary.²² The ADI legally represents the territory, with tasks including managing the territory and defining local development priorities (Law No. 3859; Florián and Diaz 2016). Women actively participate in the GA and its working groups. ADI board members have typically been men, but the current board composition of the Talamanca Bribri Integral Development Association (*Asociación de Desarrollo Integral Indígena Bribri*; ADITIBRI) is three women and four men, with women holding the positions of president, vice president, and treasurer. The executive secretary,

responsible for ensuring that the board fully complies with the functions assigned by the GA and for reporting anomalies, has always been male (Pers. Comm. 2024).

Challenges. The Bribri matrilineal clan system has been strained over the years. Currently, families rather than clans typically own land and agricultural parcels. Men and women possess communal and individual farms. Land disputes are becoming increasingly common, even within families, often involving how land—which under customary norms should follow matrilineal inheritance—is going to be handed to the next generation (Posas 2013). A long-standing challenge faced by the Bribri is the uncompleted return of Indigenous lands settled by non-Indigenous people. State inaction, despite the legal mandate for them to return Indigenous lands, has prompted Indigenous communities to reclaim their lands through reoccupation. From 2010 to 2022, Indigenous communities have recovered about 13,000 hectares within Indigenous reserves (Brown 2022;

Calma 2024), but this has often been marked by violent conflict. In 2015 the Inter-American Commission on Human Rights (IACHR) required the state to adopt precautionary measures to protect Bribri and Teribe Indigenous leaders who are reclaiming their lands (IACHR 2015). The state launched the National Plan for the Recovery of Indigenous Territories in 2016, but again failed to follow through on implementation (Zúñiga 2023a). The conflict has led to the killing of Indigenous leaders, including Bribri leader Sergio Rojas Ortiz in 2019 (Brown 2022). The presence of non-Indigenous settlers in Indigenous reserves has undermined community social fabric, creating divisions among Bribri and causing the loss of identity, knowledge, languages, and food sovereignty (Calí Tzay 2022).

For Bribri women, the entry of multinational agribusiness, particularly the expansion of banana monocultures in the 1950s, led to loss of land and undermining of the matrilineal social structure.²³ Men left to work at banana plantations and women stayed home or also found work in the plantations in unskilled jobs that paid much less. Men returned from the plantations with a new-found sense of machismo and power. Women lost their status while male dominance was perpetuated and passed to the next generation (Pers. Comm. 2023d). Young people who work for large fruit corporations often do not return to their home communities. Bribri women have lamented that the fruit industry has weakened their cultural heritage, environmental well-being, and social capital (Blau 2017).

To regenerate their culture, starting in the 1990s, Bribri women in Talamanca have organized themselves economically and politically. For example, some organized the Association of Indigenous Bribri Women of Talamanca (Asociación de Mujeres Indígenas Bribri de Talamanca; ACOMUITA) to help Bribri and Cabecar women reclaim ancestral land and become cacao producers (practicing agroforestry) to attain financial independence and political voice. Another organization, Asociación Stibrawpa (artisans), was formed to promote ecotourism and traditional agriculture for women's economic independence and cultural preservation (Blau 2017; Pers. Comm. 2023d). Although the matrilineal system has changed, women now play a more active role in decision-making in the clans and the community. This is passed on to the next generation, as younger women are inspired by observing older women participate in territorial organizations (Pers. Comm. 2023d).

Climate action: REDD+

Reducing Emissions from Deforestation and Forest Degradation in Developing Countries (REDD+) is a mechanism under the United Nations Framework Convention on Climate Change (UNFCCC) that helps forest-rich developing countries pro-

tect and value the carbon and ecosystem services their forests provide and receive financial compensation from Global North countries, multilateral funds, and private companies (Bertazzo 2019). Costa Rica was one of the drivers of the multilateral process for REDD+ in 2005 (Wallbott and Florian-Rivero 2018). Since then, it has taken steps at the national level to participate in REDD+, including by initiating information and pre-consultation processes in the forest-rich Indigenous territories in the southern part of the country, where Talamanca, one of the most densely forested regions, is situated. The process began in 2008 with the development of National REDD+ Strategy and Plan, culminating in 2014 when Costa Rica became a UN-REDD partner country. In 2022, it became the first Latin American country to receive REDD+ payments, amounting to US\$16.4 million for reducing 3.28 million tons of carbon emissions in 2018–2019. REDD+ in Costa Rica builds upon its national program on payments for ecosystem services (PES) (Wallbott and Florian-Rivero 2018; Marín-Herrera et al. 2021; World Bank 2022).

Not all Indigenous groups are on board with REDD+. The Bribri have been the most outspoken in opposing both its processes and premises. They contend that consultations with ADI boards plus a few other organizations were inadequate and did not represent the opinions of other segments of the community. Many Bribri report being unaware of the process, not having access to information, and lacking clarity about the different stages, actors, and contents of the consultation process. They also assert that REDD+ puts a price on nature, which is contrary to their Indigenous worldview, which considers forests and nature as sacred. They express wariness about the seeming privatization of Indigenous territory and resources and have doubts as to the positive impacts of PES, both in its conservation logic and its management of economic resources (Mosley 2018; Marín-Herrera et al. 2021).

To move forward, in 2012 the state jointly developed with IPs a consultation plan for Indigenous territories, and in 2014 established a pool of Indigenous mediators to aid in consultation (Wallbott and Florian-Rivero 2018).²⁴ Thereafter, in 2018 the state issued Executive Decree No. 40932 setting forth five priority themes for REDD+ in Indigenous territories: (1) land tenure security and restitution; (2) adaptation of PES; (3) recognition of Indigenous cosmology in conceptualizing forests and conservation; (4) clarifying management of protected areas; and (5) participatory evaluation and monitoring (Wallbott and Florian-Rivero 2018; Pers. Comm. 2024). The Bribri are currently reassessing their stance on REDD+, awaiting concrete plans and actions on their priority issues.

Implications for women's land rights

As a matrilineal society, the five priority themes for REDD+ in Indigenous territories spell additional risks for the Bribri. Two risks particularly require distinct adaptations to protect the matrilineal tenure system.

Loss of land rights. Costa Rica's REDD+ strategy recognizes the necessity of returning Indigenous lands occupied by non-Indigenous settlers. But it is not clear how land restitution will be managed—whether lands will be redistributed to the clans according to matrilineal lineage or registered in the name of the ADI as the state-mandated legal representative of the community and the main entity that negotiates with the state regarding REDD+. Registering restituted land to the ADI risks further eroding the matrilineal tenure system since ownership and decision-making on communal lands are shifted from traditional authorities or council of elders representing the clans to an institution imposed by the state with members elected at large. This shift on how land is governed can have profound impacts on the traditional land entitlements of Bribri women, not only with respect to restituted lands but also potentially to currently owned clan or family land. Without mechanisms for respecting matrilineal systems in the land restitution process, women can lose out. A parallel can be drawn from the experience in the national PES program, whereby the ADI serves as signatory to Indigenous PES contracts and as recipient of the payments. Lacking clear rules in the PES program for managing compensation within communities, there have been conflicts regarding how the payments are managed by the ADI boards, ranging from the types of investments made to the perceived distribution of payments to favored families (Mosley 2018; Marín-Herrera 2021). There is a risk that, absent mechanisms for respecting customary tenure systems, the ADI will veer away from matrilineal and hold restituted land as a privatized collective valued for its carbon storage, following the market-based logic of REDD+. This accords with research showing that matrilineal systems tend to be more vulnerable to kinship change after integration into modern market systems (Schneider and Gough 1961; Shenk et al. 2019).

Loss of livelihoods. The emphasis of Costa Rica's REDD+ strategy on forest conservation and prohibition of land use change to enhance carbon stock can disrupt the Bribri's use of their territory. Bribri forest conservation is integrated with forms of production, including hunting, plant extraction for medicinal and other purposes, tree felling for construction, and small crop cultivation (citrus, banana, cacao). Forests are also integral to Bribri spirituality, which has allowed them to maintain one of the most densely forested areas in the country (Mosley 2018; Wallbott and Florian-Rivero 2018; Marín-Herrera et al. 2021).

Figure 4 | Cacao agroforestry in Talamanca, Costa Rica



Source: Authors 2023.

For Bribri women, limiting their use of forests will negatively impact livelihoods. Many rely on cacao agroforestry for their livelihoods and food security (Pelliccia 2021). Others depend on nature tourism as an alternative to out-migration and working in monoculture plantations. In Yorkin village, tourism earnings have funded a health clinic, a high school, an aqueduct, and a community center (Fariña 2012; Responsible Travel n.d.).

Bribri women have been actively participating in the discussions and have proposed two more priority themes for Indigenous REDD+ in addition to the abovementioned five already agreed with the state: (1) gender, culture, and language; and (2) tourism. The first calls for the recognition and integration of the Bribri matrilineal system and women's roles as producers, and the protection of the Bribri language as part of their culture. The second is the recognition of tourism activities in REDD+, given its importance to Bribri livelihoods (Pers. Comm. 2024).

The Guna, Gunayala, Panama

The Guna occupy four politically autonomous reservations in Panama: Gunayala, Madungandi, Takarkunyala, and Wargandi. This study focuses on Gunayala, consisting of a series of islands off Panama's Caribbean coast (365 islands of which 49 are occupied by the Guna)²⁵ and an adjacent strip of forest in the mainland²⁶ that borders two provinces, Darien Province and Panamá Province, and considered one of the best-preserved forests in Central America (Anaya 2014; Guerra 2014). The population of Gunayala is 32,016 (2023), dispersed in the different islands (City Population 2023).²⁷ The Guna have lived between the sea and the forest for over two centuries.²⁸ Climate change is challenging their way of life.

Gunayala was the first legally recognized Indigenous reservation (*comarca*), through Act No. 2 of 1938 and successive legislation. Act No. 16 of 1953 established its boundaries, formalized governance bodies, and conferred autonomy and sovereignty over its terrestrial and marine resources, while Act No. 20 of 1957, declared Guna lands as inalienable. Additionally, Panama's 2004 Constitution guarantees collective ownership of Indigenous lands and respect for Indigenous ethnic identities, cultures, and values; and Law No. 37 of 2016 established IPs right to free, prior, and informed consent (FPIC). These laws give the Guna one of the highest degrees of political autonomy and self-governance among IPs in Latin America (de la Plaza 2015; Zúñiga 2023b).

Matrilineal land tenure. For the Guna, the extended family serves as the basic unit of society, consisting of two or more generations of women and their families: the senior couple (matriarch and her husband), unmarried children, and married daughters with their husbands and children (Prestan 1975).²⁹ Residence is matrilineal, with men moving to their wife's home upon marriage. Guna women own family land in the islands and fields in the mainland, along with everything that grows on it—especially coconut palm, which is native to the islands and a significant source of income.³⁰ Men are charged with cultivating family fields on the mainland, fishing, collecting fruits that grow in the rainforest, and sustainably hunting. The senior couple decides what crops need to be planted. As food preparers and distributors, women are seen as the family providers and many control the household budget. Guna culture does not assign hierarchy to the value of work: farming, fishing, and other male labor are seen as complementary to the female labor of cooking, raising children, and the making of *molos*, the traditional fabric and clothing worn by Guna women, which are also sold and are an important source of income. Family land in the islands and mainland belong to women and are primarily inherited by daughters, but men can also inherit and own land individually by clearing communal forest in the mainland to create farm plots; and both daughters and sons can inherit their father's plots (Arias and López Alba 2021; Scull 2023).

Governance. Each island community in Gunayala is traditionally governed by a local congress composed of community members and presided over by a chief called *sagla*, who is simultaneously a political leader and a spiritual and cultural guide³¹ (Arias and López Alba 2021). Local congresses manage island territory and may grant the use of land to non-Guna for facilities such as health centers, churches, schools, etc., but the land remains Guna property. Each island has standards of responsibility for community members for collective work, including cleaning of roads and pathways, construction of houses or canoes, etc., with nonparticipation subject to punishment or fines (Arias and

López Alba 2021; Gunayala Fundamental Law [GFL], Art. 226). At the *comarca* level, there are two governance bodies: The Guna General Congress (General Congress) is the highest political-administrative body led by three *sagla dummagans* (chieftains) and meets twice a year with five delegates each from the 49 islands to decide on region-wide activities (GFL, Arts. 9 and 12).³² The General Congress of the Guna Culture (Cultural Congress) is the highest body that protects and disseminates the Guna historical-cultural heritage, consisting of traditional authorities from each of the 49 communities (Art. 7, GFL). It is also led by three chieftains and meets thrice a year with representatives from each community. Men dominate the public sphere, but domestic relations are equal: decision-making is mostly by consensus and women's opinions are valued (Salvador 2003). Currently, there is increasing political participation of women.

Changes over time. The public position of Guna women has been enhanced in recent years by new rules on representation in the General Congress, which now requires at least one woman and one youth in each five-member community delegation. Women have also been elected as *sagla* and have organized themselves to form women-only farming collectives to diversify their livelihoods.³³ With the entry of tourism in the islands,³⁴ women found new sources of income through the sale of *molos* and other handicrafts, which can exceed what men earn by diving for lobsters or cleaning tourist boats (Arias and López Alba 2021; Scull 2023). However, tourism, the state educational system, and out-migration to cities for work are ushering in cultural transitions for the Guna. In Panama City, where Guna emigrants have formed an urban enclave, the sense of community is still strong, but the matrilineal tenure system is no longer consistently practiced. When the neighborhood was newly established, only men with proof of employment were eligible to acquire land for housing. It was not until much later, after a woman became neighborhood president, that women were allowed to acquire land in their own name (Martínez Mauri 2020; Dam Lam and Gasparatos 2023; Pers. Comm. 2023a).

Climate action: Climate-induced relocation

Rising sea levels in the Caribbean first came to the attention of the Guna in the 1990s. At that time, some of the islands were also starting to grapple with population increase and overcrowding. Many residents took to reclamation or "infilling" to extend the land area, mainly using natural coral collected from surrounding reefs, but also rocks, cement blocks, and even plastic garbage. Although infilling raised houses to buffer against rising sea levels, the practice ended up destroying coral reefs and exacerbating the islands' exposure to storms and strong currents (Displacement Solutions 2014; HRW 2023). The problem of sea

level rise and climate change became more pressing in the 2000s after several severe storms struck Gunayala. This time, relocation to the mainland arose as a potential solution for some island communities. The General Congress enjoined local congresses to develop contingency plans for the climate challenges they now face (Displacement Solutions 2014).

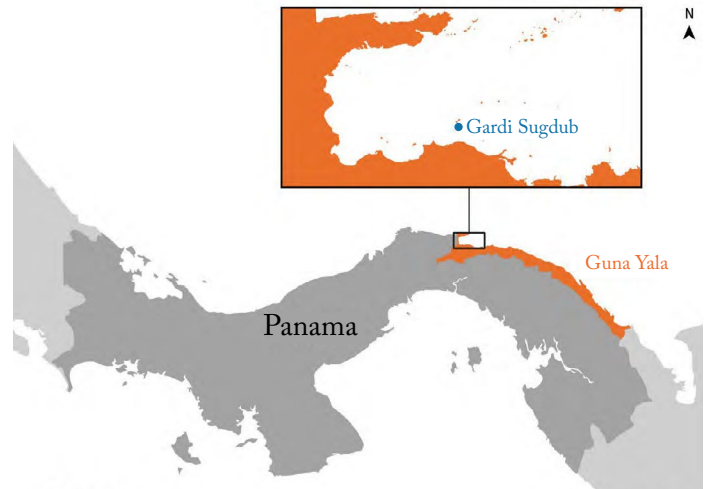
Panama's Ministry of the Environment estimates that sea level along the country's Caribbean coast will rise significantly by 2050, with the Gunayala archipelago among the most affected (HRW 2023). Similarly, the Smithsonian Tropical Research Institute in Panama reported that the Gunayala islands will eventually all be underwater and uninhabitable due to sea level rise, with some islands needing to be vacated sooner than others (Newsome 2023).

One of the islands that has decided on mainland relocation is Gardi Sugdub, which has long been struggling with overcrowding and flooding (see map in Figure 5). Residents describe how, in November and December of each year, heavy rains and high waves inundate their island, with floodwaters remaining for up to two weeks at a time. During particularly intense storms, residents suffer severe damage, including parts of houses on the island's edges washing away at sea and destruction of community infrastructure. Livelihoods and food sources are affected, as residents cannot fish or row to their fields in the mainland, and island tourism halts (HRW 2023).

In 2010, local leaders in Gardi Sugdub created a committee to organize the process of relocation. The following year, the committee identified two plots, then secondary forests in the mainland, as the site for the new village.³⁵ Around the same time, the government announced two new development projects for Gunayala—a school and a hospital near the relocation site (Displacement Solutions 2014). The community completed clearing the plots for the relocation site, school, and hospital at their own cost in 2015, at which time Panama's Ministry of Housing offered to build the houses in the relocation site³⁶ and provide infrastructure (potable water, sanitation, road access) according to a relocation blueprint called "Nuevo Cartí" (Displacement Solutions 2015; HRW 2023). The Housing Ministry also commissioned a socioeconomic survey, including assessing potential housing beneficiaries (Displacement Solutions 2016). This survey, together with the Guna's own survey,³⁷ showed two groups working to relocate—a larger group composed of islanders and a group of Gardi Sugdub's diaspora living in Panama City who want to move back to Gunayala.³⁸

Challenges faced. The relocation proved complicated. One of the more fraught aspects involved the design of the relocation village. The Housing Ministry's blueprint for Nuevo Cartí depicted a new, urban development laid out on a grid, with one main

Figure 5 | Map of Gunayala and Gardi Sugdub



Source: HRW 2023.

street and ten smaller streets with ten houses each (Pers. Comm. 2023b). The design of the dwellings was adapted from the Housing Ministry's low-cost housing flagship program,³⁹ with a standard design featuring cement floors and walls and zinc sheet roofs. In Nuevo Cartí, each house will be 36 square meters on a 450-square-meter plot. Site infrastructure will include a water treatment plant, park, church, supermarket, cafeteria, and school. After urging by the Guna, the Housing Ministry also agreed to add one house in each street configured for people with disabilities, and build traditional Guna buildings: a community meeting hall where leaders and members discuss community issues and sing spiritual songs, and a gathering hall for official ceremonies and celebrations (HRW 2023; Pers. Comm. 2023a).⁴⁰

The Guna advocated for their traditional dwelling style, made with local materials (bamboo for the walls and thatched palm for roofs, see Figure 6) for better airflow and to help absorb the impact of offshore earthquakes that occur regularly in the Caribbean coast. They called for the dwelling design to account for their culture, with several structures for different purposes—sleeping and living, cooking and dining, and a separate bathroom. The Guna sleep in hammocks traditionally, but the new houses have low ceilings and lack supportive beams to hang them on (HRW 2023). After being informed that the government's budget would not allow for the traditional design, the Guna acceded but many plan to add traditional structures behind the new houses, despite the small plots (HRW 2023; Pers. Comm. 2023b).

Construction of Nuevo Cartí began in 2019, almost a decade after the decision to relocate.⁴¹ The project was beset by delays. Panama's president visited the site three times and committed to delivering the project in September 2023. This was pushed to December 2023, then to February 2024, and then again to March 2024. The relocation village remains undelivered as of this writing, although significantly built. The hospital and school developed in parallel have no announced completion dates. Hospital construction has halted, with the building abandoned and deteriorating. The school remains under construction, still lacking water and sewage, educational supplies, and teachers (Displacement Solutions 2014; HRW 2023).

In committing to build Nuevo Cartí, the Panamanian government pledged to have a participatory process that would be a model for future relocations in Gunayala. The actual process was marked by inadequate community participation. Apart from the socioeconomic survey that guided housing eligibility and the addition of community buildings after petition by the Guna, there was no meaningful involvement by the Guna in the planning and development of the relocation blueprint (Displacement Solutions 2016). Panama passed its FPIC law in 2016, but it does not appear to have been applied to subsequent decision-making points related to the relocation. Gardi Sugdub residents claim that meetings with government officials were more information-sharing events than consultations. Even if it is argued that consent was already given by the Guna to the relocation blueprint before the FPIC law was enacted, decisions moving forward should have followed the law (HRW 2023). Getting it right with Gardi Sugdub is critical as more island communities are driven to consider relocation to the mainland.

Implications for women's land rights

Beyond the assumed benefit of risk and loss avoidance, the impacts of climate-induced relocation remain underexplored in the literature. The few existing studies suggest that adverse consequences can include the disruption of community ties and loss of a sense of community, culture, and traditional knowledge, negative health and gender impacts, and economic decline (Felipe Pérez and Tomaselli 2021; Abu et al. 2024).

Cultural erosion. The scant attention given by the government to the Gardi Sugdub relocation process, lack of effective consultation and participation, and complete disregard of the Guna culture risks disrupting the matrilineal tenure system. Nuevo Cartí's physical layout reflects a Western, urban lifestyle, with compact houses designed for a nuclear family of four or five people. Guna dwellings consist of several structures designed for large and multigenerational families that are a cornerstone of the Guna matrilineal culture. Their living arrangements underpin

community social cohesion and women's social support network. The multifamily households allow women to share domestic responsibilities, diversify livelihoods, and exercise considerable decision-making powers. Some Guna expressed that living in tight-knit matrilineal families with a supportive structure for women explains why domestic violence is rare in Gunayala (Pers. Comm. 2023a).

Research shows a strong correlation between culture and the built environment. Communities typically design their physical space and structures to reflect their social and cultural values and needs, accounting for climatic conditions and naturally available materials (Al Husban et al. 2021). Conversely, how the built environment, its architecture and spatial organization is

Figure 6 | **Guna dwellings and Nuevo Carti layout**



Source: Authors 2023.

designed influences people’s behavior and social practices, with repercussions for cultural identity, social practices, and community ties (De Burca 2023). The Guna face the risk that their relocation to an urban, Western-style village will reshape their culture from one centered on the extended family to one based on a nuclear family, potentially weakening the matrilineal tenure system and women’s support network. The urban layout may also lead to a transition to a more Western land tenure concept, one that privileges private ownership and titling in the name of the household head, typically the husband. There is a precedent for this in the urban diaspora. A neighborhood leader recalls that emigrants from the islands originally lived in extended families in single plots but have since been subdividing their plots between children. Grandparents continue to live together, but the younger generation is veering toward nuclear family arrangements prevalent in the city (Pers. Comm. 2023c). Some young women who grew up in Panama City remarked that they would eventually live independently from their families (Pers. Comm. 2023c).

The Gardi Sugdub relocation also exposes a gap in Panama’s environmental laws—the lack of a specific policy or regulations for climate-induced relocation. The UNFCCC 2010 Cancun Agreements officially recognized planned relocation as an adaptation action and invited states to enact measures enhancing understanding, coordination, and cooperation regarding it (Para. 14f). Panama’s National Strategy for Climate Change 2050 and Third National Communication to the UNFCCC mentions the planned relocations of Gardi Sugdub and other communities considering relocation but fail to provide guidance on how to support such initiatives and ensure they are implemented in a culturally appropriate manner incorporating Indigenous and local perspectives. The government has proposed a climate change adaptation framework law and a national climate adaptation policy for 2030–2050, but it remains to be seen whether these will adequately include planned relocation and the perspectives and concerns of IPs (HRW 2023).

MOVING FORWARD: MITIGATING RISKS

The case studies demonstrate that women in matrilineal tenure systems face distinct risks of losing their land rights and associated social support systems due to climate action. In the three Indigenous communities studied, land is central to women’s identity, culture, and livelihoods. Ownership and control of land benefits not only the women themselves but also their families and communities. Positively, the three countries have legal frameworks that recognize Indigenous land rights—albeit

with key implementation gaps—hence requiring Indigenous engagement in processes and decisions related to climate action. But without a culturally sensitive approach underpinned by the internationally recognized right to free, prior, and informed consent (FPIC) and mindful of differential tenure systems, interventions can potentially default to patriliney for defining engagement and distributing payments and benefits, marginalizing women and eroding their matrilineal land entitlements.

The following measures enacted by state authorities—national, subnational, and local—can help mitigate the risks for Indigenous women and their communities and ensure congruence of global climate commitments and actions with the global advocacy for women’s land rights. The first set refers to general measures that apply to all three countries, and the second set consists of country-specific recommendations targeting context-specific gaps.

General

Institutionalizing FPIC according to international standards.

Each country has varying levels of integrating FPIC, but overall public policies fall short of genuine recognition of Indigenous rights. Consultations are conducted with state-recognized traditional authorities instead of IPs’ own ancestral authorities. Meaningful FPIC integration requires adherence to international standards—International Labour Organization (ILO) Convention 169 and UN Declaration on the Rights of Indigenous Peoples—and explicit grounding in national legislation that respects customary laws and decision-making practices. To achieve this, national government authorities must align the regulatory frameworks on FPIC so that each interlinked element of FPIC fulfills key standards, including the following:

- Free:
 - Self-directed internal decision-making processes that are unencumbered by coercion, manipulation, expectations, or externally imposed time lines.
 - Access to participation by all community members, regardless of gender, age, or standing, with safeguards to ensure the inclusion of marginalized segments of the community.
- Prior:
 - Consent sought sufficiently in advance of any commencement of activities, at the planning stages of an intervention.

- Respect for the decision-making time line established by IPs, reflecting the time needed to understand, verify, and evaluate the activities in accordance with their own customs.
- Informed:
 - Adequate and balanced information about the project from diverse sources that is accurate, transparent, objective, and complete, accompanied by an assessment of the possible economic, social, cultural, and environmental impacts, including potential risks and benefits.
 - Information delivered in Indigenous or local languages in a culturally appropriate format—including traditional/local media or new media—in culturally appropriate locations and by culturally appropriate personnel, with safeguards to ensure that marginalized segments of the community have access to information.
 - Information provided on an ongoing basis throughout the FPIC process, aimed at enhancing local communication and decision-making processes.
- Consent:
 - A collective decision expressing the right of self-determination and reached through the customary decision-making processes, with participation from all segments of the community.
 - Freely given, as a “yes,” “no,” or “yes with conditions,” with the option to reconsider if the proposed activities change or if new, relevant information emerges.
 - An iterative process, given or withheld in phases, over specific periods for distinct stages or phases of the project; not a one-off process.
- Rights awareness and leadership trainings to enhance Indigenous women's and men's capacity to voice their concerns and influence decisions.
- Skills-building trainings to enhance literacy and numeracy and helping organize and seed self-help groups⁴² to improve economic prospects in case of loss of traditional livelihoods.
- Gender-sensitization activities for government agents and other parties implementing climate actions, to elucidate the distinctiveness of matrilineal tenure systems and the role of women, including organizing workshops with women to design guidelines and criteria based on a gender and climate perspective.
- Providing safe and convenient physical spaces for women to meet, network, and organize to protect their interests and that of the community.
- Protection for women and men who may be threatened and placed in harm's way while defending their lands and rights.

Country specific

Colombia

- The Ministry of Mines and Energy (MME) must address the regulatory and institutional gap on community consultations in the energy transition policy and adjust community participation mechanisms to include legitimate traditional authorities. Presently, consultations are on a case-by-case basis and without regard to FPIC. A high-priority measure would be national guidelines aligned with FPIC that set the following:
 - Minimum standards and flexibility to adapt to cultural differences, especially regarding compensation and benefits
 - Consultation protocols that guarantee women's and marginalized groups' participation
 - Safeguards to secure IPs' and women's land rights

The national government must also allocate sufficient and competent personnel for Corpoguajira and the Ministry of Environment as the environmental authorities charged with guaranteeing prior consultations.

- MME, coordinating with departmental and municipal authorities, must guarantee the personal safety and well-being of Wayuu women and men who are negotiating with energy companies and defending ancestral lands. This may include creating grievance bodies and mechanisms to help defuse internal tensions and supporting respected ancestral

Supporting Indigenous women and their organizations to enhance their capacity to engage in decision-making.

In the three communities, even as women stood to lose land and associated rights from the climate action, they have been mostly underrepresented and played secondary roles in the processes and decisions involved. Their crucial roles as producers, natural resources caretakers, and keepers and transmitters of ancestral knowledge, including traditional medicine, necessitate their participation in decision-making for climate action to be equitable and sustainable. Relevant state authorities, including gender ministries, collaborating with nongovernmental organizations (NGOs), can provide support through, among others:

authorities (*palabrero*) as mediators for clan conflicts. It should also include support to reduce power asymmetries and ensure basic services provision.

Costa Rica

- National authorities, including the Ministry of Environment and Energy (*Ministerio de Ambiente y Energía*; MINAE) and the National Forestry Financing Fund (*Fondo Nacional de Financiamiento Forestal*; FONAFIFO) must enact measures to implement the five priority themes for REDD+ in Indigenous territories under Decree No. 40932, starting with the restitution of Indigenous lands occupied by non-Indigenous settlers, as mandated by law. Importantly, land restitution must be done in a culturally sensitive manner that ensures broad participation of Bribri representatives (not just the ADI board), respects customary tenure systems, and includes grievance mechanisms to mediate disputes.
- The MINAE and FONAFIFO must officially recognize the Bribri's proposed two additional themes: gender, language, and culture; and tourism, which support matrilineal culture and secure women's livelihoods.

Panama

- Parliament must address the policy and regulatory gap on climate-induced relocation. Current climate legislation, including on climate adaptation and disaster risk reduction, fails to address planned relocation of vulnerable communities (HRW 2023). Filling the gap is critical given the projection that islands in the country's Caribbean coast will eventually be uninhabitable due to sea level rise. Crucially, policies and legislation must incorporate Indigenous and local perspectives and respect FPIC rights.
- The Housing Ministry must ensure that land and housing in the relocation village recognize women's traditional entitlements under the matrilineal system. This can include prioritizing women for housing plots, placing plots of the matrilineal clan next to each other or in proximity, and providing space in the relocation village for women to meet and network. The government must allocate resources for IP resettlement villages, guaranteeing not only public services provision but also the protection of their culture.

APPENDIX A: CASE STUDY PARTNERS



Colombia: Indigenous Organization of La Guajira Yanama (Organización Indígena de la Guajira Yanama; YANAMA) is an Indigenous non-profit organization with over 50 years of experience in strengthening Wayuu education, territory, and culture. YANAMA promotes the strengthening and safeguarding of culture, Indigenous economies and communication, pedagogical training and research, early childhood care, and the environment, under the principles of the Indigenous movement: self-governance, autonomy, and territory.



Costa Rica: Association of Bribri Indigenous Women of Talamanca (Asociación de Mujeres Indígenas Bribri de Talamanca; ACOMUITA) is a nonprofit organization established by Indigenous Bribri and Cabecar women to promote their recognition and more active role within their communities' economic, political, cultural, and social systems. Its members promote the ancestral practice of cacao agroforestry.



Panama: National Coordinator of Indigenous Women of Panama/Olowaili (Coordinadora Nacional de Mujeres Indígenas de Panamá; CONAMUIP/Olowaili) is a nonprofit organization that brings together women from the seven Indigenous communities of Panama (Bribri, Buglé, Emberá, Guna, Naso, Ngobe, and Wounaan), with the objectives of strengthening the participation and leadership of Indigenous women at the regional, national, and international levels, promoting their role as managers and actors at the social, economic, cultural, and political spheres, and improving their standard of living and that of their families. The Olowaili Guna Women's Coordinator is a grassroots organization of CONAMUIP.

GLOSSARY

Climate action: Refers to efforts taken to combat climate change and its impacts. These efforts involve reducing greenhouse gas emissions (climate mitigation) and/or taking action to prepare for and adjust to both the current effects of climate change and the predicted impacts in the future (climate adaptation) (EUR-Lex n.d.).

Comarca (Indigenous reservation): Special designation of Indigenous territories in Panama. Comarca Gunayala was the first legally recognized comarca through Act No. 2 of 1938 and successive legislation, namely: Act No. 16 of 1953 establishing its boundaries, formalizing governance bodies, and conferring autonomy and sovereignty over its terrestrial and marine resources; and Act No. 20 of 1957, declaring Guna lands as inalienable. Panama's 2004 Constitution guarantees collective ownership of Indigenous lands and respect for Indigenous ethnic identities, cultures, and values; and Law No. 37 of 2016 established Indigenous Peoples' right to free, prior, and informed consent (FPIC).

Land tenure: Refers to the relationship that individuals and groups hold with respect to land and related resources, such as trees, minerals, pastures, and water. Land tenure rules define the ways in which property rights to land are allocated, transferred, used, or managed in a particular society (USAID n.d.).

Matriarchal society: Social organization dominated or governed by women (FAO and IWGA 2020). Matriarchal societies are also matrilineal in terms of kinship and inheritance patterns, and additionally vest social and political authority and power of economic distribution in senior women in the community. In matrilineal societies women generally hold economic power (often shared with men) but do not necessarily hold political authority, which is often held by men (Göettner-Abendroth 2012; Hasty et al. 2024).

Matrilineal system or community: Society or community in which kinship or lineage is traced from the maternal line, and ancestral land is transmitted from mother to daughter (Shenk et al. 2019; Surowiec et al. 2019).

Matrilocal residence: The practice of installing the residence of newly married couples near or within the woman's family's home; that is, the husband moves to his wife's clan's land after marriage (Blau 2017; FAO and IWGIA 2020).

Reservas indígenas (Indigenous reserves): Special designation of Indigenous territories in Costa Rica. Executive Decree No. 5904-G of 1973 established several reservas indígenas, including the Talamanca Bribri reserve. The 1977 Indigenous Law of Costa Rica (Law No. 6172) declared reservas indígenas as inalienable, imprescriptible, nontransferable, and exclusive to their Indigenous inhabitants, to be governed according to Indigenous traditional structures and

laws. Executive Decree No. 13568 of 1982 provided that reservas indígenas would be represented by community participation bodies called Integral Development Associations (Asociaciones de Desarrollo Integral).

Resguardos indígenas or resguardos (Indigenous reservations): Special territorial regime accorded to Indigenous territories in Colombia, first established during the Spanish colonial period. Resguardo Wayuu Alta y Media Guajira was established in 1984. Colombia's 1991 Constitution declared resguardos as inalienable, imprescriptible, and not subject to seizure. Decree No. 2164 of 1995 affirmed the status of resguardos as legal and sociopolitical institutions that can be made up of one or more Indigenous communities under collective title and governed by their own normative system.

ENDNOTES

1. The Glasgow Leaders' Declaration on Forests and Land Use was adopted by state parties to the UN Framework Convention on Climate Change (UNFCCC) at the 26th UNFCCC Conference of Parties held in Glasgow, Scotland, in 2021 (COP26). It consists of commitments to ramp up protection of the world's forests, including through sustainable management of forests, reduced deforestation, and more transparent supply chains. The Global Biodiversity Framework was adopted by state parties to the Convention on Biological Diversity (CBD) in 2022. It includes Target 3, the "30x30" Target, a commitment to conserve 30 percent of terrestrial, inland water, coastal, and marine areas by 2030.
2. Net zero by 2050 is a commitment by countries, cities, businesses, and other institutions to address the climate crisis by cutting down emissions to a small amount of residual emissions, leaving net zero in the atmosphere. REDD+ is a mechanism under the UNFCCC to support developing countries in reducing emissions from deforestation and forest degradation through the conservation and sustainable management of forests.
3. For example, women who may only have secondary land rights (derived from male relatives) may not receive compensation when land is acquired for a climate-related intervention. They may also be excluded from decision-making because they are not considered as landowners.
4. Expanded definition from EUR-Lex: Climate action refers to efforts taken to combat climate change and its impacts. These efforts involve reducing greenhouse gas emissions (climate mitigation) and/or taking action to prepare for and adjust to both the current effects of climate change and the predicted impacts in the future (climate adaptation) (EUR-Lex n.d.).
5. They are less common than patrilineal societies, making up 17 percent of the societies (versus 41 percent patrilineal) included in the *Atlas of World Cultures* (Shenk et al. 2019). Note that "matrilin-eal" is not synonymous with "matriarchal." Matriarchal societies are also matrilineal in terms of kinship and inheritance patterns but additionally vest social and political authority and power of economic distribution in senior women in the community. In matrilineal societies women generally hold economic power (often shared with men) but do not necessarily hold political authority, which is often held by men (Göettner-Abendroth 2012, Hasty et al. 2024).

6. Two sets of key informant interviews were conducted. The first set consisted of interviews of community members conducted by local partners in early 2023, and the second set were interviews conducted by WRI with local partners and other key informants during field visits made between March and June 2023 and individual conversations via virtual platforms such as Teams, Zoom, and WhatsApp.
7. Midway through the research project, WRI convened an in-person peer-to-peer exchange with the local partners, hosted by YANAMA in La Guajira, Colombia, in order for WRI to provide more background on the objectives of the research and for the partners to learn about each other's distinct matrilineal cultures and share experiences and the challenges they face. The meeting took place on September 24–27, 2023. ACOMUITA was unable to participate due to schedule conflicts.
8. Further, Decree No. 2164 of 1995 defines *resguardos* as legal and sociopolitical institutions that can be made up of one or more Indigenous communities under collective title and governed by their own normative system. They are treated as local municipalities under the state's territorial organization, which allows them to receive federal public funds (Arroyo 2016).
9. The Wayuu gained title to Resguardo Wayuu Alta y Media Guajira in 1984 through the Colombian Institute for Agrarian Reform (Instituto Colombiano de la Reforma Agraria; INCORA) Resolution No. 0015. In the 1970s–1980s, the Colombian government reinstated the *resguardos*, which had been created during the colonial period. During this period more than 20 million hectares were declared as Resguardos Indígenas in the Amazon region (van der Hammen 2003). There are also smaller communities of Wayuu in Baja Guajira (Lower Guajira).
10. The Wayuu Normative Framework encompasses principles, norms, procedures, and rituals governing the Wayuu. The system is based on the principles of reparation and compensation, as applied by local moral authorities called *pütchipü'üi* or *palabrero* (orator), who are experts in resolving conflicts and disputes between the local matrilineal clans (UNESCO n.d.).
11. The only exception to the primacy of the Wayuu Normative System is constitutional mandates.
12. Permanent residence is restored after death through burial in the maternal cemetery, where all clan members are buried (Mancuso 2006).
13. The struggle for territorial control is a significant driver of ongoing violence and attacks against community leaders in La Guajira. Challenges include land disputes, resource management disputes, and strained relations with governmental and international bodies (Osorio et al. 2020). A key challenge is armed conflict rooted in the 1970s with the surge of illegal activities, notably drug trafficking, which drew various groups, including the Revolutionary Armed Forces of Colombia (Fuerzas Armadas Revolucionarias de Colombia; FARC) and the National Liberation Army (Ejército de Liberación Nacional; ELN,) fighting the Colombian government, with tensions escalating through the 1990s and early 2000s (Caicedo et al. 2011; Duro 2018). This period witnessed severe violence, including massacres and territorial disputes, with significant socioeconomic and environmental repercussions (Rubiano 2022). The region became a refuge for illegal groups, often recruiting locals, while suspicions of military interventions for ulterior motives, such as land development projects, arose (Pers. Comm. 2022). Civil society organizations emerged in response to paramilitary atrocities, with women playing a pivotal role (Pers. Comm. 2023g). Despite demobilization efforts, paramilitary groups persist under different names, engaging in narcotics trafficking and exploiting intra-ethnic conflicts, undermining peace in La Guajira (Caicedo et al. 2011).
14. An example of a women's organization is Fuerza Mujeres de Wayuu. Meanwhile, YANAMA, the local partner for this project, was established by a woman and led by women, although its members are not exclusively women.
15. Another challenge that emerged more recently is the return to La Guajira of Wayuu people who have previously crossed the border to traditional Wayuu lands in Venezuela over the past two decades, driven by an ongoing economic recession and hyperinflation in Venezuela. As returnees reclaim their lands in La Guajira, conflicts often arise over ownership, boundaries, or land use. An estimated 1.7 million Wayuu have returned from Venezuela, causing not only land conflict but a humanitarian crisis in the region already struggling with poverty and lack of basic services. Wayuu ancestral territory straddles Colombia and Venezuela: La Guajira in northern Colombia and Zulia State in western Venezuela (Cobb 2020; Consuegra 2022).

16. About 70 percent of Colombia's new and upcoming renewables development, along with its associated transmission, is planned to be in La Guajira, with the department representing an estimated 18–21 GW of the country's total wind potential. The Ministry of Mines and Energy estimates that La Guajira has the potential for approximately 15 GW of wind energy, with wind speeds averaging 9.8 meters per second and a capacity factor of nearly 65 percent. Currently, there are only two wind parks in operation, as a third one, Jepirachi, has recently been closed. Jepirachi was Colombia's inaugural wind energy generation project, managed since 2004 by Empresas Públicas de Medellín (EPM), with a capacity of 19.5 MW. It has been a pioneer not only in Colombia but globally, registering as one of the first Clean Development Mechanism projects (Quiroga 2017). The Jepirachi wind park is being dismantled due to lack of resources for technical upgrades and failure to comply with the state requirement to grant co-ownership to Wayuu communities (Torres 2023; MME 2023).
17. Decree No. 2164 of 1995 implements Chapter XIV of Law 160 of 1994 (creating the National System of Agrarian Reform and Rural Peasant Development) with respect to the provision and titling of land to the Indigenous communities for the establishment, restructuring, and expansion of Indigenous reservations in Colombia.
18. The inadequacy of prior consultations for wind park projects stems from various factors. Implementation of regulations mandating consultation is hampered by limited government support and limited understanding of Indigenous normative systems by government agents (Rodríguez 2018; Fuentes et al. 2023). The Wayuu Normative System integrates consultation principles but faces obstacles in its application, compounded by lack of awareness among non-Wayuu individuals (Sánchez 2021). Extractive projects often sideline community interests, with companies leading consultations and minimal government intervention in a highly decentralized approach (Pers. Comm. 2022; Pers. Comm. 2023e).
19. A community member who was interviewed also reported the potential for the erosion of cultural identity stemming from romantic entanglements between employees of the project companies and community members, leading to the dilution of traditional values and practices within the community (Pers. Comm. 2024).
20. Colombia was the deadliest country in the world for environmental defenders in 2022 (60 documented cases), where killings especially targeted Indigenous Peoples and Afro-descendants (Global Witness 2023).
21. The implementing regulations of Law No. 6172, the Indigenous Law of Costa Rica, specifies that existing ADIs would “act as local government” in Indigenous communities (Executive Decree No. 13568-C-G, 1982, Art. 1). ADIs are voluntary government-funded community participation bodies first created in 1967 under the Community Development Law (Law No. 3859, 1967). They are present in most Costa Rican districts and have a hybrid status as “private law entities” but also “public interest entities” (Law No. 3859, Art. 11). Only in Indigenous reserves do they have the status of local governments, as ratified by a 2006 Supreme Court decision (Sala Constitucional 2006-14545) (Scope 2021). ADIs are overseen by the National Directorate of Community Development, attached to the Ministry of Interior and Police (Law No. 3859, Art. 1).
22. The GA meets once a year but may call for extraordinary sessions by majority vote of the junta directiva or at the request of at least 10 percent of active members. The GA elects the members of the junta directiva, consisting of a president, vice president, secretary, treasurer, and three members, with a term of two years. The junta directiva may create committees or working groups to facilitate the work of the association, such as culture, health, youth, or security committees. Under Article 19 of Law No. 3859, the state must transfer an estimated 2 percent of income tax collection to ADIs, divided into a revolving fund and a project fund under the implementing regulations.
23. Multinational corporations, particularly the United Fruit Company (UFC), through local intermediaries acting as landlords, used the legal system to purchase the most fertile Bribri lands in Talamanca Valley. The company declared the Indigenous occupants to be squatters, and either provided minimal financial compensation and misled them into signing away their legal rights to the land, or employed workers to clear the forests and disrupt settlements by force, thus displacing the Bribri from their heartland (Bourgeois 1989).
24. The plan was called the Cultural Mediators Program.
25. Aside from the 49 islands occupied by the Guna, two other islands are inhabited by non-Indigenous communities. Gunayala was formerly called Comarca San Blas. Act No. 99 of 1998 re-named it Comarca Gunayala.
26. The forest has an area of 5,571 square kilometers (km²), extending 200 km along the coast and 15 to 20 km inland.
27. The total Guna population in the four comarcas and living in urban areas is estimated at 60,000 (Al Jazeera News 2019). According to the 2010 census, Indigenous Peoples in Panama, including the Guna, constitute 12 percent (about 418,000) of the overall population of 3.4 million (IWGIA 2024).

28. The Guna started moving to the San Blas Islands in the 1800s from settlements within their mainland forests to escape malaria outbreaks from mosquitos, snakebites, and other illnesses and increase trade in forest products and coconuts (Howe 2010).
29. Traditionally, the births of girls are highly desired to ensure continuity of the maternal line and inheritance, and also to gain sons-in-law who contribute their work to the wife's family, although this is changing for Gunas who migrate to urban areas where matriliney is weakening.
30. Fields are plots cleared in the mainland forest for farming. Parts of the forest are delineated among the different families, generally the area facing family homes in the islands.
31. The *sagla* is supported by an interpreter or *argar*, charged with making the *sagla*'s message understandable and instructive to community members, and the *suar ibed*, or community police, are responsible for peace and order and maintaining customary norms and traditions (Arias and López Alba 2021).
32. The General Congress is represented by the *sagla dummagan*, comprising three *saglas* chosen by the Cultural Congress and ratified by the General Congress.
33. There are 36 women-only farming collectives to date.
34. Tourism in Gunayala started in the 1940s, mainly in the western islands, where the water depth allowed cruise ships to enter. Tourists would visit the islands to walk around Guna villages and buy the colorful *molas* made by Guna women. In 1962 the Panamanian Tourist Institute promoted tourism in the islands in a systematic fashion. Tourism grew dramatically in the 1970s, but enterprises were often under the control of *ladino* (non-Indian) Panamanians, for whom the Guna usually worked as menial employees. In 1996, the Guna General Congress enacted a Guna statute, Statute on Tourism in Kuna Yala, establishing guidelines governing tourism in the *comarca* as a strategy to ensure that the Guna benefit from tourism in Gunayala (Bennett 2010; Snow 2010).
35. The relocation committee identified as a site a 14-hectare and a 3-hectare plot, based on its higher elevation, proximity to the local port, and newly paved highway that connects to Panama City.
36. At first 65 houses, which later increased to 300 houses.
37. The Guna were assisted in their survey by an NGO, Displacement Solutions.
38. It is worth noting that not the entire population of Gardi Sugdub will relocate to the mainland. A minority of residents are undecided or intend to stay; some because of recent inheritance of homes, or island-based livelihoods, or deep attachment to a place that is familiar, especially for the older generations. The government does not have an adaptation plan for Gardi Sugdub for those who will remain, since its objective according to the Housing Ministry is for the island to be completely vacated (HRW 2023).
39. Called *Techos de Esperanza* (Roofs of Hope).
40. The community hall is called the *casa del congreso* or *onmagged neg*, in Guna language, while the gathering hall is *casa de la chicha* or *inna nega*, in Guna language.
41. The residents of Gardi Sugdub provided the labor for the construction of the relocation village.
42. For example, village savings and loan associations.

REFERENCES

- Abu, M., S.C. Heath, W.N. Adger, S.N.A. Codjoe, C. Butler, and T. Quinn. 2024. "Social Consequences of Planned Relocation in Response to Sea Level Rise: Impacts on Anxiety, Well-Being, and Perceived Safety." *Scientific Reports* 14, no. 3461. <https://doi.org/10.1038/s41598-024-53277-9>.
- AIPP and IWGIA (Asia Indigenous Peoples' Pact and International Work Group for Indigenous Affairs). 2010. "REDD+ and Indigenous Peoples. A Briefing Paper for Policy Makers." https://www.iwgia.org/images/publications/0513_REDD_policy_makers_briefing_eb.pdf.
- Al Husban, S.A.M., A.A.S. Al Husban, and Y. Al Betawi. 2021. "The Impact of the Cultural Beliefs on Forming and Designing Spatial Organizations, Spaces Hierarchy, and Privacy of Detached Houses and Apartments in Jordan." *Space and Culture* 24 (1): 66–82. <https://doi.org/10.1177/1206331218791934>.
- Al Jazeera News. 2019. The indigenous Guna: Living with albinism in Panama. <https://www.aljazeera.com/gallery/2019/7/31/the-indigenous-guna-living-with-albinism-in-panama>.
- Anaya, J. 2014. "Report of the Special Rapporteur on the Rights of Indigenous Peoples, Addendum: The Status of Indigenous Peoples' Rights in Panama." UN Human Rights Council: Country Reports. <https://www.refworld.org/reference/countryrep/unhrc/2014/en/101045>.
- Ángel, D.M. 2022. "Onomástica y Parentesco. El Caso Wayuu de La Baja Guajira." *Revista Interdisciplinaria Arista-Crítica* 2.
- Arias, M., and G. L. Alba. 2021. *Educación y Sociedad en la Historia de la Nación Kuna (Education and Society in the History of the Kuna Nation)*. Panamá City: Cultural Portobelo Biblioteca de Autores Panameños.
- Arroyo, P. 2016. *Land Rights, Conservation, and Peace in the Colombian Amazon*. International Union for Conservation of Nature (IUCN) Land Rights and Conservation Issue Brief. IUCN. <https://iucn.org/resources/grey-literature/land-rights-conservation-and-peace-colombian-amazon>.
- Balch, O. 2013. "Cerrejón Mine in Colombia: Can It Address Its Human Rights Risks?" *The Guardian*. <https://www.theguardian.com/sustainable-business/cerrejon-mine-colombia-human-rights>.
- Barney, J. 2021. "La Guajira, entre un nuevo aire o un desastre" ("La Guajira, between a breath of fresh air or a disaster"). *Debates Indígenas*. <https://debatesindigenas.org/notas/86-energias-renovables-colombia.html>.
- Barney, J. 2023. *Por el mar y la tierra guajiros, vuela el viento Wayuu: En alerta la Püloui y Waneetu'unai, por el asedio de las multinacionales eólicas en territorio Wayuu (The Wayuu wind flies across the Guajiro sea and land: Püloui and Waneetu'unai are on alert due to the siege of multinational wind companies in Wayuu territory)*. Bogotá: Indepaz. <https://co.boell.org/sites/default/files/2023-04/por-el-viento-y-el-mar-guajiros.pdf>.
- Bennett, J. 2010. *The Dream and the Reality: Tourism in Kuna Yala. Cultural Survival*. <https://www.culturalsurvival.org/publications/cultural-survival-quarterly/dream-and-reality-tourism-kuna-yala>.
- Bertazzo, S. 2019. "What on Earth is 'REDD+'?" *Conservation International* (blog), March 28. <https://www.conservation.org/blog/what-on-earth-is-redd>.
- Blau, E.R. 2017. "Tsirik—Fold the Leaves So That Others May Be Guided: A Study of How the Bribri Women Are Preserving Their Culture to Ensure a Sustainable Future for Their Community." *Capstone Collection* 2973. <https://digitalcollections.sit.edu/capstones/2973>.
- Bourgois, P. I. 1989. *Ethnicity at Work: Divided Labor on a Central American Banana Plantation*. Baltimore, MD: Johns Hopkins University Press: 1–36.
- Brown, K. 2022. "We Go in and Take Indigenous Lands Back from Cattle Ranchers: Q&A with Activist Pablo Sibar." *Mongabay*, November 21. <https://news.mongabay.com/2022/11/we-go-in-and-take-indigenous-land-back-from-cattle-ranchers-qa-with-activist-pablo-sibar/>.
- Caicedo, L.P., A. Benjumea, N. Poveda, C. Barraza, Y. Romero, D.C. Figueroa, and R.M. Lopez. 2011. *Tierra y territorio. Afectaciones y retos para las mujeres (Land and territory. Impacts and challenges for women)*. Bogotá: Fundación Humanas.
- Calí Tzay, J.F. 2022. *Report of the United Nations Special Rapporteur on the Rights of Indigenous Peoples, José Francisco Calí Tzay, on His Visit to Costa Rica in December 2021*. Presented at the United Nations General Assembly on September 28. <https://undocs.org/Home/Mobile?FinalSymbol=A%2FHRC%2F51%2F28%2FAdd.1&Language=E&DeviceType=Desktop&LangRequested=False>.
- Calma, J. 2024. "Want to Restore a Forest? Give It Back to Indigenous Peoples Who Call It Home." *The Verge*, April 22. <https://www.theverge.com/2024/4/22/24133444/forest-restoration-indigenous-human-rights-costa-rica-earth-day>.

Cannon, J. 2023. "Indigenous Groups Voice Support for REDD+, despite Flaws." *Mongabay Environmental News*, May 9. <https://news.mongabay.com/2023/05/indigenous-groups-voice-support-for-redd-despite-flaws/>.

Castillo, B.D. 2023. "Neggsed (Autonomy): Progress and Challenges in the Self-Government of the Gunadule People of Panama." In *Indigenous Territorial Autonomy and Self-Government in the Diverse Americas*, edited by M. González, A.B. Cal y Mayor, J. Marimán, P. Ortiz-T, R. Funaki. Calgary, Canada: University of Calgary Press. <https://ucp.manifoldapp.org/read/indigenous-territorial-autonomy/section/390ffc1-59ff-432d-a942-fe7d352dc949>.

Chacón, R. 2005. "El sistema jurídico indígena en Costa Rica: Una aproximación inicial" ("The Indigenous legal system in Costa Rica: An initial approach"). *Revista IIDH: Instituto Interamericano de Derechos Humanos* 41: 119–49. <https://www.corteidh.or.cr/tablas/R08062-4.pdf>.

CI (Conservation International). 2024. "Free, Prior and Informed Consent in Context." <https://www.conservation.org/projects/free-prior-and-informed-consent-in-context#:~:text=The%20principle%20of%20Free%2C%20Prior,given%20under%20force%20or%20threat>.

City Population. 2023. "Guna Yala Population." https://www.citypopulation.de/en/panama/admin/guna_yala/1001__guna_yala/.

Cobb, J.S. 2020. "In Indigenous Colombia, Venezuelan Migration Sparks Conflict." Reuters, March 12. <https://www.reuters.com/article/world/in-indigenous-colombia-venezuelan-migration-sparks-conflict-idUSKBN20Z0ZK/>.

Consuegra, A. 2022. "Cambios en la movilidad transfronteriza del pueblo Wayúu en el contexto de la crisis Venezolana" ("Changes in the cross-border mobility of the Wayúu people in the context of the Venezuelan crisis"). *Jangwa Pana* 21 (2).

Cultural Survival. 2023. "Indigenous Peoples Continue to Push for Rights, Inclusion, and Direct Financing in Climate Change Negotiations Prior to UNFCCC COP28." *Cultural Survival* (blog), June 26. <https://www.culturalsurvival.org/news/indigenous-peoples-continue-push-rights-inclusion-and-direct-financing-climate-change>.

Dalmases, F., and A. Sánchez. 2021. "Winds of Change Blow through indigenous Lands in La Guajira." *Open Democracy* (blog), December 22. <https://www.opendemocracy.net/en/democraciaabierta/colombia-wind-power-guajira-en/>.

Dam Lam, R., and A. Gasparatos. 2023. "Unpacking the Interface of Modernization, Development and Sustainability in Indigenous Guna Communities of Panama." *People and Nature* 5: 774–94.

De Burca, J. 2023. "Cultural Identity and Built Environment: Unraveling the Story of Indigenous Architecture." *Constructive Voices*, August 14. <https://constructive-voices.com/cultural-identity-and-built-environment-unraveling-the-story-of-indigenous-architecture/>.

de la Plaza, C. 2015. "Report of the Community Conservation Resilience Initiative in Guna Yala, Panama." Asunción, Paraguay: Global Forest Coalition. <https://globalforestcoalition.org/wp-content/uploads/2010/10/Full-country-report-Panama.pdf>.

DANE (Departamento Administrativo Nacional de Estadística, Colombia), National Administrative Department of Statistics. 2021. "Información sociodemográfica del pueblo Wayúu" (Sociodemographic information of the Wayúu people), <https://www.dane.gov.co/files/investigaciones/poblacion/informes-estadisticas-sociodemograficas/2021-09-24-Registro-Estadistico-Pueblo-Wayuu.pdf>.

Displacement Solutions. 2014. "The Peninsula Principles in Action. Climate Change and Displacement in The Autonomous Region of Gunayala, Panama." Geneva.

Displacement Solutions. 2015. "One Step at a Time: The Relocation Process of the Gardi Sugdub Community in Gunayala, Panama." Mission Report. Geneva.

Displacement Solutions. 2016. "An Overview on the Relocation of Guna Indigenous Communities in Gunayala, Panama." Mission Report. Geneva.

Dunne, D., and Y. Quiroz. 2024. "Mapped: The Impacts of Carbon-Offset Projects around the World." London: Carbon Brief. <https://interactive.carbonbrief.org/carbon-offsets-2023/mapped.html>.

Duro, R.M. 2018. "Territorio y re-existencia: Alter-Nativas al neo-extractivismo hegemónico: Caso mujeres-Lideresas Wayuu" (Territory and re-existence: Alternatives to hegemonic neo-extractivism: The case of Wayuu women leaders). In *La Criminalización de las resistencias como última estrategia desarrollista de despojo en América Latina (The Criminalization of resistance as the latest developmental strategy of dispossession in Latin America)*, edited by R. Pérez and G. Zarrilli. Buenos Aires: Fundación CICCUS.

EUR-Lex. n.d. "Glossary of Summaries: Climate Action." <https://eur-lex.europa.eu/EN/legal-content/glossary/climate-action.html>.

FAO and IWGIA (Food and Agriculture Organization of the United Nations and the International Work Group for Indigenous Affairs). 2020. "Territorial Management in Indigenous Matrilineal Societies: Case Studies on the Khasi, Wayuu, Shipibo-Conibo and Moso Peoples." Rome: FAO and IWGIA.

Fariña, A.L. 2012. "Bribri Women Lead the Way in Community-Based Tourism in Costa Rica." *Cultural Survival* (blog), February 17. <https://www.culturalsurvival.org/publications/cultural-survival-quarterly/bribri-women-lead-way-community-based-tourism-costa-rica>.

Felipe Pérez, B., and A. Tomaselli. 2021. "Indigenous Peoples and Climate-Induced Relocation in Latin America and the Caribbean: Managed Retreat as a Tool or a Threat?" *Journal of Environmental Studies and Sciences* 11: 352–64. <https://doi.org/10.1007/s13412-021-00693-2>.

Finn, K. 2022. "Indigenous Rights as a Central Value in Investing in Net Zero." *Cultural Survival* (blog), June 1. <https://www.culturalsurvival.org/publications/cultural-survival-quarterly/indigenous-rights-central-value-investing-net-zero>.

Florián, E., and A. Diaz. 2016. "Fortaleciendo capacidades de negociación, integración y representatividad en los procesos de la estrategia REDD+ para el territorio Cabagra del pueblo bribri en Costa Rica" ("Strengthening negotiation, integration and representation capacities in the REDD+ strategy processes for the Cabagra territory of the Bribri in Costa Rica"). San José, Costa Rica: Unión Internacional para la Conservación de la Naturaleza y de los Recursos Naturales (UICN). <https://www.biodiversidad.gob.mx/media/1/region/files/proforco/Fortaleciendo-capacidades-bribri.pdf>.

Fuentes, B., A. Palencia, and J. Romero. 2023. "¿Cómo lograr la articulación entre los actores involucrados en la construcción de los parques eólicos en el departamento de la guajira bajo un esquema de gobernanza colaborativa?" ("How can coordination between the actors involved in the construction of wind farms in the department of La Guajira under a collaborative governance scheme be achieved?") Bogotá: Escuela de Gobierno Alberto Lleras Camargo, Universidad de los Andes.

Global Witness. 2023. "Standing Firm. The Land and Environmental Defenders on the Frontlines of the Climate Crisis." Global Witness. <https://www.globalwitness.org/en/campaigns/environmental-activists/standing-firm/>.

Göettner-Abendroth, H. 2012. *Matriarchal Societies: Studies on Indigenous Cultures across the Globe*. New York: Peter Lang Inc., International Academic Publishers.

Gonzalez, W., R. Ermini, and S. Manfreda. 2018. "Types of Dwellings and Spatial Distribution of the Indigenous Communities of Wayuu of the Guajira." In *Atti del XVII Convegno ANIDIS L'ingegneria Sismica in Italia: Pistoia, 17-21 settembre 2017* (Proceedings of the 17th ANIDIS Conference on Seismic Engineering in Italy: Pistoia, 17-21 September 2017). Pisa: Pisa University Press. https://www.researchgate.net/publication/337078129_Types_of_Dwellings_and_Spatial_Distribution_of_the_Indigenous_Communities_of_Wayuu_of_the_Guajira.

González, C., and J. Barney. 2019. "El Viento del este llega con revoluciones. Multinacionales y transición con energía eólica en el territorio Wayuu" ("The east wind comes with revolutions. Multinationals and wind energy transition in the Wayuu territory"). Bogotá: Indepaz.

González, C. 2022. "Colombia: Extractivismo verde/azul o transición socioambiental latinoamericana" ("Colombia: Green/blue extractivism or Latin American socio-environmental transition"). Bogotá: Indepaz. <https://indepaz.org.co/colombia-extractivismo-verde-azul-o-transicion-socioambiental-latinoamericana/>.

González, D. 2023. "Wind Farms Divide Indigenous Communities in Colombia." Article originally published on *Dialogue Earth*, May 30. <https://dialogue.earth/en/energy/368855-wind-farms-divide-indigenous-communities-in-colombia/>.

GTMH (Grupo de Trabajo de Memoria Histórica). 2010. "La masacre de Bahía Portete. Mujeres Wayuu en la mira" ("The Bahia Portete massacre. Wayuu women in the crosshairs"). Bogotá: Aguilar, Altea, Taurus, Alfaguara, S.A. <https://centrodememoriahistorica.gov.co/la-masacre-de-bahia-portete-mujeres-wayuu-en-la-mira/>.

Guerra, R. 2014. "Between the Forest and the Sea: Life and Climate Change in Guna Yala – Part I." *Mongabay*, October 27. <https://news.mongabay.com/2014/10/between-the-forest-and-the-sea-life-and-climate-change-in-guna-yala-part-i/>.

Guerra, W. 2011. "Los reglamentos de convivencia intercultural en los proyectos de desarrollo en territorios indígenas: El caso de los proyectos minero-energéticos en la península de La Guajira" ("Intercultural coexistence regulations in development projects in Indigenous territories: The case of mining-energy projects in the La Guajira peninsula). *Wale'keru: Revista de Investigación En Cultura y Desarrollo* (*Journal of Research in Culture and Development*) 2: 26–33. <http://hdl.handle.net/10256/7729>.

Hance, J. 2023. "Indigenous Peoples Undersupported on Frontline of Hotter, Drier, Fiery World." *Mongabay*, September 13. <https://news.mongabay.com/2023/09/indigenous-peoples-undersupported-on-frontline-of-hotter-drier-fiery-world/>.

Hasty, J., D.G. Lewis, and M.M. Snipes, 2024. "The Power of Gender-Patriarchy and Matriarchy." In *Introduction to Anthropology*, by J. Hasty, D.G. Lewis, and M.M. Snipes. LibreTexts Open Education Resource (OER). <https://socialsci.libretexts.org/@go/page/150286>.

Howe, J. 2010. "Native Rebellion and US Intervention in Central America." *Cultural Survival*. <https://www.culturalsurvival.org/publications/cultural-survival-quarterly/native-rebellion-and-us-intervention-central-america>.

- HRW (Human Rights Watch). 2023. "The Sea Is Eating the Land Below Our Homes. Indigenous Community Facing Lack of Space and Rising Seas Plans Relocation." <https://www.hrw.org/report/2023/07/31/sea-eating-land-below-our-homes/indigenous-community-facing-lack-space-and-rising>.
- IACHR (Inter-American Commission on Human Rights). 2015. Resolución 16/15. Medida Cautelar No. 321-12. <https://www.oas.org/es/cidh/decisiones/pdf/2015/MC321-12-ES.pdf>.
- INCORA (Instituto Colombiano de la Reforma Agraria [Colombian Institute for Agrarian Reform]). Resolution No. 0015 of February 28, 1984.
- IWGIA (International Work Group for Indigenous Affairs). 2024. "Indigenous Peoples in Panama." IWGIA.org. <https://www.iwgia.org/en/panama.html>.
- Jones, N. 2020. "How Native Tribes Are Taking the Lead on Planning for Climate Change." *Yale Environment 360*, February 11. <https://e360.yale.edu/features/how-native-tribes-are-taking-the-lead-on-planning-for-climate-change>.
- Leal Filho, W., N.R. Matandirotya, J.M. Lütz, E.A. Alemu, F.Q. Brearley, A.A. Baidoo, A. Kateka, et al. 2021. "Impacts of Climate Change to African Indigenous Communities and Examples of Adaptation Responses." *Nature Communications* 12: 6224. <https://doi.org/10.1038/s41467-021-26540-0>.
- Lowes, S. 2016. "The Ties That Bind: Matrilineal Kinship and Spousal Cooperation." *World Bank Blogs*, December 13. <https://blogs.worldbank.org/impactevaluations/ties-bind-matrilineal-kinship-and-spousal-cooperation-guest-post-sara-lowes>.
- Malcolm, K. 2020. "Indigenous Land Rights Defenders Struggle against Violence amid a Lack of Legal Protection." London: International Bar Association. <https://www.ibanet.org/article/E279604E-DE18-45C1-B7D8-34D8A9A0BB57>.
- Marín-Herrera, M., H. Correa-Correa, and G. Blanco-Wells. 2021. "Territorialization of the REDD + Strategy in the Bribri Indigenous People, Talamanca, Costa Rica." *Ambiente & Sociedad* 24. <http://dx.doi.org/10.1590/1809-4422asoc20180231r2vu2021LIAO>.
- Mancuso, A. 2006. "Relaciones de género entre los Wayuu: Estado de la investigación y nuevos campos de análisis" ("Gender relations among the Wayuu: State of research and new fields of analysis"). *Aguaita: Revista del Observatorio del Caribe Colombiano (Aguaita: Journal of the Colombian Caribbean Observatory)* 13–14 (December 2005–June 2006), Cartagena de Indias.
- Martínez Mauri, M. 2020. "Human-Tree Exchanges in the Isthmo-Colombian Area. Ethnographic Contributions from Gunayala (Panama)." *Tabula Rasa* 36, 1–18. <https://doi.org/10.25058/20112742.n36.05>.
- Medina, M. 2014. "Retos del reconocimiento y ejercicio de los derechos humanos de las mujeres indígenas en el multiculturalismo constitucional. Reflexiones a partir del pueblo Wayúu" ("Challenges of the recognition and exercise of human rights of Indigenous women in constitutional multiculturalism. Reflections from the Wayúu people"). *Tesis en Maestría en Derecho* (Master's of Law Thesis). Bogotá: Universidad Nacional de Colombia.
- MinCultura (Ministerio de Cultura, Colombia [Ministry of Culture, Colombia]). n.d. "El sistema normativo de los wayuus, aplicado por el pütchipü'üi ('palabrero')." ("The normative system of the Wayuus, applied by the pütchipü'üi ('palabrero')." [https://patrimonio.mincultura.gov.co/legislacion/Paginas/El-sistema-normativo-de-los-wayuus,-aplicado-por-el-p%C3%BCtchip%C3%BC%E2%80%99%C3%BCi-\(%E2%80%9Cpalabrero%E2%80%9D\).aspx](https://patrimonio.mincultura.gov.co/legislacion/Paginas/El-sistema-normativo-de-los-wayuus,-aplicado-por-el-p%C3%BCtchip%C3%BC%E2%80%99%C3%BCi-(%E2%80%9Cpalabrero%E2%80%9D).aspx).
- MINAE (Ministerio de Ambiente y Energía [Ministry of Environment and Energy]). 2020. *Estrategia Nacional REDD+ Costa Rica: Marco de planificación para pueblos indígenas (Costa Rica national REDD+ strategy: Planning framework for Indigenous peoples)*. <https://documents1.worldbank.org/curated/en/231181594364828337/pdf/Marco-de-Planificaci%C3%B3n-para-Pueblos-Ind%C3%ADgenas.pdf>.
- MME (Ministerio de Minas y Energía, Unidad de Planeación Minero Energética República de Colombia [Ministry of Mines and Energy, Mining and Energy Planning Unit, Republic of Colombia]). 2023. "Informe de registro de proyectos de generación de electricidad" ("Electricity generation project registration report"). <https://app.powerbi.com/view?r=eyJrIjojMmMyZmM1MGMTnZExZC00NzJlLTk5O-DAtNWUyMzYxMGwMGYzIiwidCI6IjMzZWYwNmM5LTBiNmMtNDg3MC1hNTY1LWlZyZc5NWlxNmE1MyIsImMiOjR9>.
- Monsalve, M.M. 2023. "El viento de la transición energética lleva disputas a La Guajira colombiana" ("The winds of energy transition brings disputes to La Guajira, Colombia"). *El País*. <https://elpais.com/america-futura/2023-05-14/el-viento-de-la-transicion-energetica-lleva-disputas-a-la-guajira-colombiana.html#?rel=mas>.
- Mosley, E.C. 2018. "The Commodification of Nature: Power/Knowledge and REDD+ in Costa Rica." Master's Thesis submitted to the faculty of the Virginia Polytechnic Institute and State University, Blacksburg, VA.

- MyS, M., D. Serrano, M.G. Serrano, J. Campos, A.I.M. Salazar, A.R. Villalobos, F.M.V. Mena, et al. 2014. "Minienciclopedias de los territorios indígenas de Costa Rica: los Bribris y los Cabécares de Sulá" ("Mini Encyclopedias of the Indigenous Territories of Costa Rica: The Bribris and the Cabécares of Sulá"). San José, Costa Rica: Department of Intercultural Education, Ministry of Public Education. https://mep.go.cr/sites/default/files/media/tomo_1.pdf.
- Newsome, M. 2023. "How an Indigenous Community in Panama Is Escaping Rising Seas." *Science News*, April 7. <https://www.sciencenews.org/article/indigenous-guna-panama-escape-rising-seas>.
- Noriega, C. 2020. "The Green Erasure of Indigenous Life." North American Congress on Latin America (NACLA). <https://nacla.org/news/2020/05/06/green-erasure-indigenous-life>.
- O'Neill, L., B. Riley, G. Maynard, and J. Hunt. 2023. "Beyond Juukan Gorge: How First Nations People Are Taking Charge of Clean Energy Projects on Their Land." *The Conversation*, October 25. <https://theconversation.com/beyond-juukan-gorge-how-first-nations-people-are-taking-charge-of-clean-energy-projects-on-their-land-213864>.
- Osorio, M., O. Estupiñán, and M.C. Fuentes. 2020. "Retos de Paz y Derechos Humanos en la Comunidad Wayúu en la Alta Guajira, Colombia ("Challenges of peace and human rights in the Wayúu community in Alta Guajira, Colombia)." *Revista de Paz y Conflictos (Journal of Peace and Conflicts)* 13 (2): 25–51.
- Pers. Comm. (Personal communication). 2022. Personal communication between the authors and the leaders of YANAMA and residents of Cabo de la Vela, La Guajira, Colombia. September 24–26.
- Pers. Comm. (Personal communication) 2023a. Personal communication between the authors and leaders of Coordinadora Nacional de Mujeres Indígenas de Panamá (CONAMUIP), Panama City, Panama. May 31.
- Pers. Comm. (Personal communication) 2023b. Personal communication between the authors and the leaders of CONAMUIP and residents of Niadub Island, Gunayala, Panama. June 1.
- Pers. Comm. (Personal communication) 2023c. Personal communication between the authors and the leaders of CONAMUIP and residents of Abya Yala, Panama City, Panama. June 4.
- Pers. Comm. (Personal communication) 2023d. Personal communication between the authors and the leaders of Asociación de Mujeres Indígenas de Bribri de Talamanca (ACOMUITA), WhatsApp. October 23.
- Pers. Comm. (Personal communication). 2023e. Personal communication between the authors and the leaders of YANAMA and residents of Maicao, La Guajira, Colombia. June 15–17.
- Pers. Comm. (Personal communication). 2023f. Personal communication between the authors and residents of Palaima, Flamingos Natural Park, La Guajira, Colombia. June 16–19.
- Pers. Comm. (Personal communication). 2023g. Personal communication between the authors and leaders of Fuerza de Mujeres Wayuu, Maicao, La Guajira, Colombia. June 20.
- Pers. Comm. (Personal communication) 2024. Personal communication between the authors and the leaders of ACOMUITA via WhatsApp. January 8.
- Polo, N. 2017. "El Sistema normativo Wayuu." Módulo Intercultural. Santa Marta: Universidad Sergio Arboleda, Colombia.
- Porras, M., and H. Picado. 2016. "Bribris: A People Never Conquered Who Are Standing up to REDD." *World Rainforest Movement Bulletin* 221. <https://www.wrm.org.uy/bulletin-articles/bribris-a-people-never-conquered-who-are-standing-up-to-redd>.
- Posas, P. 2013. "Shocks and Bribri Agriculture Past and Present." *Journal of Ecological Anthropology* 16 (1): 43–60.
- Premauer, J.M., and F. Berkes. 2015. "A Pluralistic Approach to Protected Area Governance: Indigenous Peoples and Makuira National Park, Colombia." *Ethnobiology and Conservation* 4, no. 4 (June 11). doi:10.15451/ec2015-5-4.4-1-16.
- Prestan, A. 1975. *El Uso de la Chicha y la Sociedad Kuna (The Use of Chicha and the Kuna Society)*. Panama City: Instituto Indigenista Interamericano.
- Quiroga, L.M. 2017. "Beneficios obtenidos y potenciales por el desarrollo del proyecto del parque eólico Jepirachi ubicado en el departamento de La Guajira, Colombia" ("Analysis of the Jeripachi wind farm project in the department of La Guajira, Colombia"). Tesis para el título de Especialización en Planeación Ambiental y Manejo de los Recursos Naturales (Thesis for degree in specialization in environmental planning and natural resources management). Bogotá: Universidad Militar Nueva Granada. <https://core.ac.uk/reader/143454253>.
- Rasolt, D.H. 2019. "From a Vibrant Past to a Desolate Future: La Guajira and the Wayuu Tribe of Colombia." *Unbounded World*. <https://unboundedworld.com/from-a-vibrant-past-to-a-desolate-future-la-guajira-and-the-wayuu-tribe-of-colombia/>.
- Responsible Travel. n.d. "Responsible Tourism in Costa Rica." *Responsible Travel* (blog). <https://www.responsiblevacation.com/vacations/costa-rica/travel-guide/responsible-tourism-in-costa-rica>.
- Roberts, B. 2021. "Securing Women's Land Rights: Challenges and Solutions." *Agrilinks.org*. <https://agrilinks.org/post/securing-womens-land-rights-challenges-and-solutions>.

- Rodríguez, L.A. 2018. "Factores que influyen en la relación entre políticas de RSE en materia de derechos humanos y el derecho a la consulta previa libre e informada de los pueblos indígenas. Caso de estudio parque eólico Jepirachi, La Guajira, Colombia" ("Factors influencing the relationship between CSR Policies on human rights and the right to free, prior and informed consultation of Indigenous peoples. Case study of the Jepirachi wind farm, La Guajira, Colombia"). Tesis para Doctorado en Filosofía (Thesis for a Doctorate in Philosophy), Monterrey: Universidad Autónoma de Nuevo León. <http://eprints.uanl.mx/16115/1/1080290409.pdf>.
- Rogozenska, E. 2023. "Enel Suspends Proposed Windpeshi Wind Farm on Wayúu Indigenous Land in Colombia." Berkeley, CA: CorpWatch. <https://www.corpwatch.org/article/enel-suspends-proposed-windpeshi-wind-farm-wayuu-indigenous-land-colombia>.
- Rubiano, M.J. 2022. "Brindar el alimento y la comida: Cambios del rol femenino dentro del parentesco Wayuu y sus implicaciones sobre los cuidados alimentarios concedidos" ("Giving food and meals: Changes in women's role within the Wayuu kinship and its implications in care practices"). Facultad de Ciencias Sociales y Humanas (Faculty of Social and Human Sciences), Medellín, Colombia: Universidad de Antioquia.
- Salvador, M. 2003. "Molas, Meaning and Markets." In *Crafting Gender: Women and Folk Art in Latin America and the Caribbean*, edited by E. Bartra. Durham, NC: Duke University Press. <https://doi.org/10.1215/9780822384878>.
- Sánchez, S. 2021. "El valor de la palabra en el sistema normativo Wayuu aplicado por el palabrero. Una Visión desde el derecho propio" ("The value of the word in the Wayúu normative system applied by the palabrero. A view from the law itself"). Bucaramanga, Colombia: Facultad de Derecho, Universidad Santo Tomás.
- Sarmiento Barletti, J.P., and A. Larson. 2017. "Rights Abuse Allegations in the Context of REDD+ Readiness and Implementation. A Preliminary Review and Proposal for Moving Forward." *CIFOR Infobriefs*, no. 190. https://www.cifor.org/publications/pdf_files/infobrief/6630-infobrief.pdf.
- Schneider, D.M., and K. Gough, eds. 1961. *Matrilineal Kinship*. Berkeley and Los Angeles: University of California Press.
- Scope, P. 2021. "Costa Rica: Self Rule." Chapel Hill: University of North Carolina. https://garymarks.web.unc.edu/wp-content/uploads/sites/13018/2021/02/CostaRica_combined.pdf.
- Scull, J.C. 2023. "The Guna: An Endangered People of the Caribbean Where Women Rule." *Owlcation* (blog), November 26. <https://owlcation.com/social-sciences/The-Guna-An-Endangered-People-of-the-Caribbean-Where-Women-Rule#gid=ci02ae9b9540002643&pid=the-guna-an-endangered-people-of-the-caribbean-where-women-rule-MTkzMDQ2OTE4NTk4MDQzMzQ0>.
- Shenk, M.K., R.O. Begley, D.A. Nolin, and A. Swiatek. 2019. "When Does Matriliney Fail? The Frequencies and Causes of Transitions to and from Matriliney Estimated from a De Novo Coding of a Cross-Cultural Sample." *Philosophical Transactions of the Royal Society*. 374: 20190006.
- Snow, S.G. 2010. "The Kuna General Congress and the Statute on Tourism." *Cultural Survival*. <https://www.culturalsurvival.org/publications/cultural-survival-quarterly/kuna-general-congress-and-statute-tourism>.
- Solano, Elizabeth. 2002. "La Población indígena en Costa Rica según el censo del año 2000" ("The Indigenous population in Costa Rica according to the 2000 census"). *CEPAL 75*: 341–73. <https://ccp.ucr.ac.cr/noticias/simposio/pdf/solano.pdf>.
- Stege, K.E., R. Maetala, A. Naupa, and J. Simo. 2008. "Land and Women: The Matrilineal Factor—The Cases of the Republic of the Marshall Islands, Solomon Islands, and Vanuatu." Fiji: Pacific Islands Forum Secretariat.
- Surowiec, A., K.T. Snyder, and N. Creanza. 2019. "A Worldwide View of Matriliney: Using Cross-Cultural Analyses to Shed Light on Human Kinship Systems." *Phil.Trans. R. Soc.* B374: 20180077. <http://dx.doi.org/10.1098/rstb.2018.007>.
- Torrado, S. 2022. "Análisis crítico del discurso indígena Wayuu, líderes sociales y gobierno nacional entorno a proyectos eólicos en la Alta Guajira" (Critical analysis of the Wayuu Indigenous discourse, social leaders and national government regarding wind projects in Alta Guajira). Tesis para Maestría en Comunicación Política (Thesis for Master's Degree in Political Communication). Bogotá: Facultad de Comunicación Social-Periodismo, Universidad Externado de Colombia.
- Torres, N. 2023. "Colombian Wind Farm End-of-Life Raises Circularity and Indigenous Questions." *Mongabay*, November 9. <https://news.mongabay.com/2023/11/colombian-wind-farm-end-of-life-raises-circularity-and-indigenous-questions/>.
- Townsend, J., F. Moola, and M.K. Craig. 2020. "Indigenous Peoples Are Critical to the Success of Nature-Based Solutions to Climate Change." *FACETS* 5: 551–56. doi:10.1139/facets-2019-0058. <https://www.facetsjournal.com/doi/pdf/10.1139/facets-2019-0058>.

Turner, Y.A. 2008. "El Derecho de autodeterminación de los pueblos indígenas de Panamá." Panama City: Instituto de Estudios Nacionales, Universidad de Panamá.

Ulloa, A. 2023. "Aesthetics of Green Dispossession: From Coal to Wind Extraction in La Guajira, Colombia." *Journal of Political Ecology* 30 (1). doi: <https://doi.org/10.2458/jpe.5475>.

UNCCN (United Nations Climate Change News). 2022. "How Indigenous Peoples Enrich Climate Action." <https://unfccc.int/news/how-indigenous-peoples-enrich-climate-action>.

UNEP (United Nations Environment Programme). 2023. "As Climate Crisis Alters Their Lands, Indigenous Peoples Turn to the Courts." <https://www.unep.org/news-and-stories/story/climate-crisis-alters-their-lands-indigenous-peoples-turn-courts>.

UNESCO (United Nations Educational, Scientific and Cultural Organization). n.d. "Intangible Cultural Heritage: Wayuu Normative System, Applied by the Pütchipü'üi (Palabrero)." <https://ich.unesco.org/en/RL/wayuu-normative-system-applied-by-the-putchipu-ui-palabrero-00435>.

UNHRSP (United Nations Human Rights Special Procedures), Working Group on the Issue of Discrimination against Women in Law and in Practice. 2017. "Insecure Land Rights for Women Threaten Progress on Gender Equality and Sustainable Development." <https://www.ohchr.org/sites/default/files/Documents/Issues/Women/WG/Womenslandright.pdf>.

USAID (United States Agency of International Development), Land and Resource Governance Division. n.d. LandLinks: "What Is Land Tenure?" <https://www.land-links.org/what-is-land-tenure/>.

van der Hammen, M.C. 2003. "The Indigenous Resguardos of Colombia: Their Contribution to Conservation and Sustainable Forest Use." Amsterdam: Netherlands Committee for IUCN. <https://portals.iucn.org/library/sites/library/files/documents/2003-017.pdf>.

Vargas, N. 2020. "The Effects of the Wind Farms on the Indigenous Zapotec Community of the Isthmus of Tehuantepec, Mexico." *Occam's Razor* 10, Article 3. <https://cedar.wvu.edu/orwwu/vol10/iss1/3>.

Vega-Araújo, J.A., M. Muñoz Cabré, Y. Ramirez, and R. Lerma. 2023. "Wind Energy and Wayuu Indigenous Communities: Challenges in La Guajira." Stockholm Environmental Institute. <https://www.sei.org/features/wind-energu-wayuu-la-guajira/>.

Vega-Araújo, J.A., M. Muñoz Cabré, Y. Ramirez, and R. Lerma. 2024. "Enabling Factors of Social Acceptance of Wind Energy Projects in La Guajira." Stockholm Environmental Institute. <https://www.sei.org/wp-content/uploads/2024/01/sei2024.001-acceptance-wind-energy-la-guajira.pdf>.

Wallbott, L., and E. Florian-Rivero. 2018. "Forests, Rights and Development in Costa Rica: Political Ecology Perspective on Indigenous Peoples' Engagement in REDD+." *Conflict, Security & Development* 18 (6): 493–519. <https://doi.org/10.1080/14678802.2018.1532643>.

World Bank. 2022. "Costa Rica's Forest Conservation Pays Off." *World Bank News*. <https://www.worldbank.org/en/news/feature/2022/11/16/costa-rica-s-forest-conservation-pays-off#:~:text=Strengthening%20Accounting%20and%20Confidence%20in,emissions%20in%202018%20and%202019>.

Zúñiga, N. 2023a. "Costa Rica: Context and Land Governance." Land Portal. <https://landportal.org/book/narratives/2023/costa-rica#ref25>.

Zúñiga, N. 2023b. "Panama: Context and Land Governance." Land Portal. <https://landportal.org/book/narratives/2023/panama#ref41>.

ACKNOWLEDGMENTS

The authors are deeply grateful to Wellspring Philanthropic Fund for generously supporting this research and WRI's work on women's land and property rights.

We are greatly indebted to our local partners in each of the three case study countries—YANAMA (Colombia), ACOMUITA (Costa Rica), and CONAMUIP/Olowaili (Panama)—for organizing the fieldwork, assisting in the interviews of community leaders and members, and validating the case study findings on their respective communities. Special thanks to Nat Nat Iguarán Fajardo, Remedios Fajardo Gomez, Jareena Iguarán Fajardo, Jesús Acosta, and Alemnis Amaya Arias (YANAMA); Faustina Torres Torres, Javier Méndez Blanco, and Marina López (ACOMUITA); and Sonia Henriquez, Elvira Guillén, Melvis Gernado, and Zahira Martínez (CONAMUIP/Olowaili).

We express special thanks to our peer reviewers for lending their time and expertise to review our paper: Patricia Kristjanson, Renée Givarelli, and Servio Alberto Caceido served as external reviewers, and Stefanie Tye, Rene Zamora, Wen Zhou, Robin King, and Acoyani Adame served as internal reviewers. Special thanks to Cosmas Ochieng for his guidance as sign-off director for WRI's Equity Center,

and to Simone Athayde and Kathleen Schalch for their valuable feedback as reviewers for WRI's Research, Data, and Impact. We also wish to acknowledge the support provided by Allison Meyer, Renee Pineda, Romain Warnault, Shazia Amin, and Lauri Scherer in the editorial and production process.

Finally, we thank the women and men in La Guajira, Colombia; Talamanca, Costa Rica; and Gunayala, Panama, for generously welcoming us into their communities, candidly sharing their experiences and insights, and inspiring us with their strength and resilience. Special thanks to Sixto Ávila, Luis, Delvida, Sandra, Keiny, Edgar, Virtud, Alidanis, José Santos, Gleidy Iguarán, Ilich Vladimir Mercado, Daniel Quintero, Jayson Menjurrieta, and Laura Martínez (Colombia); Maruja Mallorga, Albir, Awapa Foundation, and Eliseo (Costa Rica); and Diana, Ina, Antonia, Evangelina, Mesías, Jorge, Ermiño, Francisca, Tenilda, Delis, Lorenzo, Anguidili, Elita, Briseida, Dr. Hernando Franco Muñoz, and Dir. Aresio Valiente López (Panamá).

ABOUT THE AUTHORS

Celina Salcedo-La Viña is a Senior Associate/Land Tenure and Governance Specialist with the Land and Resource Rights Initiative at WRI.

Contact: Celine.LaVina@wri.org.

Anamaría Martínez is a Research Manager with WRI México & WRI Colombia.

Contact: Anamaria.Martinez@wri.org.

Patricia Quijano Vallejos is a Senior Consultant specializing in environmental and climate affairs.

Contact: patty.quijanov@gmail.com.

ABOUT WRI

World Resources Institute is a global research organization that turns big ideas into action at the nexus of environment, economic opportunity, and human well-being.

Our challenge

Natural resources are at the foundation of economic opportunity and human well-being. But today, we are depleting Earth's resources at rates that are not sustainable, endangering economies and people's lives. People depend on clean water, fertile land, healthy forests, and a stable climate. Livable cities and clean energy are essential for a sustainable planet. We must address these urgent, global challenges this decade.

Our vision

We envision an equitable and prosperous planet driven by the wise management of natural resources. We aspire to create a world where the actions of government, business, and communities combine to eliminate poverty and sustain the natural environment for all people.

Our approach

COUNT IT

We start with data. We conduct independent research and draw on the latest technology to develop new insights and recommendations. Our rigorous analysis identifies risks, unveils opportunities, and informs smart strategies. We focus our efforts on influential and emerging economies where the future of sustainability will be determined.

CHANGE IT

We use our research to influence government policies, business strategies, and civil society action. We test projects with communities, companies, and government agencies to build a strong evidence base. Then, we work with partners to deliver change on the ground that alleviates poverty and strengthens society. We hold ourselves accountable to ensure our outcomes will be bold and enduring.

SCALE IT

We don't think small. Once tested, we work with partners to adopt and expand our efforts regionally and globally. We engage with decision-makers to carry out our ideas and elevate our impact. We measure success through government and business actions that improve people's lives and sustain a healthy environment.



Copyright 2024 World Resources Institute. This work is licensed under the Creative Commons Attribution 4.0 International License. To view a copy of the license, visit <http://creativecommons.org/licenses/by/4.0/>