



UNIDIR

MANAGING EXITS
FROM ARMED CONFLICT

MEAC FINDINGS REPORT 43

Armed Group Responses to Climate Shocks: A Study of FARC-EP Dissident Activities in the Colombian Amazon During an El Niño Year

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March 2025

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This Findings Report, and the research that supported it, were undertaken as part of UNIDIR's Managing Exits from Armed Conflict MEAC project. MEAC is a multi-donor, multi-partner initiative to develop a unified, rigorous approach to examining how and why individuals exit armed conflict and evaluating the efficacy of interventions meant to support their transitions. While the Findings Report benefited from feedback from MEAC's donors and institutional partners, it does not necessarily represent their official policies or positions.

Citation: Juanita Vélez, Ángela Aguirre, Sofia Rivas, Dr. Siobhan O'Neil, "Armed Group Responses to Climate Shocks: A Study of FARC-EP Dissident Activities in the Colombian Amazon During an El Niño Year," *Findings Report 43*, UNIDIR, Geneva, 2025, <https://doi.org/10.37559/MEAC/25/03>

Key Findings

- The 2023-2024 El Niño cycle brought extreme droughts and rising temperatures, a proxy for the kinds of climatic shifts and events expected from climate change, leading to significant environmental, economic, social, and cultural impacts on communities in the Colombian Amazon.
- Combined with a shifting political landscape, the El Niño phenomenon contributed to increased deforestation in the region.
- FARC-EP dissident groups in the Amazon, such as the formerly known “EMC” (Central High Command), have developed a robust business model centred on regulating deforestation and profiting from related economic activities in the region, including logging. Even after the group split into two separate factions in 2024, both continue to generate revenue by charging external actors for land transactions, deforestation, and cattle ranching.
- While FARC-EP dissident groups appear to have shifted their behaviour to take advantage of the extremely dry weather of El Niño, which is conducive to deforestation activities, the Government has not altered its approach to combating deforestation during this period. Institutional responses remain insufficient, primarily due to the State’s limited control over the affected territories.
- Local communities have developed various strategies to cope with climate-related challenges, including reforestation programmes and water conservation techniques. However, sustaining these efforts over time requires stronger State control over the affected territories and concrete support, as many communities lack the necessary resources and expertise for developing long-term resilience.

Background

About MEAC

How and why do individuals exit armed groups, and how do they do so sustainably without falling back into conflict cycles? These questions are at the core of UNIDIR's Managing Exits from Armed Conflict (MEAC) initiative. MEAC is a multi-year, multi-partner collaboration that aims to develop a unified, rigorous approach to examining how and why individuals exit armed conflict and evaluating the efficacy of interventions meant to support their transition to civilian life. MEAC seeks to inform evidence-based programme design and implementation in real time to improve efficacy. At the strategic level, the cross-programme, cross-agency lessons that will emerge from the growing MEAC evidence base will support more effective conflict resolution and peacebuilding efforts. The MEAC project benefits from generous support by the German Federal Foreign Office (GFFO); Global Affairs Canada (GAC); the Swiss Federal Department of Foreign Affairs (FDFA); and the Irish Department of Foreign Affairs; and is run in partnership with UNICEF; and the International Organization for Migration (IOM); the UN Development Programme (UNDP); UN Department of Peace Operations (DPO); the World Bank; the Secretariat of the Regional Strategy for Stabilization, Recovery and Resilience in the Lake Chad Basin; and United Nations University Centre for Policy Research (UNU-CPR).

About This Series

The MEAC findings report series seeks to put evidence about conflict transitions and related programming into the hands of policymakers and practitioners in real time. The reports present short overviews of findings (or emerging findings) across a wide range of thematic areas and include analyses of their political or practical implications for the United Nations and its partners.

About This Report

This report explores the interplay between climate shocks, human-led degradation, and armed group activity in San José del Guaviare, Amazonian department of Guaviare, Colombia. Specifically, the study analyses how FARC-EP dissidents' involvement in deforestation activities changed throughout the 2023-2024 El Niño phenomenon, which brings extreme droughts, making deforestation easier. The study draws on two rounds of focus groups, the first of which took place in San José del Guaviare before the El Niño effects were widely felt in November 2023, and the second round was conducted in September 2024, after the period of

its most drastic effects. This approach sought to explore how the related drought – which may mimic the effects of climate change – may have influenced armed group activities in the region. The focus groups were conducted with populations that had visibility on deforestation in the region and/or its impacts - including community leaders, Indigenous groups, military and police forces, civil authorities, and youth. The report seeks to enhance knowledge about the interplay between climatic shifts, deforestation, and armed group activities in this region, and their security and environmental implications. It also emphasizes the challenges of preventing and addressing deforestation in the context of an ongoing armed conflict, where armed groups exert significant influence over communities, including on environmental issues. Practically, these findings could guide the creation of more security-aware deforestation prevention strategies, while enhancing the environmental frame of security policy, and in both cases, recognizing the diverse roles armed groups play in deforestation and the resulting impacts on local communities.

Introduction

The experience of San José del Guaviare, in the Amazonian department of Guaviare in Colombia, highlights various challenges. Following the signing of the 2016 Peace Agreement between the Revolutionary Armed Forces of Colombia-People’s Army (FARC-EP, for its initials in Spanish) and the Colombian Government, there was a marked increase in deforestation. FARC-EP dissident groups, including the previously known “EMC” (Central High Command),¹ stepped into the vacuum created by the demobilizing FARC-EP, and have increasingly engaged in deforestation activities. This opportunistic behaviour has impacted both the environment and the social, cultural, and economic dynamics of the communities in the area.

The report examines whether and how the FARC-EP dissident groups’ involvement in deforestation activities in the region changed in response to the 2023-2024 El Niño phenomenon, which brought extreme temperatures and drought to the region, favourable conditions for deforestation activities. El Niño droughts mimic those effects thought to be exacerbated by climate change. As such, the phenomenon served as a natural experiment of sorts that allowed MEAC to examine how armed groups respond to climatic shocks and shifts, particularly with regard to their engagement in deforestation, which in turn exacerbates climate change. It is important to note that several other organizational, political, and economic developments occurred during the 2023-2024 El Niño period, which also influenced FARC-EP

¹ In April 2024, the EMC split into two separate factions: the Calarcá and Mordisco Units, respectively. The Calarcá faction is also commonly known as the Seventh Front or the “EMBF”. The Mordisco faction is also known as the First Front or the “EMC”.

dissident groups' deforestation activities, highlighting that armed group decision-making even when responsive to climatic changes, does not occur in a vacuum.

The findings presented in this report are based on qualitative research carried out in partnership with the Conflict Responses Foundation (CORE), MEAC's implementing partner in Colombia, and in consultation with the Foundation for Conservation and Sustainable Development (FCDS).² The report starts by providing context on San José del Guaviare's conflict and deforestation history, followed by an explanation of the study's methodology and the results. In practical terms, the findings of this study are important for the development of effective deforestation prevention strategies that consider the various challenges involved in the context of continuous armed group presence and violence. The report concludes with recommendations developed with the FCDS to better prevent and address armed group involvement in deforestation and the related negative impacts on communities in San José del Guaviare. This comes at an important time given the strong environmental focus of the "Total Peace" policy, in which the Colombian Government seeks to negotiate with the main armed groups operating in the country today and demobilize its members to improve security outcomes.³

I. Conflict Context

Historically, armed groups have had a significant environmental influence in the Colombian Amazon. This territory combines protected areas such as natural reserves, Indigenous territories (*resguardos*)⁴, as well as non-titled land, or '*baldios*' (state-owned) lands, where different armed groups have had a profound influence over the past decades.

From the 1980s onwards, the FARC-EP was the de-facto environmental authority in the Amazonian region. The group imposed norms and sanctions to regulate activities such as fishing, logging, and the overall preservation of natural areas in the Amazon. While their environmental protection efforts, such as the implementation of anti-deforestation norms, served as a strategy for hiding more effectively from the military within protected forests, they also permitted deforestation in other select areas for coca cultivation to sustain their illicit economy. This contradiction underscores the tension between their role as "protectors" of the environment and their participation in environmentally degrading activities for economic gain.

² The project received technical and logistical support from the Foundation for Conservation and Sustainable Development (FCDS), a non-governmental organization whose goals include the sustainable and equitable development of – mainly rural – human populations and the preservation of these regions' natural and social conditions in the Colombian Amazon.

³ Kyle Johnson, "[La Paz Total: Dos años para un nuevo camino?](#)", CORE, 25 November 2024.

⁴ A *resguardo* is a unique sociopolitical and legal institution consisting of one or more Indigenous communities that collectively hold rights to their land with the same protections as private property. These institutions own their territory, govern its use, and manage internal affairs through an autonomous organization guided by Indigenous law and their own normative systems. *Resguardos* are collectively owned by the Indigenous communities for whom they are established, and their lands are inalienable, imprescriptible, and immune from seizure.

However, the Peace Process in 2016 between the armed group and the Government, followed by the guerrilla group's demobilization, left a power vacuum that has been filled over the years by FARC-EP dissident groups that opposed the Agreement.

In the aftermath of the 2016 Peace Agreement, new FARC-EP dissident groups, such as the previously known EMC, took control over the same Amazonian territory previously controlled by the FARC-EP. Positioning themselves as the continuation of the former FARC-EP, these groups aimed to preserve their territorial control in their established regions rather than pursuing state power, as the original FARC-EP had aimed to do.

In comparison to the former FARC-EP, the new dissident groups no longer depend primarily on drug trafficking as their main source of income. They have diversified to other economic activities, making the management of deforestation, mining, and land grabbing their main source of income in the Amazon. Today, these groups impose more flexible restrictions on deforestation than their predecessors used to. They permit certain actors to clear limited areas of land while imposing fines on those who exceed the allowed limits. Additionally, they charge a fee for each head of cattle that enters their territories and for any transactions involving the buying or selling of land. Therefore, while the former FARC-EP prioritized environmental protection and strictly enforced anti-deforestation measures, dissident groups are far less concerned and impose minimal restrictions on such activities.

Since the 2016 Peace Agreement, there have been different approaches to dealing with dissident groups and their involvement in deforestation. Dissident groups in the Amazon have responded to national anti-deforestation policies in varied ways, adapting their strategies to local conditions. Between 2016 and 2018, the Colombian Government implemented the "Environmental Bubble", a coordinated response by the Attorney General's Office, the army, the police, and environmental authorities to share intelligence on deforestation activities and coordinate targeted military operations to prevent and address it.

From 2018 to 2022, the focus shifted to a militarized strategy against deforestation called "Artemisa". This initiative led to the establishment of ten high-mountain battalions and five jungle battalions in critical areas where deforestation was taking place.⁵ However, the strategy largely resulted in the capture of small-scale farmers rather than the key players behind deforestation. FARC-EP dissident groups capitalized on this military-heavy approach by framing it as an attack on peasants and local communities. This narrative undermined

⁵ Juanita Vélez, "[La estrategia de Duque en contra de la deforestación empieza con tres líos](#)", La Silla Vacía, 9 May 2019.

government credibility and helped dissidents build trust and legitimacy within the affected communities.

Since Gustavo Petro's Government took office in 2022, Colombia has advanced a Total Peace strategy that aims to negotiate with "political" groups while bringing criminal actors to justice. As part of this initiative, formal negotiations with the EMC began in October 2023. During this period, an environmental cessation of hostilities was observed: dissidents shifted from permitting logging to banning it as a "political gesture" in the lead-up to the Total Peace talks. Simultaneously, the military halted operations against deforestation, focusing instead on forging environmental agreements with local communities to promote reforestation. The dissident group's commitment to the negotiations and the cessation of hostilities, however, has not been continuous. The group has intermittently permitted logging in the region whenever it perceives that the Government is failing to meet its demands, highlighting the fragility of environmental accords within the broader Total Peace negotiations. Furthermore, local populations have observed no significant improvements in their security since the negotiations began a year and a half ago, reflecting the negotiations' failure to improve the country's security situation.

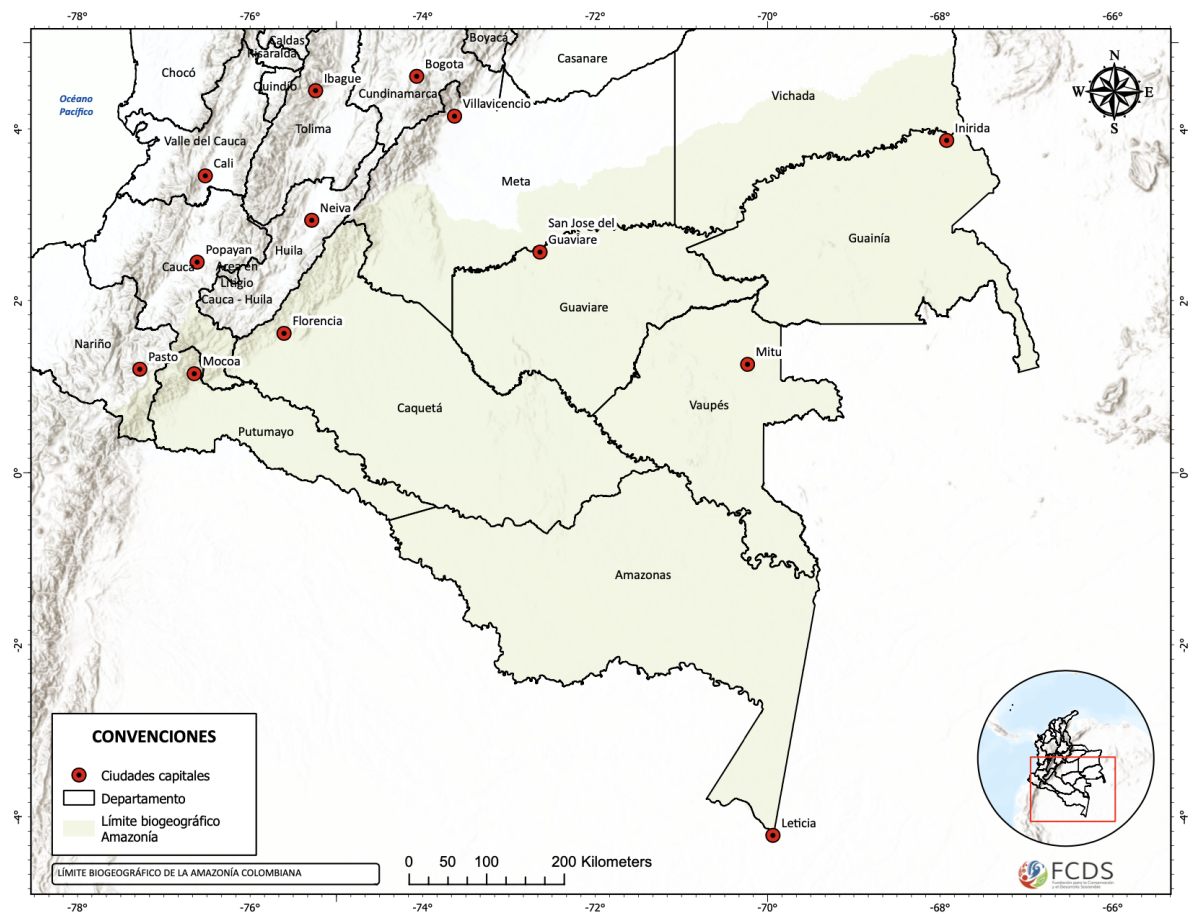
In April 2024, the EMC split into two separate factions: the Calarcá Units, also known as the Seventh Front or as the "EMBF" (*Estado Mayor de Bloques y Frente*), and the Mordisco Units, also known as the First Front or as the "EMC" (*Estado Mayor Central*). The dissident group split due to internal differences about the implementation of the ceasefire with the Government in the context of the Total Peace negotiations.⁶ Specifically, while the Calarcá Units agreed with regional ceasefires in only certain areas of the country, Mordisco Units only accepted a widespread national ceasefire. Today, Calarcá Units are still negotiating with the Government under Total Peace and imposing territorial control over a large subregion of the Colombian Amazon.⁷ In contrast, Mordisco Units no longer participate in the peace talks and currently operate in a more limited subregion of the Amazon.⁸

⁶ Redacción Colombia +20, "[Así se gestó la división en disidencia EMC que llevó a la ruptura con Iván Mordisco](#)", *El Espectador*, 16 July 2024.

⁷ On a national level, the Calarcá Units exercise control over some municipalities in Caquetá, Guaviare, Huila, Meta and Tolima.

⁸ On a national level, the Mordisco Units exercise control over some municipalities in Guaviare, Guinía, Amazon, Caquetá, Putumayo, Tolima, Huila, Valle del Cauca, Arauca, Casanare, Cauca, and Nariño.

FIGURE 1 - MAP OF COLOMBIA'S AMAZONIAN REGION⁹



Source: Foundation for Conservation and Sustainable Development (FCDS)

II. Deforestation in the Amazon

The Amazon is estimated to have about 123 billion tons of carbon both above and below ground, making it one of the biggest carbon holders in the world.¹⁰ The region's ability to store carbon is dependent on its trees, many of which have been cut down in recent years due to deforestation practices. Deforestation directly contributes to climate change by diminishing the number of trees capable of CO₂ absorption, thereby increasing the concentration of this gas in the atmosphere and exacerbating global warming. Consequently, heightened deforestation activities and the associated reduction of CO₂ absorption pose an urgent and catastrophic environmental challenge locally, nationally, and globally.

Following the demobilization of the FARC-EP, deforestation in the Colombian Amazon doubled from 70.074 hectares in 2016 to 144.147 hectares in 2017.¹¹ Taking advantage of the

⁹ This map illustrates the Colombian Amazonian region, highlighted in green. Red dots indicate the capital cities of each department.

¹⁰ Amazon Aid, "[Climate change](#)", 28 February 2025.

¹¹ Natalia Arenas and Juanita Vélez, "[El impacto ambiental de la salida de las FARC-EP](#)", *La Silla Vacía*, 5 July 2017.

regulatory vacuum in the region that emerged in the aftermath of the 2016 Peace Agreement, many local people cleared hectares of land to build farms. In contrast to the former FARC-EP, the new dissident groups permit these deforestation practices as a strategy to gain legitimacy and build trust within the communities. During this time, the dissident groups promoted themselves as “protectors” of the communities against government-led anti-deforestation operations. Deforestation reached a peak in 2018 and even though it declined in 2019, it climbed again in 2020 and 2021.¹²

In 2022, deforestation declined again in part due to the former EMC’s prohibition to cut down trees just after Petro came to power as a political gesture in response to the Total Peace negotiations. This trend remained fairly similar throughout 2023.¹³ However, deforestation activities rose severely again in the first months of 2024 due to two main factors: the new Calarcá faction (also known as the Seventh Front or the EMBF) allowed deforestation again in response to disagreements with the Government during the Total Peace negotiations and the effects of El Niño exacerbated the situation, as the first half of the year coincides with the dry season, a period when people typically take advantage of favourable conditions for logging.¹⁴

As such, dissident groups in the Amazon have taken advantage of deforestation as a source of financing and as a tool to pressure current political negotiations. In the words of a participant from the study, “The issue of allowing logging to increase (...) is to demonstrate to the Government that they can control this issue, and that (...) if they tell the people to cut down, they can cut down. I think that's what they want to demonstrate... that they are the ones who control the territory.”¹⁵ Additionally, as described in the following section, the El Niño phenomenon and climate change more broadly have created conditions that have changed the calculations and the opportunities available to armed groups in the Colombian Amazon.

III. The El Niño Phenomenon and Climate Change

The El Niño phenomenon is a climate pattern that is exacerbated (but not directly caused) by climate change¹⁶ and occurs irregularly in two-to-seven-year intervals.¹⁷ This cyclic phenomenon results in “the unusual warming of surface waters in the Eastern Pacific Ocean”,¹⁸ which has a direct impact on the strength of ocean currents and on weather conditions from

¹² According to data from the Institute of Hydrology, Meteorology and Environmental Studies of Colombia (IDEAM), deforestation peaked to 138.176 hectares in 2018, declined to 98.256 in 2019, rose again to 109.302 in 2020 and 112.899 hectares in 2021.

¹³ Colombia, Ministry of Environment, [La deforestación baja en 2023 y en 2024 enfrenta amenazas](#) (Bogotá, 2024).

¹⁴ Colombia, Ministry of Environment, [La deforestación baja en 2023 y en 2024 enfrenta amenazas](#) (Bogotá, 2024).

¹⁵ MEAC Focus Group Discussion with community leaders (San José del Guaviare, November 2023).

¹⁶ Catalina González Arango, [“Fenómeno del Niño: todas las preguntas sobre este evento climático”](#), Universidad de los Andes, 4 March 2024.

¹⁷ National Geographic, [“El Niño”](#), n.d.

¹⁸ National Geographic, [“El Niño”](#), n.d.

Australia to South America and beyond.¹⁹ In the Colombian Amazon specifically, the El Niño phenomenon has typically generated extreme droughts and heat.²⁰ According to IDEAM (the meteorological authority in Colombia), the recent El Niño cycle officially started in November 2023 and lasted until July 2024.²¹

El Niño, in many ways, serves as a natural experiment, as the cyclic weather phenomenon provides a climatic shock that mirrors some of the anticipated impacts of worsening climate change, particularly droughts and extreme heat. These effects facilitate deforestation, as hot, dry weather makes these activities easier. The study therefore examines whether climatic shifts influence FARC-EP dissident group deforestation and environmental regulation more broadly.

Existing evidence suggests that armed conflict and climate phenomena are linked. For instance, scholars have established a strong relationship between rainfall deviations below normal and the likelihood of emerging high-intensity conflicts²² or the probability of new civil conflicts arising during El Niño.²³ Additionally, literature has also explored the impact of climate change on natural resource supply and demand, and its effects on armed groups' ability to govern, recruit and finance.²⁴ Armed groups fill the gap left by states in conflict-affected environments, where climate change exacerbates fragility, by providing public services to gain legitimacy (governance). They may also exploit the effect that climate change has on livelihoods, offering people better opportunities and economic incentives (recruitment) and taking advantage of opportunities to manage (and prohibit) access to natural resources. This dynamic can be exacerbated if climate change increases the scarcity of natural resources, leaving armed groups with more power to decide who can use/exploit them (financing).²⁵

While there is emerging evidence that climatic shocks and shifts can influence armed group behavior, the effects of El Niño in San José del Guaviare, should not be analysed in isolation. Indeed, other critical changes in government policy, intergroup dynamics (e.g., the EMC split), and economic developments occurred during the study period and influenced armed group

¹⁹ United States Environmental Protection Agency, "[Impacts of Climate Change](#)", n.d.

²⁰ Mark Cochrane and William Laurance, "[Fire as a large-scale edge effect in Amazonian forests](#)", *Journal of Tropical Ecology*, Vol 18, No. 3 (May 2001), pp. 311-325.

²¹ Ministerio de Ambiente. "[Gobierno Nacional declara oficialmente el fenómeno del niño y alerta al país a continuar preparándose](#)", 4 November 2023; "[El fenómeno del niño ha finalizado en Colombia según el IDEAM](#)", *El Espectador*, 15 July, 2024.

²² Marc Levy, Catherine Thorkelson, Charles Vörösmarty, Ellen Douglas, and Macartan Humphreys, "[Freshwater Availability Anomalies and Outbreak of Internal War: Results from a Global Spatial Time Series Analysis Human Security and Climate Change](#)", January 2006.

²³ Salomon M. Hsiang, Kyle C. Meng, and Mark A. Cane, "[Civil Conflicts are Associated with Global Climate](#)" *Nature*, Vol. 476 (August 2011), pp. 438–441.

²⁴ Katharina Nett and Lukas Rüttinger, "[Insurgency, Terrorism and Organised Crime in a Warming Climate: Analysing the Links Between Climate Change and Non-State Armed Groups](#)", Adelphi, October 2016.

²⁵ Tim Sweijjs, Marleen de Haan, and Hugo van Manen, "[Unpacking the Climate Security Nexus Seven Pathologies Linking Climate Change to Violent Conflict](#)", The Hague Centre for Strategic Studies, March 2022; Katharina Nett and Lukas Rüttinger, "[Insurgency, Terrorism and Organised Crime in a Warming Climate: Analysing the Links Between Climate Change and Non-State Armed Groups](#)", Adelphi, October 2016.

deforestation activities. This underscores that climate change does not occur in a vacuum; how armed groups respond to climatic shifts, events, or shocks is shaped by the broader operational and economic contexts in which they operate, and the policies implemented towards them by governments.

Methodology

This study draws on a series of focus groups conducted in San José del Guaviare, Colombia, at two points in time: one set of five focus groups at the onset of El Niño phenomenon in November 2023, and another round of six focus groups after El Niño's effects had started to subside in September 2024. Conducting these two rounds of data collection with largely the same respondents²⁶ allowed the research team to explore how the climatic shifts - specifically rising temperatures and extreme droughts - impacted conflict dynamics in the region.

With the goal of speaking to a diversity of key stakeholders with visibility on different aspects of armed group activity in the region,²⁷ the research team conducted focus groups with the following:

1. **Children and Youth:** This sample was composed of one 11-year-old girl, four young women from the ages of 17 to 22, and one 21-year-old man. One of the participants resided in a natural reserve while the other five resided in an urban area.²⁸
2. **Military and Police:** Three men partook in this focus group. Two were part of the military and one belonged to the environmental police, an institution in charge of preventing and addressing environmental issues in the region.²⁹
3. **Community leaders:** The sample was composed of four men who worked in agriculture and resided in three different villages in the rural area of San José del Guaviare.
4. **Indigenous communities:** Five people - two women and three men- from the Jiw indigenous community, Sikuni, and Syrian (Siriana) communities participated.³⁰

²⁶ While it was the intention to interview the same participants in the second round of data collection (post-El Niño) to compare participants' data across both periods, some adjustments needed to be made based on participant availability. Any changes are detailed in footnotes for each specific focus group.

²⁷ During the study, there was a continuous presence of armed groups in the region. To ensure the safety of both participants and the research team, the focus groups were all conducted in safe and private spaces in San José del Guaviare, as this urban site was considered as safer than conducting the activities in rural areas. Transportation for all participants residing in rural areas to travel to the city was provided.

²⁸ Only two of the six participants from the Children and Youth sample participated in the second focus group; many of the original participants had since left the area to enter University. A new 13 year-old girl from the rural area of San José del Guaviare joined this focus group in the second round.

²⁹ In the second round, the research team separated military members and the police into two different groups to avoid potential conflicts between these participants since they reported in the first round feeling uneasy sharing information with the other party.

³⁰ Indigenous communities, including the Ticuna, Nukak, and Nasa, are among the populations most affected by deforestation in the Colombian Amazon. Over half of Colombia's indigenous groups—64 out of 115—reside in the Amazon, spread across 162 collective territories known as *resguardos*. These territories have endured the impacts of armed conflict for decades, and today, with the rise of the EMC, (and subsequently its split units) in the region, their ecosystems face heightened threats, further exacerbating the challenges these communities already endure.

5. Civil Authorities: A total of seven people - five men and two women - participated in this focus group. Participants worked in the Nukak National Natural Park,³¹ the tourist office of the Guaviare department, the Corporation for the Sustainable Development of the North and East of the Amazon (CDA),³² and the Administrative Department of Planning,³³ and the Government of Guaviare.³⁴

Findings

To examine the impact of climatic shocks — specifically the El Niño phenomenon—on dissident groups’ activities, this section first examines deforestation trends, the involvement of armed groups and institutional responses to deforestation in San José del Guaviare before the onset of El Niño. It then explores the economic, social, cultural, and environmental effects of the 2023-2024 El Niño cycle on communities in the region. Lastly, it details the situation in the aftermath of the climatic phenomenon, highlighting ongoing challenges and changes.

The Landscape Before the El Niño Cycle (2017-2023)

I. Deforestation Trends, Drivers, and Actors

In line with scientific evidence, participants perceived a significant increase in deforestation in San José Del Guaviare between the signing of the 2016 Peace Agreement and the onset of the El Niño phenomenon in 2023.³⁵ Deforestation primarily occurs in rural and remote regions but can also be observed in certain urban areas.³⁶ Traditionally, deforestation has been carried out through cutting and burning trees. However, participants³⁷ also reported alternate methods, including tree poisoning and more discreet techniques designed to evade satellite detection, such as selectively targeting specific trees and clearing land in irregular, nonlinear patterns.

³¹ The Nukak National Park is one of the 59 National Parks in Colombia.

³² The Corporation for the Sustainable Development of the North and East of the Amazon (CDA) is a local state entity in charge of monitoring the environment and sanctioning environmentally degrading activities in Vaupés, Guainía and Guaviare.

³³ The Administrative Department of Planning is a specific department of the Guaviare Government which focuses on the development of the department.

³⁴ Due to regular staff rotations in these departments, the makeup of the civil authorities involved in the second round of focus groups changed, although the institutions they represented remained the same (with the exception of the tourist office, which was not present in the second phase).

³⁵ International Crisis Group, “[Rebel Razing: Loosening the Criminal Hold on the Colombian Amazon](#)”, 18 October 2024.

³⁶ International Crisis Group, “[Rebel Razing: Loosening the Criminal Hold on the Colombian Amazon](#)”, 18 October 2024.

³⁷ MEAC Focus Group Discussion with civil authorities (San José del Guaviare, November 2023); MEAC Focus Group Discussion with the police (San José del Guaviare, September 2024).

Following the 2016 Peace Agreement, the expansion of deforestation in the region was attributed to the rise of dissident groups, such as the former EMC, which allowed and promoted deforestation for economic gain. The dissident group not only engaged in deforestation directly, as the former FARC-EP did, but also played an intermediary role charging external actors per hectares cleared or per head of cattle grazing on cleared land.

Other key actors driving deforestation during this time were wealthy ranchers. These ranchers take control over non-titled land, generally owned by the State, and exploit it for their own economic gain. Once appropriated, this land is repurposed for specific economic activities, such as cattle ranching or milk production, or sold. The former EMC profited from this process by imposing a “tax” on these ranchers for managing or selling the land. Evidence suggests that, at the time, the dissident group charged approximately nine to ten per cent of the land’s sale price.³⁸ Civil authorities described these ranchers as “ghost farmers,” as they are rarely seen or known within the communities, often residing in urban areas outside the region. Meanwhile, Indigenous participants referred to these actors as “colonizers”, as they are frequently responsible for invading and exploiting natural resources within Indigenous sacred lands.

However, “ghost farmers” rarely clear the land themselves as they do not reside in the region. Instead, they hire peasants and informal workers who reside on the territory to do so, taking advantage of their economic vulnerability. A participant who currently works to combat deforestation, admitted that it was hard to avoid the draw of such profitable work at the time, recalling: “Back in the days when there was logging, I used to make 300,000 or 400,000 pesos a day. Why? Because the truth is, I was really good at the job. I’d go alone, leave at 5:30 in the morning, and by 5 o’clock, after 12 hours, I had already cleared two and a half hectares.”³⁹ According to FCDS leaders, “ghost farmers” easily hire workers for deforestation purposes, as they often lack awareness of the devastating environmental consequences of these activities.

In general terms, deforested land is mainly used for cattle ranching. These activities are highly profitable as it initially costs “Three million pesos, and in two years, it’s worth six... Here, where there’s good pasture, it’s a profitable business... That’s why Guaviare is considered a cattle-raising area... most of the population here, though not all, owns some cattle. It’s good money.”⁴⁰ The drive to engage in profitable livestock farming contributes significantly to deforestation in the region, as much of the cleared land in Guaviare is used to sustain these activities.

Additionally, deforested areas were also increasingly used for new hotels and housing to accommodate rising tourism and population growth during this period. One participant

³⁸ Juanita Vélez, *Una Guerra Después* (Bogotá, Aguilar, 2023).

³⁹ MEAC Focus Group Discussion with community leaders (San José del Guaviare, September 2024).

⁴⁰ MEAC Focus Group Discussion with the military (San José del Guaviare, September 2024).

explained that in previous years, “...the area was very green, with lots of trees and everything. Now the town is expanding in that direction, with more houses.”⁴¹

II. Dissident groups’ Involvement in Deforestation

In 2023,⁴² the price of coca dramatically decreased, forcing new dissident groups to move away from the coca production model of its predecessors - the FARC-EP - and diversify their economic activities. Before the onset of the El Niño, as evidenced by a participant, “Coca is no longer profitable... I’ve been through areas... where people who rely on coca are struggling. For over a year, they haven’t been able to sell their product....”⁴³

Beyond the business model of the former FARC-EP, which heavily relied on direct involvement in coca production, FARC-EP dissident groups have now also expanded into other activities, developing a robust business model based on direct involvement in deforestation as well as on the regulation and management of a range of economic activities. Dissident groups started imposing “taxes” (e.g., extortion payments) on “ghost farmers” and peasants who wanted to engage in fishing, logging, cattle ranching, and milk production. They also charged fees for every hectare of land bought or sold in their areas of influence. While these “taxes” were generally paid with money, some farmers were forced to pay with cattle. During this period, the dissident groups imposed heavy penalties—ranging from economic sanctions to expulsion from the community—on those who failed to comply with their rules.

A key mechanism for enforcing these regulations was the establishment of a land registry in the region. Participants confirmed that before the El Niño cycle and prior to the EMC’s split, the group measured farms in rural areas of Guaviare and even charged local communities for including their properties in this registry. Ultimately, this land registry served as a tool for territorial control and taxation, helping the EMC have greater visibility over the land tenure and uses in the region, and thus facilitating its control over the local population.

During this period, while the EMC exerted significant environmental influence in the region, the participants⁴⁴ highlighted major inconsistencies behind the group’s environmental rules. Although the EMC enforced rules that were portrayed as “protecting” the environment, they simultaneously engaged in environmentally destructive activities, such as large-scale deforestation and the deployment of anti-personnel mines (causing severe ecological harm) to restrict access to certain areas. This duality suggests that the group was not deeply invested in environmental protection, but rather oscillated in its authorization of activities that hurt the

⁴¹ MEAC Focus Group Discussion with youth (San José del Guaviare, November 2023).

⁴² Daniela Beltrán, “[La ONU alertó por caída en el precio de la hoja de coca: está afectando principalmente a los campesinos](#)”, Infobae, 11 Agosto 2023.

⁴³ MEAC Focus Group Discussion with community leaders (San José del Guaviare, November 2023).

⁴⁴ MEAC Focus Group Discussion with civil authorities (San José del Guaviare, November 2023).

environment for tactical political or economic gains, including strengthening their control over local communities. For instance, the EMC's involvement in deforestation was directly linked to the progress of negotiations with the Government under the Total Peace initiative. Since negotiations began in 2022 and since the split of the group in 2024, the Calarcá faction, which is still involved in the Total Peace talks, has used deforestation to pressure the Government to comply with its demands. In other words, when the Government fails to comply with their demands, they allow more deforestation and other environmentally destructive activities in the region.

Beyond political and economic factors, participants also highlighted the impact of security conditions on dissident groups' activities. For instance, the suspension of military operations starting in 2022 significantly impacted the EMC's involvement in deforestation activities. During this time, the group decided to prohibit logging as a political gesture just before the start of the Total Peace talks and in direct response to the suspension of military attacks.

III. Institutional Responses to Deforestation

Despite the shift in government policies—from Iván Duque's administration (2018 - 2022), which prioritized military operations to identify and capture actors responsible for deforestation, to Gustavo Petro's Government (2022 - current), which suspended these operations—the same challenges persist. Despite coordination between various state agencies, including the Prosecutor's Office, the police, the army, and environmental authorities, large-scale loggers, also known as “ghost farmers”, continue to operate with impunity. These individuals, who finance and direct illegal logging activities, are rarely sanctioned not only because they reside in urban centres outside the affected regions, making it difficult to detect and capture them, but also because of limited institutional capacity. According to participants, this results in the State primarily capturing local peasants who are hired by these “ghost farmers” to carry out the logging.⁴⁵ This dynamic presents ethical dilemmas for authorities, as they recognize that most of the individuals, they detain are not the true actors responsible for deforestation but are instead participating as a means of survival.⁴⁶

Security challenges in the region further undermine the effectiveness of institutional responses to deforestation during this period. Since the signing of the 2016 Peace Agreement, dissident groups have systematically restricted state authorities from entering areas under their control, severely limiting the Government's capacity to enforce environmental regulations. Many of the most heavily deforested areas remain inaccessible due to landmines planted by the EMC before its split in 2024, making anti-deforestation operations extremely difficult. As highlighted

⁴⁵ MEAC Focus Group Discussion with the police (San José del Guaviare, September 2024); MEAC Focus Group Discussion with the military (San José del Guaviare, September 2024).

⁴⁶ MEAC Focus Group Discussion with civil authorities (San José del Guaviare, November 2023).

by a participant, “The Prosecutor’s Office does not enter if there are no police, and the police do not enter if there are not the right security conditions.”⁴⁷ This means that the State has largely allowed the groups to control the territory.

Corruption also plays a significant role in weakening efforts to combat deforestation. Armed groups frequently infiltrate state agencies, such as the military or local Prosecutor’s Offices, to deliberately sabotage anti-deforestation efforts: “When it comes to the military, any part of the army can leak information, because there are infiltrated soldiers, officials and even possibly infiltrated generals”.⁴⁸ Moreover, state agencies often face pressure to present positive results, leading to the overreporting of hectares recovered from deforestation. This practice contributes to uncertainty regarding the true extent of environmental destruction in the region. Institutional barriers and widespread insecurity therefore hinder the effectiveness of governmental responses to deforestation, exacerbating the impacts of climatic shocks on local communities, as outlined in the following section.

El Niño Phenomenon: Social, Cultural, Economic and Environmental Impacts

The 2023 - 2024 El Niño cycle significantly impacted San José del Guaviare. Respondents noted that preexisting climatic shifts experienced in the region were amplified by the heightened temperatures and severe droughts linked to El Niño. It is important to note that the impacts discussed in this section are not scientific metrics but rather reflect participants’ perceptions of the effects they attribute to various climatic changes and deforestation activities.

I. Impacts on Water Access

Participants highlighted those rising temperatures and prolonged drought, exacerbated by the El Niño phenomenon, have severely reduced access to both drinkable and non-drinkable water in the region. Some water sources, such as rivers and reservoirs, had disappeared entirely during the El Niño cycle. Compounding the problem, the chemicals used in deforestation⁴⁹ and illegal mining⁵⁰ are leading to water contamination,⁵¹ which has further reduced potable water and threatened public health (e.g., causing skin allergies and stomach issues for those who

⁴⁷ MEAC Focus Group Discussion with the police (San José del Guaviare, September 2024).

⁴⁸ MEAC Focus Group Discussion with the military (San José del Guaviare, September 2024).

⁴⁹ Javier Vázquez Fernández and Agencia Sinc, “[El Impacto del Uso de Plaguicidas en la Amazonía: una actividad en aumento](#)”, *El Espectador*, 29 February 2024.

⁵⁰ Juanita Vélez, “[Narcos, mineros ilegales y disidencias: la triple alianza que devasta a la Amazonía](#)”, *El País*, 29 December, 2024.

⁵¹ Foundation for Conservation and Sustainable Development (FCDS), “[Ganadería como motor de deforestación: Condiciones habilitantes y dinámicas territoriales en el Guaviare](#)”, Report (2024).

consume contaminated water and contributing to an increase in mosquitoes,⁵² raising the risk of diseases like dengue and chikungunya). As a result, according to participants, communities must often walk several kilometres to access clean water.

II. Impacts on Soil Quality

The recent El Niño phenomenon has also severely affected soil quality in the region, which had already been diminished by climate change and deforestation. Rising temperatures and persistent droughts are “Drying out the trees that used to be resilient. Nowadays, they [the trees] no longer have the same capacity because they are exposed to strong sunlight, which dries them out and kills them.”⁵³ In addition, the chemicals used in deforestation and livestock farming are further contaminating the soil.

As noted by participants, these changes, coupled with water shortages, have disrupted the natural cycles of crops, resulting in smaller yields and less frequent harvests than in the past. A participant shared: “This year, my dad started planting yucca and planted 50 banana trees, but so far, they haven’t yielded any results. It seems like the bananas aren’t growing. So, we see that the climate issue is very direct—the crops just can’t survive,” reflecting the growing reality that “the land is becoming less productive every day”.⁵⁴ Peasants are increasingly dependent on fertilizers because of droughts and rising temperatures and are compelled to repeatedly plant the same crops because the deteriorated soil conditions are not allowing other specific kinds of crops to grow.

Climatic shocks brought by El Niño amplified the pre-existing challenges climatic shifts had already created for those farming in the region. The challenges related to farming and the economic insecurity that increasingly comes with it have led certain communities to abandon farming in search of better economic opportunities. To illustrate this point, the indigenous sample reported that many community members had abandoned traditional agricultural activities, such as growing yuca and plantains, to work for “colonizers” in deforestation and livestock activities outside of their Indigenous territories.

III. Extreme Heat

The extreme temperatures brought by El Niño impacted the local population’s ability to support themselves or carry out their duties. Respondents explained that the extreme temperatures during the El Niño cycle have made it impossible for farmers to work the land between ten a.m. and five p.m., significantly reducing the number of hours they can work in a day. These

⁵² Sushmita Sharma, “[Mosquito-Mukt India: Expert Explains Connection Between Mosquitoes And Water Quality](#)”, Only my Health, 18 August 2024.

⁵³ MEAC Focus Group Discussion with Indigenous communities (San José del Guaviare, November 2023).

⁵⁴ MEAC Focus Group Discussion with Indigenous communities (San José del Guaviare, September 2024).

challenges have had a direct impact on farmers' economies, as they are now unable to produce and sell as much as they did in the past.

Extreme heat also has security implications. Military respondents reported that increased temperatures have affected the productivity of soldiers, particularly those stationed at checkpoints or those required to walk long distances, as their uniforms are not designed for such intense heat. High temperatures like the ones that have accompanied the 2023-2024 El Niño phenomenon, have significantly affected local productivity across sectors, undermining economic stability and having knock-on effects for security.

IV. Rise in Deforestation and Other Climate-Related Impacts

While the 2023-2024 El Niño cycle created conditions that undermined the health and economic livelihoods of local populations in San José del Guaviare, it also created conditions conducive to deforestation activities. The increase in deforestation, in turn, exacerbated the impacts of El Niño. For example, the extreme heat was felt even more by the local population because extensive deforestation reduced shade coverage. In addition to the heat, "the air quality becomes poor [due to the fires used for deforestation], making it difficult to breathe"⁵⁵ and aggravating respiratory problems.

These two trends had compound effects on local populations. Indigenous practices were particularly impacted by air contamination as it hindered the ability to read the sky for weather predictions, a practice that has long been integral to their cultural heritage. Similarly, climate shocks and shifts, and deforestation have made it harder for indigenous communities to source materials for their traditional crafts and medicine. One participant explained that, in the past, these medicinal plants could be found in just 15 minutes from their village, but now, they must often walk four to five hours to gather them.⁵⁶

The Landscape During the El Niño Cycle (2023 - 2024)

This section highlights how the dynamics around deforestation - its trends, actors, and responses to it- fluctuated during the 2023-2024 El Niño phenomenon. It is important to note that the El Niño did not occur in isolation as other significant events during this period likely influenced these dynamics, such as the evolution of the Total Peace negotiations and the split

⁵⁵ MEAC Focus Group Discussion with community leaders (San José del Guaviare, September 2024).

⁵⁶ MEAC Focus Group Discussion with Indigenous communities (San José del Guaviare, November 2023).

of the EMC into two separate factions (the Mordisco and the Calarcá's factions), along with other social, political, and economic factors.

I. Deforestation Trends, Drivers, and Actors

Overwhelmingly, participants in San José de Guaviare observed a significant rise in deforestation during the El Niño period, as intensified droughts and higher temperatures were conducive to such activities.⁵⁷ As in the pre-El Niño period, deforestation in the region continued to be driven primarily by economic and political interests and orchestrated by the same actors. Both the Calarcá and Mordisco factions remain central to these activities, charging external actors, particularly “ghost farmers,” fees per hectare cleared or per head of cattle grazing on deforested land. In turn, these “ghost farmers” continue to hire local peasants and informal workers to carry out the deforestation activities. Interestingly, in the aftermath of the El Niño cycle, participants noted an increase in community members engaging in deforestation as a means of economic survival. The precarious conditions within these communities, exacerbated by the effects of El Niño, have therefore pushed more individuals toward deforestation as a livelihood strategy.

Furthermore, during the El Niño period, the price of coca recovered from its 2022-2023 crisis,⁵⁸ motivating some farmers to revert to coca production. Previously, many had been forced to transition to other crops due to coca's reduced profitability during the crisis. With coca once again becoming more profitable than other agricultural products—many of which have become increasingly difficult to cultivate due to worsening environmental degradation—its resurgence may also be contributing to further deforestation.

II. Dissident Groups' Involvement in Deforestation

Despite the division of the EMC which occurred during the El Niño Cycle, both factions - the Mordisco and the Calarcá ones - maintained the same business model as when the group was unified. They continue to impose environmental restrictions and tax various activities, including land sales, cattle ranching, and milk production. However, participants noted some changes in the armed groups' behaviour before and during the El Niño cycle, as detailed below.

Beyond these established activities, participants observed that, since the onset of the El Niño cycle, both factions have increasingly profited from wood extraction resulting from

⁵⁷ The only group to report a decline in deforestation during this cycle was the indigenous sample, possibly because of the specific makeup of the sample, with in most cases, only one representative from each indigenous community. It is possible that the particular individuals chosen did not have visibility on deforestation, and thus it is not clear if their perspective is reflective of the broader communities. In addition, indigenous communities tend to remain within their *resguardos* (Indigenous Collective territory) and as a result, may be less exposed to deforestation affecting other areas in the region.

⁵⁸ Cesar Molinares, “[Colombia: la encrucijada de la reserva y el resguardo Nukak Makú frente a la coca, la ganadería y la deforestación](#)”, Mongabay, 24 July 2024.

deforestation.⁵⁹ Before the El Niño cycle, deforestation primarily led to wood being discarded or burned. Nevertheless, respondents⁶⁰ reported that the expansion of housing units to accommodate population growth in recent years has fueled the emergence of a lumber market, further intensifying deforestation.

Additionally, participants also reported that the dissident factions are increasingly “taxing” reforestation programs and other carbon credit initiatives that are implemented by the government and the private sector to protect the region’s ecosystem.⁶¹ A participant recounted an incident involving the construction of a drinking water plant in their village, where the contractor was required to pay ten per cent of the project's total value to the Mordisco faction as a “tax” to allow the implementation of the project.⁶² Although this practice predated the El Niño cycle, this type of taxation intensified as the number of reforestation and carbon credit initiatives grew under the current government’s anti-deforestation and environmental protection strategy.⁶³

The factions also tightened their environmental regulations and sanctions during the El Niño cycle. A MEAC researcher noticed that the Calarcá factions were displaying a public banner in communities around the region listing some environmental-related obligations that community members must follow, along with penalties for non-compliance—including heavy fines for unauthorized deforestation. To illustrate this issue, one participant explained that “The guerrillas have forbidden burning. If you burn, it can only be one hectare, and you cannot harm your neighbor or the forest. If you go beyond that, there’s a penalty of ten million pesos.”⁶⁴ These recent events prove that both dissident factions increasingly engage in environmental regulation to gain control and legitimacy amongst communities in the region.

The factions continue to regulate and manage local economic activities facilitated by the land registry previously established back in 2022 when the EMC was unified. A participant shared: “I am the vice-president of the board, and we were called to a meeting in a sector. We went, and they [the Calarcá faction] told us, ‘We need the measurements of all the farms’.”⁶⁵ In public statements, the Calarcá faction describes the land registry as part of its commitment to

⁵⁹ Juanita Vélez, “[El catastro de tierras de las disidencias en el Guaviare avanza más rápido que el del Estado](#)”, *El País*, 20 October 2024.

⁶⁰ This was particularly highlighted by Indigenous communities, the military and civil authorities in the second round of data collection (September, 2024).

⁶¹ Tomas Vergara Gutiérrez, Camila Bermudez and Catalina Oviedo Delgado, “[Bonos de Carbono en Colombia](#)”, Observatorio de Alternativas al Desarrollo.

⁶² This was particularly highlighted by Indigenous communities, the military and civil authorities in the second round of data collection (September 2024).

⁶³ Tomas Vergara Gutiérrez, Camila Bermudez and Catalina Oviedo Delgado, “[Bonos de Carbono en Colombia](#)”, Observatorio de Alternativas al Desarrollo.

⁶⁴ MEAC Focus Group Discussion with community leaders (San José del Guaviare, September 2024).

⁶⁵ MEAC Focus Group Discussion with community leaders (San José del Guaviare, September 2024).

“continuing revolutionary agrarian reform”.⁶⁶ However, in practice, it serves more as a tool to impose increasingly high taxes on landowners. In contrast, there is no evidence indicating that the Mordisco faction is currently using this land registry to raise higher taxes.

The ability of the dissident factions to exert control over the local environment stems from their – often uncontested - physical control over the territory.⁶⁷ The deteriorating security situation in the area has put local populations at greater risk—not only physically but also economically. The split has had profound financial implications, as both factions now impose extortion taxes on resources such as cattle, land, wood, and milk— often simultaneously. As recounted by a participant in the aftermath of the El Niño, “There was a time when they were both collecting taxes. The Seventh [Calarcá faction] told us we couldn’t pay the First [Mordisco faction], and the First said we couldn’t pay the Seventh.”⁶⁸ Participants also reported receiving direct threats from both factions, warning them against any association with the rival group and imposing harsh penalties on those who failed to comply—further illustrating the worsening security situation in the region.⁶⁹

The split has also intensified pressure on the environment, with each faction vying for control over environmental regulations. This has left communities uncertain about which norms to follow and has significantly influenced how they interact with natural resources. As such, participants expressed concerns that the EMC’s division could further escalate conflict, as both factions compete for territorial control, economic interests, and environmental governance.⁷⁰

Even after the group’s split, the environmental influence of the armed factions continues to fluctuate, shifting in response to political dynamics. The Calarcá faction, which remain engaged in negotiations under the Total Peace initiative, have increasingly permitted deforestation as a means of pressuring the Government to meet their demands, mirroring the EMC’s behaviours before the split. During periods of crisis in the peace talks—such as suspensions of bilateral ceasefires or delays on key agreements that the Calarcá faction perceives as “non-compliance”—they allow deforestation to escalate in the areas under their control. A participant highlighted that “In the last few months, the Seventh [Calarcá faction] has been allowing people to deforest more. Before, only one hectare was authorized to be deforested for food, now 20 hectares are authorized to be deforested.”⁷¹

⁶⁶ Juanita Vélez, “[El catastro de tierras de las disidencias en el Guaviare avanza más rápido que el del Estado](#)”, *El País*, 20 October 2024.

⁶⁷ This was particularly highlighted by community members, civil authorities, and the police in the second round of data collection (September, 2024).

⁶⁸ MEAC Focus Group Discussion with community leaders (San José del Guaviare, September 2024).

⁶⁹ MEAC Focus Group Discussion with community leaders (San José del Guaviare, September 2024).

⁷⁰ This was particularly highlighted by community members, civil authorities, and the police in the second round of data collection (September 2024).

⁷¹ MEAC Focus Group Discussion with community leaders (San José del Guaviare, September 2024).

Following the El Niño phenomenon and the EMC's split in April 2024, the Calarcá faction trained "peasant guards," coercing local communities to contribute a designated number of members from each village to act as a human "shield" against public force interventions. This, in turn, led to direct threats from the rival Mordisco faction, highlighting again how environmental protection is less of a genuine objective for the armed groups and more of a political strategy to counter other rival armed groups as well as state power.

III. Institutional Responses to Deforestation

While armed groups in the region appear to have shifted their behavior to take advantage of the effects of El Niño, the Government's efforts to tackle deforestation are still insufficient. The general perception amongst participants is that institutional responses remain insufficient to control and address deforestation in the region. Weak regulations and security concerns that complicate access, coupled with the lack of formal land ownership, enable actors to clear land without restrictions or consequences. Armed groups have capitalized on governmental inaction, using it to portray the State in a negative light within communities and, in turn, strengthen their own power and legitimacy in the region.

The current Government's military strategy prioritizes other security concerns over environmental protection: "At this moment we focus more on kidnapping and extortion than on environmental issues."⁷² This shift in priorities has diverted critical resources—such as helicopters and ground personnel—toward other operations, significantly limiting the State's ability to prevent and combat deforestation.

Furthermore, the suspension of military operations under the Government's Total Peace negotiations, along with the bilateral ceasefire with the Calarcá faction, has allowed both factions to consolidate territorial control across vast areas of the department.⁷³ Awareness of armed group activities in the area has deteriorated because the military can no longer conduct intelligence operations. A police officer described the operational challenges this creates: "Today, you can be told that there is deforestation in such and such place, but you go with your eyes closed because you have no information, no photos, no evidence of anything, you don't know what you're going to find, whereas when we had intelligence we knew which route we could take, which bridges were good."⁷⁴

The worsening security situation continues to be a major obstacle to effective institutional responses to deforestation. The dissident factions are increasingly restricting access to the territories they control, further impeding the police or military operations (should they be

⁷² MEAC Focus Group Discussion with the military (San José del Guaviare, September 2024).

⁷³ Kyle Johnson, "[La Paz Total: Dos años para un nuevo camino?](#)", CORE, 25 November 2024.

⁷⁴ MEAC, *Focus group with the police* (San José del Guaviare, September 2024).

reauthorized) and the implementation of government-led reforestation initiatives. The police sample reported that, in the past, they conducted reforestation operations in rural areas with relative ease. However, they now require reinforcements to enter these regions and frequently abandon operations altogether due to security risks. This shift highlights the growing power and influence of these armed groups during the El Niño period, in contrast with the increasingly limited response capacity of security forces.

Despite these challenges, local populations have developed diverse strategies to adapt to climatic shifts and their consequences. The Government (e.g., the Ministry of the Environment) and local authorities have taken steps to raise environmental awareness, emphasizing the importance of ecosystems and the urgency of reforestation efforts. Civil authorities reported conducting educational campaigns targeting community leaders, youth, and indigenous groups to increase awareness of climate change, the El Niño phenomenon, and deforestation's impacts. They have also organized roundtable discussions with various community members—including indigenous peoples, youth, and peasants—to better understand local experiences and develop appropriate responses. Indigenous groups have begun cultivating their own medicinal gardens to compensate for the scarcity of foraging for these resources in scarred landscapes, marking a significant shift from traditional foraging to sedentary farming practices. Additionally, in response to worsening water shortages caused by climate change and the recent El Niño cycle, communities have drilled water wells as a critical strategy for water conservation. These water conservation strategies have proven especially valuable for sustaining livestock and agriculture, which depend on substantial water resources. While these efforts reinforce local knowledge and resilience, they ultimately place the burden on communities living among armed groups—populations that often lack the tools or leverage to influence their behavior. The adaptations that these communities have developed to navigate overlapping security and environmental challenges highlight potential policy and practical solutions that could help strengthen their resilience to future climatic shocks and shifts.

Recommendations

The findings of this report underscore the urgent need to support communities in the Amazon region as they face the profound environmental consequences of climate change, including the rising temperatures and intensifying droughts that have been particularly acute during the 2023-2024 El Niño cycle. These changes significantly affect not only the health and livelihoods of community members but also conflict dynamics that have much wider implications for Colombia. As the report highlights, communities are already implementing tangible strategies to address these challenges, such as undertaking reforestation initiatives. However, the State must also step in and effectively support communities as they often lack the resources and

skills to ensure the continuity and sustainability of these efforts over time, especially in insecure areas. To this end, the Government must also re-take control over land, more effectively impose the rule of law, and implement stricter land regulations.

As emphasized throughout this report, the challenges presented by climate change, as proxied by the extreme effects of the 2023-2024 El Niño phenomenon, cannot be viewed in a vacuum. The responses of armed groups to climatic changes, events, or shocks are shaped by the broader operational, political, and economic contexts in which they operate. Therefore, strategies to prevent and address the involvement of armed groups in deforestation must be multifaceted and always account for the wider context in which the issue takes place.

To this end, this section outlines a series of recommendations - that were developed in consultation with the FCDS- to better prevent and address armed groups' involvement in deforestation and the subsequent negative impacts on communities in San José del Guaviare. These recommendations may also have relevance for other conflict-affected regions where armed groups exploit environmental vulnerabilities to consolidate their power over local communities. Institutional responses should focus on addressing the following:

Improve Land-access and Reduce the Influence of Armed Groups

- To take power away from the armed groups, it is key for the State to regain control over the territories currently occupied by these groups. This will serve to reduce legal uncertainty over land because this access will allow the State to generate more information about the situation on the ground.
- The Agustín Codazzi Geographic Institute (IGAC) must have the necessary security conditions and political support to complete the government multipurpose cadastre in the Amazon region. This information is essential to reduce legal uncertainty over land ownership and enable the Government to collect updated taxes. It is key to include communities in this process, and specifically allow Indigenous and peasant populations to monitor and support this multipurpose cadastre in their territories, to ensure its inclusive and effective implementation.
- It is key for the State to regain access to the territories occupied by armed groups to control land distribution and management more effectively.
- It is essential that the State clearly defines and enforces the boundaries of forest reserve zones and indigenous reserves, imposing sanctions on those failing to respect those boundaries.

Consolidate a Public Security Strategy

- Ensure that environmental authorities (e.g., Regional Autonomous Corporations (CAR)⁷⁵, National Natural Parks of Colombia,⁷⁶ etc.), and to a lesser extent, state entities and non-governmental organizations that work for environmental conservation, can access the territories currently occupied by armed groups. This implies increasing the presence of the military to increase the presence of the civilian state in areas under the control of armed groups as well as strengthening the budget and technical capacity of the security forces and police, so they can effectively respond and implement anti-deforestation operations in real time.
- Strengthen the budget and the technical and operational capacity of key entities such as the Ombudsman's Office, environmental authorities, regional prosecutor's offices, the National Land Agency,⁷⁷ the Rural Development Agency,⁷⁸ and the Agustin Codazzi Geographic Institute⁷⁹ to ensure the continuity and sustainability of their efforts for environmental protection.
- Reinforce already existing measures for the protection of environmental community leaders in the Amazon to ensure the continuity of their work as these face increasingly big threats.

Raise Awareness and Promote Actions for Change

- There is a need for a broader normative campaign, given that “if there is climate change, there must be cultural change.”⁸⁰ This campaign should raise awareness about the devastating impacts of climate change and deforestation while also promoting concrete actions for change. Any effective strategy must address the underlying structural conditions driving these issues, ensuring long-term, positive, and empowering outcomes for affected populations. Such a strategy must also incorporate Indigenous worldviews at every stage of the process, especially given that climate and security impacts disproportionately affect these populations. In addition, particular focus should be placed on young people, who will bear the most severe consequences of environmental degradation in the future.
- Design practical training workshops to raise awareness on environmental issues and promote concrete actions for different sectors - from farmers and ranchers to indigenous communities, public officials and youth - on how to better address the various challenges caused by the El Niño phenomenon, the effects of climate change

⁷⁵ Regional Autonomous Corporations (CARs) are governmental institutions in charge of monitoring environmental conservation and sanctioning actions that deteriorate the environment.

⁷⁶ The National Natural Parks of Colombia are institutions that protect the 59 national parks in the country.

⁷⁷ The National Land Agency is responsible for guaranteeing access to land for peasants who have little or no land.

⁷⁸ The Rural Development Agency is a state institution responsible for offering sustainable productive projects and public goods to the Colombian countryside.

⁷⁹ The Agustin Codazzi Geographic Institute is a state institution in charge of the official land registry of Colombia.

⁸⁰ Quote from an FCDS leader in an informal conversation that UNIDIR and CORE had with the organization.

and deforestation. These workshops should be done with field exercises, showing these actors how they can integrate specific actions into their daily lives, promoting, for example, the maintenance of natural water sources, the use of alternative technologies to bring water to their homes or the step-by-step process to reforest an area.

Environmental Projects Within Communities as a Strategy to Face Deforestation

- Reinforce and ensure the effective implementation of already existing agreements between the Ministry of the Environment, the Rural Development Agency, local mayors' offices, and communities that promote reforestation strategies and provide incentives for communities to engage in reforestation projects.
- The Rural Development Agency could initiate a project to create shaded areas, protecting individuals from extreme heat.
- Dedicate efforts and allocate public funding for the creation and continuity of environmentally friendly forestry projects.⁸¹ To this end, the FCDS is already supporting communities to generate income through the protection and conservation of forests. With the support of the international community, this can be strengthened through the granting of government loans that prioritize environmentally sustainable agricultural production. In addition, this can also be achieved through public calls for communities to submit their own projects that encourage sustainable agriculture. These initiatives should focus not only on providing inputs for cultivation but also on ensuring effective commercialization.
- Any community initiative that aims to tackle deforestation should aim to hire peasants previously involved in deforestation, offering them alternative sustainable economic opportunities that protect the environment.

Adopt Strategies to Increase Institutional Capacity, Directives, and Initiatives Against Deforestation

- Promote more interinstitutional coordination between local state agencies in charge of monitoring and tackling deforestation, such as the environmental authorities, the police, the army, local mayors, and the local Attorney General Offices. This involves sharing information in real-time and planning joint actions between these different institutions.
- Enhance the capabilities, budget, and technical equipment of environmental authorities so they can effectively monitor and penalize deforestation across their entire jurisdiction.

⁸¹ Forestry projects are initiatives designed to conserve, restore, or expand forests while reducing carbon emissions. They play a crucial role in mitigating climate change by enhancing carbon sequestration and preserving biodiversity.

- Sanctions against deforestation should not be limited to a fine. It is also necessary to ensure reparations for historical environmental damage caused. As part of these reparation efforts, actors responsible for logging could engage in reforestation initiatives to recover deforested land. Effective monitoring measures must also be put in place to ensure that sanctions and reparation measures are implemented.
- Develop strategies to fight against the infiltration of armed groups in various agencies - such as Regional Autonomous Corporations (CARs), regional prosecutor's offices, the police, and the army— that sabotage anti-deforestation efforts. This should be accompanied by a campaign that fosters a culture that rewards and encourages effective actions while implementing more rigorous strategies to monitor corruption.
- Accelerate the implementation of the National Program for the Substitution of Illicit Crops⁸² (PNIS in Spanish) and the Territorial Development Plans⁸³ (PDETs in Spanish) so that local communities have profitable alternatives to coca production, allowing them to establish viable livelihoods from other more sustainable economies.
- Develop a more rigorous livestock supply chain traceability policy to deter farmers from raising animals on illegally cleared land. A starting point could be to require proof of environmental compliance from farmers, such as confirmation that they have not paid environmental fines in the past nor that they engage in livestock activities within reserved areas.

Ensure the Effective Implementation of the Environmental Dimension of the Total Peace Negotiations

- State authorities, and particularly environmental agencies, must ensure that armed groups currently negotiating under Total Peace fulfil their commitments to reduce deforestation in their areas of influence. This could be achieved by designing a monitoring protocol that establishes concrete sanctions if the armed group fails to comply, such as making the ceasefire conditional on its commitment to stop deforestation.
- Establish an “environmental judicial truth” mechanism, in which the armed groups agree to provide information on landowners and other actors involved in deforestation, as well as their own land registry. In exchange, the State will commit to carrying out the agreed rural development projects in the areas where these groups operate and guarantee the security conditions necessary for their disarmament.

⁸² The National Program for the Substitution of Illicit Crops was created in the context of the 2016 Peace Process, aiming to provide financial and technical support to coca-leave peasants to replace coca production with other profitable alternatives.

⁸³ The Territorially Focused Development Plans were created in the context of the 2016 Peace Process, aiming to bring public goods to ensure the positive development of rural areas.

- Promote “environmental reincorporation” strategies in which the members of current armed groups could join environmentally responsible productive projects that are already being implemented by some communities.

Generate more Evidence and Data on the Issue.

- Given that this study focuses only on a subregion of the Amazon in Colombia, it is necessary to generate more data on the impacts of climate-related phenomena, such as El Nino, on armed groups’ activities in the whole region.
- Investigate the role of so-called “ghost farmers” and their connections to armed groups operating in the region. This information will be essential to develop more effective prevention strategies and to hold the actors involved in deforestation accountable for their actions.
- Collect more detailed information about how armed groups are pressuring some social leaders and attempting to infiltrate various civil society organizations to influence the current Peace Negotiations in their favour.

As this report has highlighted, armed groups are quickly adapting their activities in response to climatic shocks and shifts, with devastating effects on local communities, particularly indigenous populations. Governments at every level, and society as a whole, have been much slower to respond. To address the pressing issue of deforestation in the Colombian Amazon, a multi-sector, multi-level integrated response is needed to equip and empower relevant institutions and support communities in resisting deforestation and adapting to its - and broader climate shifts’ - detrimental effects.



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