



# A Broken Canopy: Preventing Deforestation and Conflict in Colombia

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*Preventing War. Shaping Peace.*

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# Principal Findings

**What's new?** Deforestation has surged in Colombia since the FARC rebels put down their weapons following a 2014 ceasefire and 2016 peace accord. Other insurgents and criminal groups have stepped up economic activities – ranching, logging, mining and coca growing – that accelerate loss of woodland and jungle in areas the guerrillas once controlled.

**Why does it matter?** By enabling economic activities that provide income to insurgents and criminals, deforestation helps them engage in fresh cycles of rural violence, hinders the state in its efforts to control territory, and prevents Colombia from meeting core goals on environment protection.

**What should be done?** Bogotá should refocus its campaign against environmental crime to target economically empowered actors driving deforestation rather than impoverished loggers. It should implement peace accord commitments for rural areas, especially concerning land registration and restitution, and build a stronger natural resource management system, drawing on community involvement and technical assistance.

## *Executive Summary*

In the five years following its historic 2016 peace accord, Colombia has seen a surge of forest razing and land clearance amid continuing unrest in the countryside. The rate of tree loss, which greatly lowers the country's chances of meeting its zero-deforestation goal by 2030, is tied to conflict and violence. These ties are complex. Deforestation began to rise soon after the Revolutionary Armed Forces of Colombia (FARC), which had operated mostly from rural areas, declared a ceasefire in December 2014. It then gathered steam after the 2016 accord was signed. The rebels' departure from their strongholds provided an opportunity for other insurgencies and organised crime to assert control. With state authority in the countryside still feeble, those groups pushed back the forest to expand enterprises like coca growing, cattle ranching, illegal gold mining and logging, sometimes working with legal businesses. To arrest the damage, Bogotá should fix its approach to prosecuting environmental crime, implement peace accord commitments relating to the environment and urgently bolster its natural resource management systems.

In many ways, the FARC ran roughshod over the environment during its five-decade insurgency. But there was a clear difference between them and the current crop of violent outfits operating in rural Colombia. In areas where FARC rebels operated, they tended to restrict deforestation. One reason was that thick tree canopies helped prevent the state from spotting their encampments from the air, allowing them to move more freely. But as they implemented a late 2014 ceasefire and prepared to sign the 2016 accord, the guerrillas also for the most part stopped limiting land clearance. Deforestation rose sharply, spearheaded or abetted by new and old armed actors, often in bruising competition with one another. These actors included the National Liberation Army (ELN), Colombia's last remaining insurgents; FARC dissidents (ie, former fighters who have reneged on the peace process and returned to arms); and criminal groups that inherited many of the structures once belonging to right-wing paramilitaries.

Deforestation, however, is not solely the handiwork of illegal bands. Tens of thousands of internally displaced people and other conflict victims, many of them desperately poor, have been swept up in the push to clear Colombia's woodlands for remunerative uses. Often having lost their land to violent groups, these farmers have been forced to find ways of surviving by clearing forest and creating new livelihoods in far-flung places. At the front line of the country's receding forest, some of these small-hold farmers are coerced or co-opted into doing the armed groups' bidding while others are paid small amounts for their labours.

Cattle ranching stands out as the single biggest cause of deforestation. Feeding into legal supply chains, it now causes more tree loss than coca, illicit logging or illegal gold mining. On paper at least, ranching is a normal business, but illegal actors engage in it, and the state has been unable to rein in many corrupt and criminal practices within the sector. Land used for grazing is often obtained illegally or located in environmentally protected territories. Profits frequently enrich criminal groups that terrorise local people and perpetuate conflict.

While the current level of rampant forest clearance in Colombia is driven by a mix of armed and criminal groups, licit actors and deep structural problems – notably the country’s profound socio-economic inequality and the state’s chronic weaknesses – Bogotá is far from helpless to stop it. The government has at its disposal tools and strategies that can help it check unregulated deforestation and blunt the adverse consequences thereof. One is law enforcement. Colombia’s campaign to fight environmental crime, Operation Artemisa, has flagged as a result of high costs, and been the object of some public wrath. It has lost support in part by tending to go after individual farmers rather than tackle the more pressing and difficult work of targeting the big bosses behind deforestation. But a new comprehensive law should enable Bogotá to remedy these mistakes by increasing punishment for the financial backers behind environmental crimes.

Another potential mechanism for bringing about change is the 2016 peace accord. Carrying out its environmentally focused provisions has been difficult, due to financial constraints, the COVID-19 pandemic and lack of high-level political support. But implementation is of critical importance. At the heart of that agreement is a set of measures that would go a long way toward addressing the causes of deforestation. The steps under way toward creation of a new land registry could help clarify property ownership and use throughout the country, while a land fund that builds on the progress made since passage of the 2011 Victims’ Law could enable families whose property was seized by armed groups to re-establish farms. In combination, these two reforms have the potential to help staunch the drive to clear more forest by providing more formal deeds to existing farmland.

Also of relevance, the accord looked to strengthen the Campesino Reserve Zones, where unused or inefficiently used land is distributed for ownership to small-hold farmers; contemplated participatory mechanisms for communities to design sustainable development plans; pledged to create a program to encourage coca growers to substitute licit crops; and envisaged a zoning plan to help manage land use, among many environmental features.

Largely unregulated land clearance, which offers a thoroughfare for armed and criminal groups to get richer and reach deeper into remote territory, is a double threat to Colombia. On one hand, it is an impediment to the country’s prospects for peace. On the other hand, accelerating tree loss, in Colombia and elsewhere, is a threat to the environment and those who depend on it. Deforestation increases the country’s vulnerability to climate change by exacerbating exposure to the effects of extreme weather, which already disproportionately harm the country’s poorer and more neglected people. Soil degradation will magnify the effects of flooding and droughts brought on by climate change, as well as knock-on disasters like landslides.

Growing deforestation, which is likely to be a core concern addressed at COP26, the UN climate summit under way in Glasgow, is also at odds with Colombia’s ambitious climate commitments under the Paris Agreement. Shortfalls in reaching these goals will not only cause reputational damage but also negatively affect access to donor funding. Better management of the country’s natural resources will require collection of more reliable data, establishment of more effective controls, and fluid dialogue between state authorities and rural populations that have been living in en-

vironmentally protected areas, sometimes over several generations, as to their future livelihoods and use of woodland.

Standing by while the farthest reaches of Colombia are cleared for illicit profit risks feeding cycles of violence. Averting this outcome will depend in large part on confronting the many interests pushing the agricultural frontier outward.

**Bogotá/New York/Brussels, 4 November 2021**

# A Broken Canopy: Preventing Deforestation and Conflict in Colombia

## I. Introduction

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For its size, Colombia is the most biodiverse country in the world.<sup>1</sup> Its natural resources are a cornerstone of its economic development, but they also provide guerrillas and criminals with the means of financing their activities. Cattle ranching, coca cultivation and gold mining, in particular, are big money-makers for the armed groups. When run by illicit actors, these enterprises are completely unregulated; they generate revenues that fuel conflict while also contributing to worsening environmental degradation and rising rates of deforestation. Over half of Colombia's land is covered in forest, but the trees are rapidly disappearing. During the period 1990-2016, over 6 million hectares were cleared of vegetation; in 2017 alone, almost 225,000 hectares were destroyed, about 2.6 per cent of the world's total deforestation for that year. In 2020, the country lost over 170,000 hectares of forest, while the COVID-19 pandemic allowed insurgencies and criminal organisations to further tighten their grip on many remote areas of the country.<sup>2</sup>

Deforestation rates began growing particularly sharply starting in 2015, after the Revolutionary Armed Forces of Colombia (FARC) announced a unilateral ceasefire as part of its peace talks with the Colombian state. Those talks culminated in the 2016 peace accord. While giving a huge boost to efforts to end over 50 years of conflict, the ceasefire, and ultimately the peace agreement, also changed the balance of power in large parts of Colombia as other insurgent and criminal outfits immediately started vying for control of former FARC strongholds. With the FARC gone, so were its rules and requirements regarding deforestation, which, while far from perfect, mitigated some of the damage that might otherwise have occurred.

Deforestation surged.<sup>3</sup> Some of it stemmed from purely criminal activity, but much land clearance takes place in a grey zone involving legal businesses that operate in conjunction with illicit elements. With the rule of law weak and state presence limited, deforestation in Colombia has strayed beyond official control and oversight. Without more vigorous state action, Colombia will be unable either to meet its goal of zero deforestation by 2030 or to fulfil its ambitious Paris Climate Agreement pledge to reduce greenhouse gas emissions by 51 per cent by 2030.<sup>4</sup>

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<sup>1</sup> "A Look at the Natural World of Colombia", World Wildlife Fund, 2017.

<sup>2</sup> "Colombia deforestation increased 8% last year, environment minister says", Reuters, 7 July 2021. On the effects of COVID-19 on rural security, see Crisis Group Latin America Report N°82, *Leaders Under Fire: Defending Colombia's Front Line of Peace*, 6 October 2020.

<sup>3</sup> Mounu Prem, Santiago Saavedra and Juan Vargas, "End-of-Conflict Deforestation: Evidence from Colombia's Peace Agreement", *World Development*, vol. 129 (2020), pp. 1048-1052; Mounu Prem, Andrés Rivera, Darío Romero and Juan Vargas, "Selective Civilian Targeting: The Unintended Consequences of Partial Peace", *Quarterly Journal of Political Science*, forthcoming.

<sup>4</sup> "Por cada año de paz, Colombia ahorraría \$7,1 billones en degradación ambiental": Simón Gaviria Muñoz", press release, Colombian National Planning Department, 10 March 2016. The 2030 goal is

Meanwhile, the loss of tropical forest contributes to rising greenhouse gas emissions worldwide and poses particular threats to Colombia.<sup>5</sup> The country's ecosystems have become less resilient to climate stresses, such as seasonal droughts associated with El Niño oscillations or river sedimentation.<sup>6</sup> Amazonian territories have been the chief victim of deforestation, but alpine grasslands and tropical dry forests feel the effects, too. These ecosystems play key roles regulating water flows, boding ill for a country already at high risk of riverine flooding and routinely facing drought.<sup>7</sup>

But beyond its impact on climate and ecology, deforestation also affects Colombia's security and stability. That is the focus of this report. In particular, the report examines both how armed groups have driven deforestation during Colombia's post-conflict era, and how environmental degradation, caused by both legal and illegal outfits since the ceasefire and the FARC's subsequent demobilisation, feeds emerging patterns of violence. The research combines quantitative analysis of deforestation trends with extensive fieldwork, drawing on 110 interviews with loggers, cattle ranchers, miners, farmers, environmental experts, social leaders, law enforcement personnel, government officials and people involved in the negotiations that led to the 2016 peace agreement. Fieldwork included visits between January and August 2021 to the Colombian departments of Antioquia, Bolívar, Caquetá, Chocó, Córdoba, Guaviare and Meta.

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established in the New York Declaration on Forests and the Bonn Challenge, to both of which Colombia is a signatory. See also Daniel Henryk Rasolt, "Deforestation in Colombia", *Ecologist*, 17 August 2020. Former President Juan Manuel Santos, who was in office when Colombia made these pledges, is a member of the International Crisis Group's Board of Trustees.

<sup>5</sup> According to the NGO Global Forest Watch, the loss of tree cover grew 7 per cent globally from 2019 to 2020, the COVID slowdown notwithstanding, and tropical forests shrank by 12 per cent. See also "Global forest losses accelerated despite the pandemic, threatening world's climate goals", *The Washington Post*, 31 March 2021; "Tropical deforestation now emits more CO<sub>2</sub> than the EU", *Mongabay*, 18 October 2018.

<sup>6</sup> Brigitte Baptiste et al., "Greening Peace in Colombia", *Nature, Ecology & Evolution*, vol. 1 (2017), pp. 1-3.

<sup>7</sup> "Climate Risk Country Profile: Colombia", World Bank, 2021.



## II. Land, the Environment and Colombia's Conflict

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Historically, competition over land and access to natural resources has helped fuel armed conflict in Colombia. Jostling among guerrillas and organised crime for income ranks high among the drivers of Colombia's deforestation, although the businesses involved are not exclusively illicit. Government figures show that for the period 2015-2020, the most important causes of deforestation were cattle ranching, unplanned infrastructure growth, coca crops, mining (mostly illegal), industrial agriculture, land grabbing (ie, forcing farmers to sell their land cheaply or occupying their lands when they are displaced by violence) and logging.<sup>8</sup> Colombia's experience aligns with global trends; as in Colombia, cattle ranching is by far the greatest source of deforestation worldwide, causing nearly twice as much as all other factors combined.<sup>9</sup>

Access to land, in particular, has been at the heart of Colombia's conflict. When the FARC was created in 1964, unequal land distribution was one of the founders' main grievances.<sup>10</sup> Armed struggle, however, not only failed to remedy this inequality but made matters far worse by propelling the displacement of rural populations fleeing conflict and the violent seizure of land. Between 6.6 and 8 million hectares of land were stolen from their owners by a multitude of armed actors over close to six decades of conflict, eventually to be acquired by criminals, large landowners and corporations.<sup>11</sup>

The most dramatic episodes of dispossession took place in the 1990s and early 2000s, when right-wing paramilitaries, backed by their political allies, booted (by some estimates) more than a million people off their property.<sup>12</sup> The paramilitaries had first shifted from protecting large landowners toward drug trafficking, but subsequently diversified into lawful businesses to avoid attention from state authorities, particularly following the attempt to demobilise them in the period 2003-2006. They are now involved in activities that overlap with the licit economy, like cattle ranching and agro-industrial projects, but they also engage in illegal gold mining and continue to be heavily invested in coca growing. These activities exhaust the soil, and

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<sup>8</sup> Crisis Group virtual interview, Institute of Hydrology, Meteorology and Environmental Studies (IDEAM) official, September 2021.

<sup>9</sup> "Deforestation Linked to Agriculture", World Resources Institute/Global Forest Review.

<sup>10</sup> The FARC guerrillas considered their "agricultural program" to be their foundational manifesto. The text lays out eight action points for reforming agriculture and returning land to dispossessed rural dwellers. "Programa Agrario de las FARC", 20 July 1964 (revised 2 April 1993).

<sup>11</sup> "Divide and Purchase", Oxfam International, September 2013.

<sup>12</sup> Paramilitaries first emerged in Colombia in the late 1960s, when legislation allowed the formation of private civic-military groups. The first groups were counter-insurgents with an anti-communist doctrine, but by the early 1980s prominent landowning families were forming groups of their own simply to protect their property. These outfits, which were outlawed in 1989, quickly developed links with drug cartels, working independently but often in close coordination with local elites and the armed forces. The paramilitaries eventually organised under an umbrella group, the United Self-Defence Forces of Colombia, which terrorised small-hold farmers. Although the Forces formally demobilised in the wake of the 2003 Santa Fé de Ralito negotiations, many members joined up with organised crime, bringing their command structures and political alliances with them. For more on land grabs, see National Centre for Historical Memory, *Justicia y paz. Tierras y territorios en las versiones de los paramilitares* (Bogotá, 2012).

when not properly supervised, cause major environmental harm and displace local populations.<sup>13</sup>

The state, with its governance shortcomings and failure to control rural areas, including its inability to track the ownership and use of land, bears much of the responsibility for the widespread despoiling. Only about 15 per cent of land in the whole country features on the land registry, or cadastre, according to updates reported in early 2021. But in practice most arable land is occupied, sometimes illegally.<sup>14</sup> Due to the gaping holes in the registry, establishing rightful ownership of land remains extremely difficult in many rural areas. Land stolen during the conflict was frequently passed on or sold to corporations or large landowners, who in turn often claim to have purchased it in good faith without knowing it had been illegally seized. Victims of forced displacement who now try to reclaim their lands face harassment, threats and violence; many have been killed.<sup>15</sup>

Since Colombia's traditional landowning elites have proven reluctant to support reforms addressing inequalities in land tenure or ensuring protection of rightful ownership in established agricultural lands, displaced small-hold and landless farmers have had to look elsewhere for their livelihoods. Historically, many of them sought to find new plots to cultivate, often in rugged or inhospitable terrain, including through deforestation. The result has been a shift since the 19th century toward settling remote parts of the country, a process greatly intensified by conflict-driven mass displacement in recent decades.<sup>16</sup>

Between 1984 and 2011, the amount of land cleared for agriculture – including farming or cattle – increased from 36 to 40 million hectares, pushing outward the “agricultural frontier”.<sup>17</sup> In 2018, the outgoing government of Juan Manuel Santos stated that this cleared area consisted of close to 33 per cent of Colombian territory (around 40 million hectares), and that any growth in it would have to be environmentally sustainable.<sup>18</sup>

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<sup>13</sup> “La Paz Ambiental”, DeJusticia, January 2017.

<sup>14</sup> For more information about the “Catastro multipropósito”, see the website of the Agustín Codazzi State Geographic Institute. Crisis Group telephone interview, academic and land expert, 29 July 2021. Indigenous and Afro-Colombian groups, as well as small-hold farmers, have been dispossessed of their lands in Colombia for decades. Crisis Group telephone interview, academic and land expert, 29 July 2021.

<sup>15</sup> “Radiografía de la restitución de tierras”, report to the Inter-American Commission on Human Rights by twelve Colombian civil society organisations concerning the lack of reparations for land grabbing victims, 9 May 2019.

<sup>16</sup> Dario Fajardo, “Estudio sobre los orígenes del conflicto social armado, razones de su persistencia y sus efectos más profundos en la sociedad colombiana”, *Espacio Crítico*, 2014, p. 29. For an intimate account of settlement on Colombia's agricultural frontier, see William Ospina, *Guayacanal* (Bogotá, 2019).

<sup>17</sup> Fajardo, “Estudio sobre los orígenes del conflicto social armado...”, op. cit., p. 37. The agricultural frontier, as defined by the Colombian state, is the dividing line between rural areas used to farm crops, cattle and fish, and areas covered in natural vegetation, where agriculture, livestock and fishing are prohibited. “Identificación general de la frontera agrícola en Colombia”, Unidad de Planificación Rural Agropecuaria, 2018.

<sup>18</sup> “Identificación general de la frontera agrícola en Colombia”, op. cit., p. 53.

### **III. Deforestation: Before and After the FARC**

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Since shortly after the FARC's ceasefire in 2014, armed groups have helped drive growing rates of deforestation and environmental degradation, with the remaining guerrillas and criminal outfits competing for illicit income from fertile or resource-rich regions. At the same time, tens of thousands of small-holders displaced from their farms by the conflict have sought new land and livelihoods in previously uncultivated territory, often bringing them in proximity to illicit armed groups.

#### *A. Defence and Exploitation of the Environment*

During its time as an insurgency, the FARC's approach to defending the environment was erratic. The guerrillas knowingly contributed to environmental damage through illegal mining, coca cultivation, oil pipeline attacks and building encampments in protected areas such as national parks. "If you are part of the war economy, ... be it as a revolutionary army or the state itself, you need to use natural resources. The environment has been a silent victim that has helped sustain the war", said a former FARC combatant who now runs a reforestation initiative. "We took water, timber, gold, coal and petrol – all that we needed – and we paid for our war".<sup>19</sup>

Nevertheless, in many places the FARC set clear rules, with corresponding punishments for any violations, in a bid to limit deforestation and certain other harmful practices. Rules regarding the environment differed among rebel fronts, depending upon local conditions. Curbing deforestation was not always and everywhere a priority, and the FARC's position on it did not stem from purely environmental concerns. One major concern was to protect the canopy as a source of protective cover. "You could not log because ... aerial intelligence would be able to detect us", said one former FARC commander, reflecting the guerrillas' need for jungle cover in order to move around and set up camp without being observed.<sup>20</sup>

But some local FARC commanders also felt they had an obligation to protect the environment for the benefit of small-hold farmers, and imposed fines for cutting down more than a certain number of trees or hunting particular species.<sup>21</sup> They also took what they regarded as restorative measures, such as planting a hectare of food crops for each hectare of coca.<sup>22</sup>

After the FARC declared its unilateral ceasefire in December 2014, deforestation increased far more rapidly in areas where the guerrillas had been the de facto authority. In some regions, such as Guaviare, south of Bogotá, the guerrillas told locals that they would henceforth abstain from exercising environmental control and that elected bodies called Community Action Councils would have the final word on deforestation.<sup>23</sup> In others, such as Norte de Santander, along the Venezuelan border,

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<sup>19</sup> Crisis Group interview, former FARC combatant, Antioquia, February 2021.

<sup>20</sup> Crisis Group interview, former FARC commander, Caquetá, April 2021.

<sup>21</sup> Crisis Group interviews, environmental experts and social leaders, February-August 2021.

<sup>22</sup> Sebastián Gómez Zúñiga, "La Ecología Política de las FARC-EP", MA thesis, Pontificia Universidad Javeriana, 2018.

<sup>23</sup> Community Action Councils, or Juntas de Acción Comunal, are social organisations at the community and village level with legal status. Representatives are elected, manage resources and often

farmers and criminals, empowered by what they perceived to be the guerrillas' withdrawal, immediately razed large tracts of land.<sup>24</sup> As one former commander said: "After we handed in our weapons, neither the army nor the police was capable of protecting the environment".<sup>25</sup>

Testimonies from around the country corroborate a major change in attitudes toward deforestation:

Under the FARC, there was a manual of coexistence [ie, rule books written and designed by the FARC and sometimes distributed by community councils or the FARC itself] that governed the environment. People were only allowed to live and deforest in certain areas. There were limits on where and how much coca they could plant. When they left, the new groups only cared about profit. ... They didn't care about conservation. So it was: either you deforest and grow coca, or you leave or we kill you. With the FARC, they were not angels, but there was a culture of practising conservation. There is no control now and so coca has increased.<sup>26</sup>

The rise in deforestation also points to the Colombian state's failure to assert control of territory abandoned by the guerrillas. Security forces and civil institutions intended to take the FARC's place after it withdrew from its bastions.<sup>27</sup> Yet, in certain areas, other insurgents or criminal groups were the first to supplant the departing rebels, and the state has yet to remove them. They often tolerated unchecked deforestation. According to one social leader, "they were tearing down the forest to grow coca. ... They extracted money from the land by growing palms. They destroyed the wetlands, set up illegal mines, took wood to sell. This is open land, there is no one establishing order or control".<sup>28</sup>

## B. *Data on Forest Loss and Violence*

Analysis of forest loss data confirms dramatic changes between the periods before and after 2015, the year in which the FARC's ceasefire began to be implemented in earnest.<sup>29</sup> There are two different but complementary measures of deforestation. The first is *relative* magnitude: the percentage of forest cover lost in each Colombian

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function as interlocutors between residents, on one hand, and the state and/or armed groups, on the other. Crisis Group telephone interview, environmental expert in Guaviare, 9 August 2021.

<sup>24</sup> Crisis Group telephone interview, environmental expert in Norte de Santander, 30 July 2021.

<sup>25</sup> Crisis Group interview, former FARC combatant, Antioquia, 7 February 2021.

<sup>26</sup> Crisis Group interview, social leader, Montelibano, Córdoba, August 2021.

<sup>27</sup> See Crisis Group Latin America Report N°63, *Colombia's Armed Groups Battle for the Spoils of Peace*, 19 October 2017, Section IV.

<sup>28</sup> Crisis Group telephone interview, social leader, Norte de Santander, June 2021.

<sup>29</sup> To measure the impact of conflict on deforestation in Colombia, and determine the changes brought about by the ceasefire, Crisis Group computed forest loss trends using data from the Global Forest Change (GFC) project, which measures forest change worldwide between 2000 and 2019 using high-resolution satellite images. Data from Colombia's IDEAM complemented those from GFC. GFC first identifies tree coverage, which is defined as all vegetation higher than 5m (16.4 feet) in altitude, irrespective of canopy density. Secondly, it computes tree cover loss (GFC's definition of deforestation) if tree coverage disappears in a particular pixel image from one year of measurement to the other. See the methodological note in Appendix B.

municipality each year judged against a baseline set in 2000.<sup>30</sup> The second is an *absolute* measure: the number of square kilometres of baseline forest cover lost every year, computed by taking the sum of deforestation within each municipality.<sup>31</sup> Figure 1, splitting the sample between the first and the second five-year period of the decade 2010-2019, looks at the two different measures of deforestation. The top panel shows the cumulative deforestation over each five-year period as the share of baseline forest cover (relative magnitude). The bottom panel shows the total loss in forest area in square kilometres (absolute magnitude). In both cases, deforestation is substantially higher in the period 2015-2019 than in the period 2010-2014.

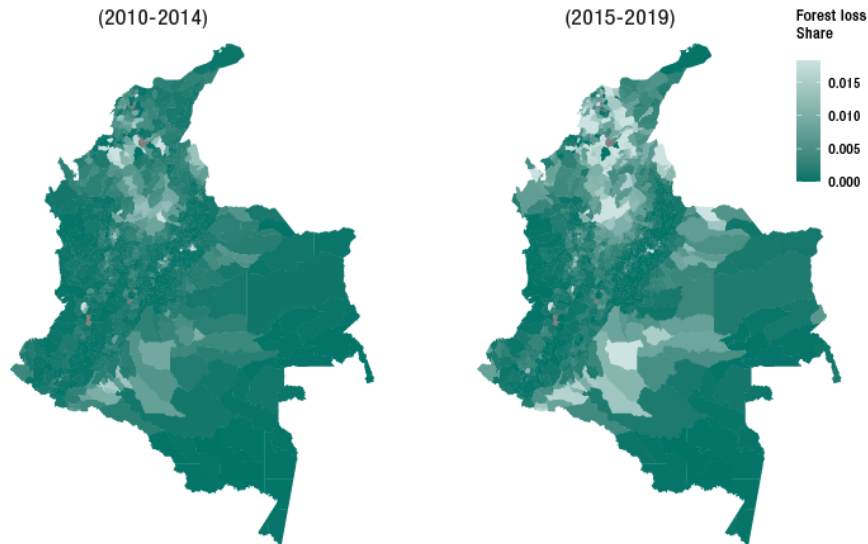
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<sup>30</sup> For purposes of making the calculations described in the footnote above, for a given year, Crisis Group coded each 30m×30m pixel GFC had identified as “lost” that year as a 1 and all other pixels as a 0. Each pixel was then multiplied by the base year level of forest cover at that same pixel as recorded by IDEAM, so that if a deforested pixel is fully covered in 2000 it remains a 1, if it is half covered it becomes a 0.5 and so on. Finally, the percentage of the base year municipal forest cover that was lost in that year was computed by summing the deforested pixels in a given municipality and a given year and dividing by the total forest cover for that municipality in the base year (2000).

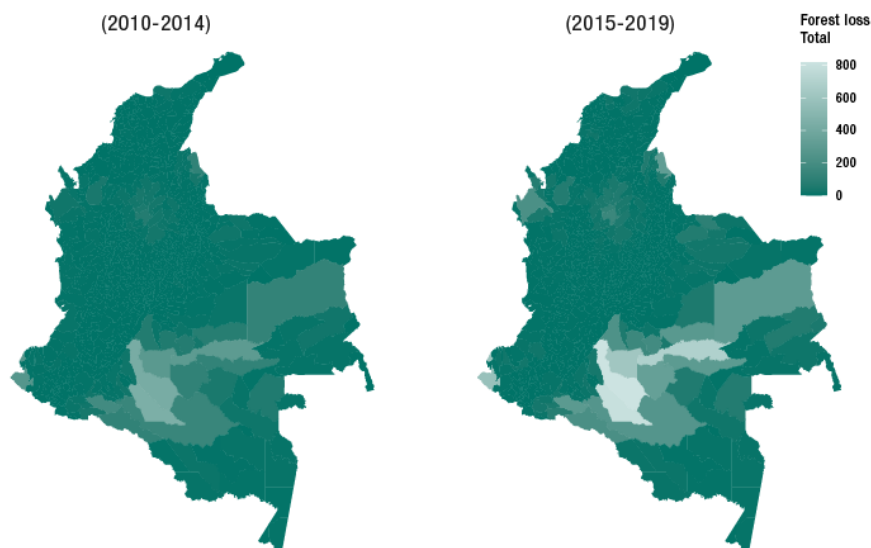
<sup>31</sup> Crisis Group computed the square kilometres of the base year forest cover lost in each municipality by simply taking the sum of deforested pixels in a given year. Having an absolute measure, in this case in square kilometres, is useful because large municipalities may lose very large areas of forest, but the loss could entail small figures of the relative deforestation measure if the baseline year forest cover is also very large.

**Figure 1. Municipal deforestation in 2010-2014 and 2015-2019**

**Average Share Loss of Forested Area**



**Total Share Loss of Forested Area (km<sup>2</sup>)**



Source: Crisis Group calculations, using GFC and IDEAM.

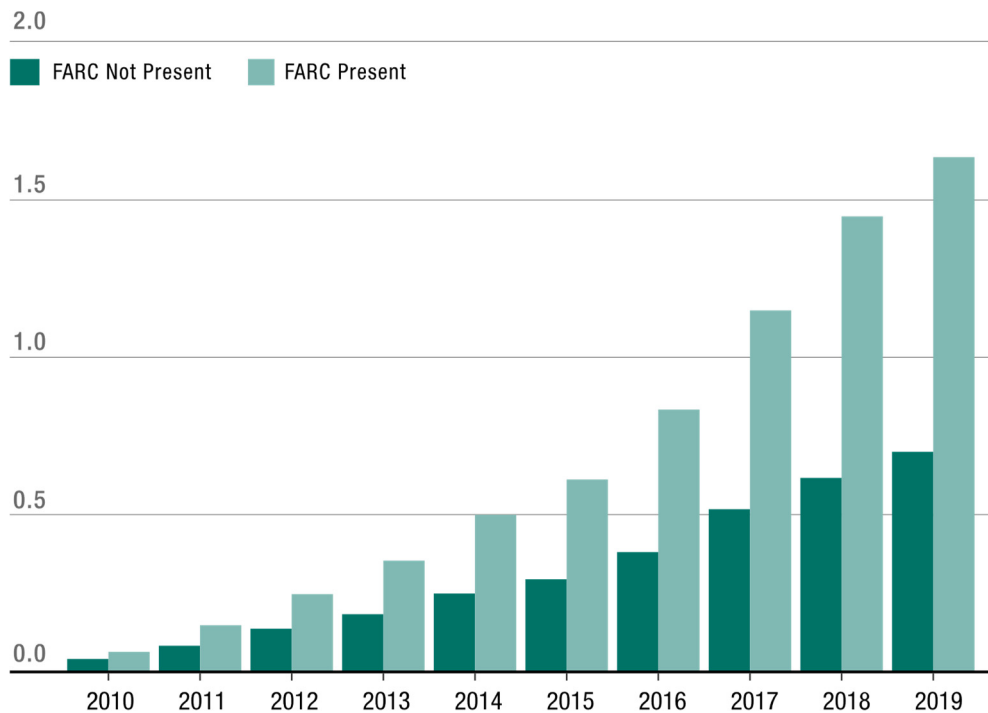
Figure 2, by contrast, plots the evolution of the baseline forest area from 2000 that was cumulatively lost every year from 2010 to 2019, distinguishing between municipalities with and without a significant FARC presence prior to the ceasefire.<sup>32</sup> The figure supports the hypothesis that when the FARC left their strongholds, deforestation accelerated faster in those places than in others where they did not previously have a significant presence.<sup>33</sup> While the deforestation rate increased after the

<sup>32</sup> Figure 2 categorises a municipality as “FARC Present” if the Universidad del Rosario Conflict Database records any act of FARC-related violence in that area between 2010 and 2014.

<sup>33</sup> Prem and his co-authors made this point in “End-of-Conflict Deforestation: Evidence from Colombia’s Peace Agreement”, op. cit.

ceasefire in areas both with and without a significant FARC presence, Figure 2 demonstrates that the increase was substantially larger in areas where the FARC had been active.

**Figure 2. Aggregate forest loss 2010-2019 according to pre-ceasefire FARC presence**



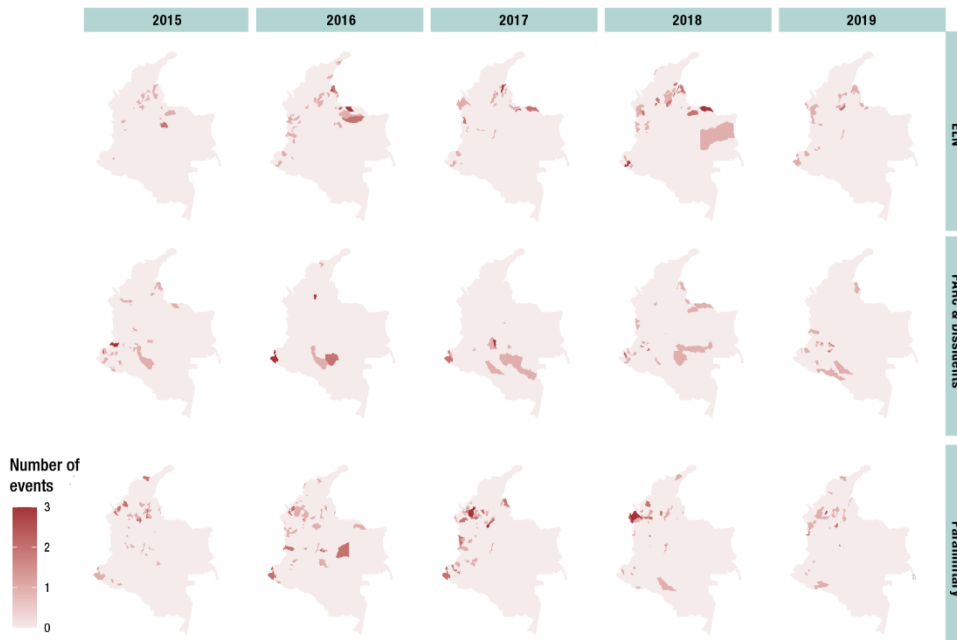
Source: Crisis Group calculations using GFW and the Universidad del Rosario Conflict Database

### C. *New Violent Competitors and Deforestation*

Various armed groups have fought for control of territories vacated by the FARC and have engaged to varying extents in the race to deforest. These groups include FARC dissidents (former FARC guerrillas who refused to sign on to the peace agreement or who took up arms again after it came into effect), the rebel National Liberation Army (ELN) and criminal outfits that include the remnants of disbanded right-wing paramilitary groups. Figure 3 shows the annual tally of violent events by type of non-state group from 2015 to 2019 across Colombia. While not perfectly coinciding, these maps point to overlaps between areas where these groups have been involved in acts of violence and zones where deforestation has been highest, as illustrated in Figure 1.

Both the FARC and its dissidents (middle panel) were active in the deforestation hotspots identified in Figure 1, especially in southern provinces such as Caquetá and Putumayo. The ELN (top panel) was also responsible for violence in areas marked by high deforestation, notably in the departments of Arauca, southern Bolívar and Norte de Santander in north-eastern Colombia, as well as Chocó on the Pacific coast. Post-paramilitary groups (bottom panel) have also been active in high deforestation areas, albeit to a lesser extent.

**Figure 3. Evolution of guerrilla and paramilitary violence: 2015-2019**



Source: Universidad del Rosario Conflict Database

### 1. FARC dissident groups

Unlike the FARC before the ceasefire, some dissident fronts have no power to enforce environmental rules, and many also lack the inclination. Most are not yet big enough to need the jungle cover that the former guerrillas required for their camps. Dissidents mostly operate in rural towns and hamlets.<sup>34</sup> The 7th Front in Guaviare has allegedly welcomed families new to the area, encouraging them to grab around 40 hectares of forested land each, as long as they use one or two hectares to grow coca for exclusive sale to the dissidents.<sup>35</sup> State officials have reported that dissidents go so far as to pay families to raze forests. One security officer said dissidents give farmers between \$500 and \$1,300 to log, clear and prepare one hectare of land in La Uribe, Meta.<sup>36</sup> But farmers and environmental experts dispute this account: they say farmers do not need to be paid to cut forest down, as they do it of their own volition. The competing narratives highlight that while the authorities have tended to treat deforestation as driven by dissidents, in many cases farmers seem to be acting out of economic need.

Dissidents generally tax local families a percentage of the profits they make using those lands but otherwise are not uniform in their practices.<sup>37</sup> Civil society representatives and farmers report that, at least in Caquetá, some dissident fronts have been

<sup>34</sup> Crisis Group interviews, law enforcement officer, Meta, 25 May 2021; farmer, Meta, 26 May 2021.

<sup>35</sup> Crisis Group interview, NGO representative and researcher, 9 March 2021.

<sup>36</sup> Crisis Group interview, law enforcement officer, Meta, 25 May 2021.

<sup>37</sup> Crisis Group interview, NGO representative and researcher, 9 March 2021; social leader, Caquetá, April 2021.



trying to curb deforestation in their areas of influence.<sup>38</sup> If locals chop down too many trees, they exact fines of between \$200 and \$300 or ban logging the next year. Repeat offenders are expelled from the region. It may be that the dissidents are reverting to a stricter code of conduct, reminiscent of the FARC's, after first relaxing the rules in order to establish good relations with residents. As they were when the FARC controlled territory, environmental regulations are often communicated through "co-existence manuals", issued by Community Action Councils under the influence of dissidents.<sup>39</sup> Fighters belonging to the Segunda Marquetalia, a dissident faction led by former FARC chief peace negotiator Iván Márquez, has announced that it will enforce environmental restrictions in parts of the San Vicente del Caguán municipality.<sup>40</sup>

## 2. The ELN

The ELN has been responsible for some of the most devastating environmental harm in Colombia through its sabotage of oil pipelines of multinational firms.<sup>41</sup> While the organisation is decentralised and different fronts within it have adopted varied stances on the environment, the ELN's predominant policy has been to attack global corporations and the national government for destroying nature's bounty while also seeking to extract extortion payments from the businesses it threatens. These military tactics have resulted in huge environmental damage.<sup>42</sup>

Areas historically exposed to ELN influence, such as southern Bolívar in the country's centre, Norte de Santander and Arauca along the Venezuelan border, and Chocó on the Pacific west coast, have experienced high rates of deforestation. Local officials and farmers say the ELN is not solely responsible, noting that it has banned or restricted some practices associated with environmental degradation, such as the use of backhoes in gold mining.<sup>43</sup> One ELN militant insisted the rebels make a distinction between deforestation, which they understand as "indiscriminate logging", and the "extraction of timber" by farmers who need to fell trees to make ends meet. They forbid the former and permit the latter, the militant said.<sup>44</sup>

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<sup>38</sup> Dissidents are reportedly keen to limit deforestation in certain areas of rural Caquetá. Crisis Group interviews, NGO representative and researcher; farmer and logger, March 2021.

<sup>39</sup> Crisis Group interview, logger, Caquetá, 14 April 2021.

<sup>40</sup> Crisis Group interviews, social leaders, Caquetá, August 2021.

<sup>41</sup> "Voladuras: una cruda arma de Guerra", *Semana Sostenible*, February 2019; "ELN y actores ilegales siguen volando oleoductos", Caracol Radio, 28 January 2021. For analysis of the ELN's history and evolution, see Crisis Group Latin America Report N°68, *The Missing Peace: Colombia's New Government and Last Guerrillas*, 12 July 2018.

<sup>42</sup> When journalists have asked about this contradiction, ELN leaders have acknowledged the environmental impact of their actions, saying they try to minimise it by using less dynamite, so that holes in the oil pipes are smaller. They also insist that alliances between the state and multinational extractive firms are the real culprit in environmental problems. Antonio García, "Antonio García: el ELN quiere la paz para todos los colombianos", *Colombia Informa*, 5 February 2018; "Pablo Beltrán, jefe negociador del ELN, habló sobre el futuro del proceso de paz, Venezuela y las voladuras de oleoductos", *Análisis Urbanos*, 7 March 2019.

<sup>43</sup> Crisis Group interview, state official, Segovia, 10 February 2021.

<sup>44</sup> Crisis Group interview, ELN militant, 2021.

ELN rebels make much of their environmental concern but their practices often do not match their rhetoric. “We warn our communities about the damage that is being caused to the environment, with the irrational exploitation of renewable and non-renewable natural resources”, an ELN pamphlet from 2021 seen in the north-western region of Antioquia reads. The leaflet warns locals to desist from logging large tracts of land and clearing *baldíos* (land without private owners).<sup>45</sup>

A social leader in rural Antioquia explained, however, that ELN fronts permit deforestation or other activities harmful to the environment if they receive payment.<sup>46</sup> For example, in the municipality of Tibú, Norte de Santander, where deforestation is rampant, the ELN restricts commercial logging, as well as hunting wild animals, but it strikes deals with farmers on how many hectares can be deforested in exchange for money or services. Armed groups including the ELN in other areas of Norte de Santander, such as El Carmen and Teorama, reportedly encourage deforestation with the goal of boosting local economic activity, which they can then tax.<sup>47</sup>

### 3. Post-paramilitary criminal organisations

Historically, right-wing paramilitary groups have been the most significant force behind land dispossession in Colombia. From the late 1980s until the mid-2000s, paramilitary groups, which were originally created to combat leftist guerrilla groups, appropriated land through threats, massacres and forcible changes to parcels’ legal status.<sup>48</sup> Of at least 6.5 million hectares of land illegally seized in Colombia since 1990, right-wing paramilitary groups took an estimated 83 per cent, according to an analysis of almost 5,800 judicial rulings in land-grabbing cases.<sup>49</sup>

Reports from the state Ombudsman’s office and the publicly funded National Centre for Historical Memory, based on paramilitaries’ confessions, among other studies, show that much of this land was deforested and used for cash crops, especially African oil palm – a part of Colombia’s agro-industry that grew rapidly in the early 2000s.<sup>50</sup> Some Colombian and multinational corporations are under investigation

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<sup>45</sup> Pamphlet, ELN War Front Darío Ramírez Castro, January 2021.

<sup>46</sup> Crisis Group interviews, social leader, north-eastern Antioquia, 6 February 2021; mine operator, Segovia, 10 February 2021.

<sup>47</sup> Crisis Group telephone interviews, environmental expert in Norte de Santander; local expert in conflict dynamics, 30 July 2021.

<sup>48</sup> Francisco Leal Buitrago, *La Inseguridad de la Seguridad* (Bogotá, 2006), p. 233; “El Despojo de Tierras y Territorios: aproximación conceptual”, Comisión Nacional de Reparación y Reconciliación, June 2009.

<sup>49</sup> In a report presented to the Truth Commission in 2020, Fundación Forjando Futuros examined all land dispossession cases brought to court during the last decade and found that judges had determined that the vast majority of culprits were associated with paramilitary groups. “En el 83% de los casos de despojo de tierras los paramilitares fueron los autores: Gerardo Vega”, *El Espectador*, 31 August 2020; “Operación Colombia las tierras de la población desplazada”, UN High Commissioner for Refugees/ACNUR, 2012.

<sup>50</sup> Yamile Salinas and Juan Manuel Zarama, “Justicia y Paz. Tierras y territorios en las versiones de los paramilitares”, National Centre for Historical Memory (CNMH), September, 2012; “Una nación desplazada: Informe Nacional de desplazamiento forzado en Colombia”, CNMH, September 2015; “Violación de derechos humanos por siembra de palma africana en territorios colectivos de Jiguamiandó y Curvaradó. Seguimiento de la Resolución Defensorial 39 del 2 de junio de 2005”, State Ombudsman’s Office, 2006; Juanita Goebertus, “Palma de aceite y desplazamiento forzado en Zona

for financing paramilitary organisations, thereby facilitating their environmentally destructive activities.<sup>51</sup>

Following demobilisation of the 37 paramilitary groups that were part of the United Self-Defence Forces of Colombia (AUC) in 2003, several crime rings formed under the leadership of mid-ranking former AUC fighters who hung on to their weapons.<sup>52</sup> Because they operate in areas where the paramilitaries were active, feature many of the same members, and use similar methods (such as exerting social control through extortion and maintaining close ties with drug traffickers), these outfits are widely seen as direct heirs of the paramilitaries.<sup>53</sup>

These post-paramilitary groups continue to displace rural families and force them to clear and settle land. Locals in the Pacific department of Chocó have reported that the Gaitanistas, a major criminal and drug trafficking outfit with paramilitary origins, have urged residents to clear swathes of jungle and plant coca. According to a local law enforcement official and a social leader based in the area, the Gaitanistas will pay per hectare – \$80 for clearing small vegetation (*la rocería*) and over \$90 for logging (*la tumba*) – if farmers then use the land to grow coca.<sup>54</sup> In other regions, prices are reportedly even higher: in Bajo Cauca local sources say that a post-paramilitary armed group pays farmers \$5,300 to deforest five hectares, prepare the land and plant coca, provided that the recipients promise to sell them the crops.<sup>55</sup>

#### D. *The 2016 Peace Accord and the Environment*

The 2016 peace accord appeared to mark a high point in Colombia's resolve to protect the environment. Alongside the FARC's concerns over inequality in land tenure, the agreement looked to address the effects of decades of conflict on the environment and respond to alarms associated with climate change. According to the government, between 1990 and 2013 some 58 per cent of Colombia's total deforestation,

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Bananera: 'trayectorias' entre recursos naturales y conflicto", *Colombia Internacional*, June 2008, pp. 152-175; Mónica Hurtado, Catherine Pereira and Edgar Villa, "Oil Palm Development and Forced Displacement in Colombia: Causal or Spurious?", *Revista Cuadernos de Economía*, vol. 37 (July 2017), pp. 441-468. For an analysis of paramilitary land grabs, see Francisco Gutiérrez and Jennifer Vargas, *El despojo paramilitar y su variación: quiénes, cómo, por qué* (Bogotá, 2016).

<sup>51</sup> Ten executives of the multinational Chiquita Brands are on trial for supporting paramilitary groups between 1997 and 2004. Lawyers for the company have argued that their due process has been violated and questioned the legitimacy of the evidence gathered by the attorney general, but a judge decided in October that the case had sufficient merit to move forward. "En firme juicio a empresarios de Chiquita Brands por posibles nexos con paras", *El Colombiano*, 13 October 2021. Some Colombian businessmen with investments in African palm have received sentences of ten years in prison for their alliances with paramilitaries, and dozens of other cases are still open. "Empresarios de palma condenados por vínculos con paramilitares", Canal 1, 4 August 2013.

<sup>52</sup> "Desmovilización y reintegración paramilitar panorama posacuerdos con las AUC", CNMH, November 2015.

<sup>53</sup> See "Herederos de los paramilitares: la nueva cara de la violencia en Colombia", Human Rights Watch, February 2010; and Crisis Group Report, *Colombia's Armed Groups Battle for the Spoils of Peace*, op. cit.

<sup>54</sup> Crisis Group interviews, law enforcement officer, Chocó, March 2021; social leader, Chocó, March 2021.

<sup>55</sup> Crisis Group interview, gold miner and former coca farmer, 13 June 2021.

about 3 million hectares, took place in conflict-affected areas, notwithstanding the FARC's imperfect conservation efforts.<sup>56</sup> Rising concern in the country over extreme climate events provoked by El Niño and La Niña, as well as Bogotá's signing of the 2015 Paris Agreement on climate change, elevated environmental issues in the Havana negotiations over the 2016 deal.<sup>57</sup> Norway, which facilitated the talks, described the peace deal as the "first in history to put heavy emphasis on environment and sustainability as part of the peace building process".<sup>58</sup>

The accord proposes several key initiatives. The chapter on rural reform aims to halt the advance of the agricultural frontier through a new "territorial order". The agreement provides for expanding the existing Campesino Reserve Zones – a mechanism created in the 1990s to set state lands aside for small-holders to farm. It also proposes to establish a National Land Fund for victims of forced displacement and land seizure, particularly in conflict-affected regions.<sup>59</sup> This Fund would redistribute illegally acquired or disused land to landless farmers and other poor people affected by the conflict.<sup>60</sup>

The agreement proposed tackling Colombia's chronic lack of robust land administration through a new registry that would record the ownership and use of all land, the location of vacant public lots, and areas with special environmental restrictions.<sup>61</sup> A new Environmental Zoning Plan would manage land use in areas with specific environmental characteristics and designate areas for protection and sustainable use, such as national parks, forest reserves, areas with high levels of biodiversity and endangered ecosystems.<sup>62</sup>

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<sup>56</sup> "Conpes 3850. Fondo Colombia en Paz", Colombian National Planning Department, 2015.

<sup>57</sup> Santos' government estimated that the peace treaty, if implemented in full, could prevent environmental damage costing Colombia \$1.8 billion per year. "Por cada año de paz, Colombia ahorraría \$7,1 billones en degradación ambiental", op. cit. See also Ivan Briscoe, Santiago Villaveces, Xander van Tilburg and Louise van Schaik, "Green or Grey Growth for Colombia: Challenging Fossil Fuel Economy Security", Clingendael Institute, October 2016.

<sup>58</sup> Norway and Cuba were the guarantor countries during the peace negotiations between the FARC and the Colombian government in Havana, Cuba, from 2012 to 2016.

<sup>59</sup> "Acuerdo Final para la Terminación del Conflicto y la Construcción de una Paz Estable y Duradera", November 2016, pp. 20, 21, 204. The Zones were created in the mid-1990s with the idea of giving small-hold farmers state lands that were not being used efficiently in order to promote rural development. In the 2016 peace agreement, they are described as: "agricultural initiatives that contribute to the construction of peace, the safeguarding of the political, economic, social and cultural rights of small-scale farmers, to development with socio-environmental and food sustainability and to the reconciliation of Colombian citizens". These Zones, according to the peace agreement, are essential to keeping the agricultural frontier in place and preserving nature. Decree 1777/1996, 1 October 1994. There are six operating Zones: Cimitarra (in the border between the states of Antioquia and Bolívar), Cabrera (Cundinamarca), the Pato river (Caquetá), Morales and Arenal (Bolívar), San José (Guaviare) and Puerto Asís (Putumayo).

<sup>60</sup> "El difícil horizonte del Fondo de Tierras para la Paz", *Verdad Abierta*, 5 March 2015.

<sup>61</sup> Experts note that designating protected areas and identifying illegal land grabs will not solve the issues of illegal occupancy and illicit economies if the state cannot control its territory. Crisis Group telephone interview, academic and land expert, 29 July 2021.

<sup>62</sup> "Acuerdo Final para la Terminación del Conflicto y la Construcción de una Paz Estable y Duradera", op. cit., p. 20. The accord also considers the role that ethnic minorities, former combatants and vulnerable communities may play in deforestation and how to satisfy their needs in ways that conserve the environment. Chapter 1.1.10 states that communities living alongside or within areas re-

Other parts of the peace agreement sought explicitly to encourage sustainable, licit and environment-friendly growth. The Territorially Focused Development Programs (PDETs) are community-led local development plans targeted at around 170 historically violent localities, with the goal of helping residents resist the allure of livelihoods that fill the coffers of guerrillas and criminals.<sup>63</sup> The National Program for Integral Substitution looks to persuade coca farmers to grow other crops and help them establish legal livelihoods.<sup>64</sup> “Reducing deforestation and restoring degraded lands, by supporting environmentally sustainable production alternatives for farmers in rural areas, is the key to ensuring a stable and lasting peace”, declared Luis Gilberto Murillo, the Colombian environment minister at the time the peace deal was signed.<sup>65</sup> But some of these initiatives have languished due to a lack of funding, setbacks in implementation and half-hearted government backing (see more in Section V).

Another creation of the peace deal, Colombia’s apparatus for transitional justice – the Special Jurisdiction of Peace (JEP) – also recognised the environment as a “silent victim” of conflict.<sup>66</sup> A special commission within the tribunal is looking into the relationship between the environment and conflict. It remains underfunded and understaffed, however, while its work is complicated by lack of data on the environmental harm caused by war crimes and acts of war, which tend to fall outside the purview of the regular justice system.<sup>67</sup> Despite these shortcomings, the JEP is pursuing cases in which armed groups are alleged to have done major environmental harm, including oil spills caused by pipeline attacks and environmental damage from illicit economic activity, such as coca growing and illegal mining.

One facet of state conduct during the period of conflict, which is also relevant to the environment, is coca eradication. Between 1994 and 2015, as part of the U.S.-sponsored war on drugs, Colombia sprayed about 1.8 million hectares of coca crops with glyphosate, an herbicide. For each hectare of coca grown, between 13 and 32

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quiring special environmental management should receive support for development plans, resettlement and “community rehabilitation of forests and the environment, which are compatible with and contribute to the objectives of closing the agricultural frontier and preserving the environment”. Chapter 3.2.2.6 underlines that programs to reincorporate former FARC fighters including environmental protection merit particular attention.

<sup>63</sup> Tatiana Pardo Ibarra, “Cualquier proceso de paz debe resolver cómo habitar los territorios”, *El Tiempo*, 17 November 2020.

<sup>64</sup> Crisis Group Latin America Report N°87, *Deeply Rooted: Coca Eradication and Violence in Colombia*, 26 February 2021.

<sup>65</sup> “Colombia to build environment-friendly peace”, press release, Norwegian Ministry of Climate and Environment, 13 December 2016.

<sup>66</sup> “Unidad de Investigación y Acusación de la JEP, ‘reconoce como víctima silenciosa el medio ambiente’”, press release, JEP, 5 June 2019. “When you attack the environment, you attack all of humanity”, said Giovanni Álvarez Santoyo, the JEP’s chief prosecutor. Crisis Group interview, Bogotá, 19 May 2021.

<sup>67</sup> Because the state did not consider many types of environmental harm a crime until July 2021, the Attorney General’s office did not persecute these acts. Nor did it calculate the implications for the environment of other criminal acts or acts of war. Crisis Group interview, Giovanni Álvarez Santoyo, JEP chief prosecutor, Bogotá, 19 May 2021.

hectares of rural land were fumigated.<sup>68</sup> The Santos government halted the practice in 2015, mostly due to public health concerns, but the environmental damage had been done.<sup>69</sup> The present administration, under President Iván Duque, has promised to return to fumigation.<sup>70</sup>

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<sup>68</sup> “Plan antidrogas de Estados Unidos y Colombia promueve la fallida política de fumigación aérea”, Washington Office on Latin America, 6 March 2020.

<sup>69</sup> In March 2015, the International Agency for Research on Cancer of the World Health Organization classified glyphosate as “probably carcinogenic to humans”. See Crisis Group Report, *Deeply Rooted: Coca Eradication and Violence in Colombia*, op. cit.; and Kathryn Guyton et al., “Carcinogenicity of tetrachlorvinphos, parathion, malathion, diazinon and glyphosate”, *The Lancet*, vol. 16, no. 5 (2015), pp. 490-491.

<sup>70</sup> “Colombia prepara el regreso de las cuestionadas fumigaciones con glifosato contra los cultivos de coca”, *El País*, 13 April 2021.

## **IV. Crime, Business and Deforestation**

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As the FARC relinquished its territorial grip in the aftermath of the 2014 ceasefire and 2016 peace accord, armed groups – rather than the state – rushed in to take their place. But a weak or absent state was not the only factor in the subsequent rise in deforestation. It was also fuelled by the expansion of highly profitable business enterprises. Some businesses flourished because of criminal backing or deficient law enforcement; coca cultivation and illicit mining, as well as legal pursuits such as cattle ranching that often are linked to illegal and violent actors, are prominent among them.<sup>71</sup> But companies free from legal taint, and the banks that finance them, also bear their share of responsibility for deforestation in which they participated and the environmental consequences.<sup>72</sup>

### *A. Coca Cultivation*

Land clearance for coca crops is a cause of deforestation, although studies have found that clearance for this purpose is lower than for the creation of new grassland and traditional agriculture.<sup>73</sup> Colombia had 143,000 hectares of coca crops in 2020, the largest surface area devoted to the plant of any country in the world; between 1998 and 2012, about 608,000 hectares of forest were cut down for coca plantations.<sup>74</sup> Satellite images show that many of the same areas shown in Figure 1 to have seen increased deforestation in the wake of the FARC ceasefire also experienced increased coca cultivation (see also Appendix C). A local leader in the Riosucio municipality, in the Chocó department, explained that prior to the peace accord the guerrillas wanted to keep coca production low to avoid attracting too much attention from law enforcement in what is a major trafficking corridor to Panama.<sup>75</sup> Once the FARC left the area, he said, coca cultivation rose sharply as the Gaitanistas expanded their footprint.

Colombian officials have identified several ways in which coca cultivation contributes to deforestation. Forests are cut down and burnt to clear land for cultivation, the chemical and physical conditions of the soil are altered, and (as discussed further below) rivers and other water sources are often contaminated.<sup>76</sup> Coca cultivation is also frequently the harbinger of other changes with bigger impact, such as road con-

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<sup>71</sup> Oliver Griffin, “Road to ruin: informal byways sow seeds of destruction in Colombia’s Amazon”, Reuters, 14 April 2021; “Caracterización de las principales causas y agentes de la deforestación a nivel nacional 2005-2015”, IDEAM, 2018.

<sup>72</sup> Though investors have reduced their investments in fossil fuels, the same cannot be said of forest-risk commodity supply chains. According to Andrew Mitchell, founder of and senior adviser to the NGO Global Canopy: “If we do not change the movement of money, we will finance ourselves into extinction”. “Major financial institutions, corporates and governments endorse launch of Taskforce on Nature-related Financial Disclosures”, Global Canopy, 4 June 2021.

<sup>73</sup> “Coca y deforestación: mensajes de acción para la planeación del desarrollo”, Deutsche Gesellschaft für Internationale Zusammenarbeit, March 2017.

<sup>74</sup> “Datos y tendencias del monitoreo de territorios afectados por cultivos ilícitos en Colombia (2020)”, press release, UN Office on Drugs and Crime (UNODC), 9 June 2021; “Coca: Deforestación, contaminación y pobreza”, Colombian National Police Anti-Narcotics Directorate, 2014.

<sup>75</sup> Crisis Group interview, social leader, Riosucio, Chocó, 25 March 2021.

<sup>76</sup> J. González et al., “Caracterización de las principales causas y agentes de la deforestación a nivel nacional período 2005-2015”, IDEAM, 2015.

struction or cattle ranching, which often follow in its wake.<sup>77</sup> One study of coca's environmental effects in Colombia describes the plant as the "front line" that triggers many other types of deforestation.<sup>78</sup>

Coca's link to deforestation is plain to see in the Caquetá, southern Meta and Guaviare regions, which are in the vanguard of Colombia's land clearance activities. Aerial fumigation in the period prior to 2015 pushed coca farmers deeper into the forests and protected areas.<sup>79</sup> According to one farmer from Guaviare, much of the soil in which coca previously flourished has been ruined by glyphosate spraying, pushing growers to deforest new patches of land to plant the crop.<sup>80</sup>

Coca has also played a role in deforestation in Tibú, in the Norte de Santander department. Locals say both the FARC dissidents of the 33rd Front and the ELN order farmers to grow the crop. Occasionally, however, farmers wishing to plant coca ask armed groups to mediate on their behalf with village councils that have prohibited logging.<sup>81</sup> Affordable labour abounds for Tibú coca growers because the area borders Venezuela and so many people are fleeing that country's economic slump.<sup>82</sup> (Coca notwithstanding, the main cause of land clearance in Tibú over the last year has been cattle ranching, as explained below.<sup>83</sup>)

Clearing forests to grow coca is not the only environmental damage caused by cocaine production. Chemicals used to process the coca leaf into cocaine in jungle laboratories are frequently dumped nearby, polluting soil and water sources. To produce 1kg of cocaine, according to the Colombian defence ministry, laboratories discharge 700 litres of chemicals.<sup>84</sup> As mentioned above, fumigation-based eradication by the government has also resulted in grave environmental harm.

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<sup>77</sup> The construction of roads and informal access paths is a clear indicator of deforestation. More than 800km of informal roads are built in Colombia's Amazon each year to let loggers, cattle ranchers and coca growers reach the jungle interior. A lack of cooperation between state institutions complicates closing illegal roads. The transport ministry has approved roads in national parks, for example, even though environmental authorities did not want them. Judges have ordered the closure of illegal roads in the Amazon and accused mayors of facilitating their construction. Griffin, "Road to ruin: informal byways sow seeds of destruction in Colombia's Amazon", *op. cit.* See also "Fiscalía imputa a alcaldes en Guaviare por deforestación en la Amazonía", press release, Attorney General's Office, 5 December 2019; and Tatiana Pardo Ibarra, "Juez ordena cerrar vía en Guaviare para frenar deforestación", 3 March 2021. Crisis Group interviews, environmental experts, 16 February and 13 May 2021.

<sup>78</sup> "Coca y deforestación: mensajes de acción para la planeación del desarrollo", *op. cit.*

<sup>79</sup> Camilo Erazo and María Alejandra Vélez, "¿Los cultivos de coca causan deforestación en Colombia?", Universidad de los Andes, 2020.

<sup>80</sup> Crisis Group interview, farmer, Meta, 26 May 2021.

<sup>81</sup> Crisis Group telephone interview, social leader, Catatumbo, 30 June 2021.

<sup>82</sup> Crisis Group telephone interview, academic, 4 June 2021. The source explained that productivity depends on work force availability. Since the start of the economic and humanitarian crisis in Venezuela, over 5 million have fled the country. Colombia hosts close to 2 million Venezuelan refugees, most of whom depend on informal employment.

<sup>83</sup> Crisis Group telephone interview, local expert in conflict dynamics, 30 July 2021.

<sup>84</sup> "Más de 248 hectáreas recuperadas tras sexta fase de la campaña Artemisa en La Macarena", press statement, Colombian Defence Ministry, 4 September 2020.



## B. *Cattle Ranching*

Transforming forest into cattle pasture is a major cause of deforestation in Colombia: at least 28.2 million cows graze on about 39.2 million hectares of land.<sup>85</sup> Even before the FARC ceasefire, the connections between deforestation and cattle ranching were already visible, especially in the Andean region, along the Caribbean coast and in parts of the Arauca and Meta departments, as well as the Casanare department to Bogotá's east. Since the ceasefire took hold, many areas, especially where the agricultural frontier abuts the Amazon, have witnessed rising deforestation alongside an increase in cattle rearing. The map in Appendix C shows that many of the areas with deforestation since 2015 in Figure 1 also registered increases in the number of head of cattle in the 2021 census.

Although cattle ranching is a legal industry, it is often associated with insurgent and criminal interests, and many cows graze in supposedly protected areas. Revenues from the cocaine business are easily laundered through cattle ranching.<sup>86</sup> "Cattle funds war", said one farmer in north-eastern Antioquia, sitting in front of a building tagged with ELN graffiti.<sup>87</sup> Armed groups, such as the FARC dissidents in Caquetá and post-paramilitary groups, tax farms with over 50 head of cattle in several regions.<sup>88</sup> Other groups, such as the Gaitanistas, extort fees from farmers working 100 hectares.<sup>89</sup>

Much of the land used for cattle grazing has been obtained illegally. In several deforestation hotspots, post-paramilitary groups and FARC dissidents occupied land once the guerrillas laid down their arms and moved out. Families displaced from other parts of Colombia started clearing woodland for cattle grazing, often with the backing of investors. Loggers using their own chainsaws in Caquetá, for example, are paid \$80 per hectare; a single such person can log three hectares per day. Those who do not own their equipment get paid about \$27 per day.<sup>90</sup> "We exchanged forests for meat", said a state official in Segovia, Antioquia. "They deforest, burn, put a fence up and sow grass for the cows".

A state official in Caquetá estimated that large ranchers cause more deforestation than all small cattle owners combined owing to superior organisation and resources.<sup>91</sup> For example, in 2021, people with chainsaws appeared accompanied by gunmen to deforest land in Vista Hermosa, Meta; two weeks later, trucks brought cattle to the same areas.<sup>92</sup> Experts, law enforcement officers and farmers stated that investors – who often remain anonymous even to their employees – pay locals to log and raise cattle in their absence; the farmers also receive a share of the profits when the ani-

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<sup>85</sup> "Conpes 4021. Política nacional para el control de la deforestación y la gestión sostenible de los bosques", Colombian National Planning Department, December 2020.

<sup>86</sup> Crisis Group interviews, social leaders, Caquetá, April 2021. Crisis Group telephone interviews, law enforcement officials, 2021.

<sup>87</sup> Crisis Group interview, social leader, north-eastern Antioquia, 6 February 2021.

<sup>88</sup> FARC dissidents charge \$2.70 per cow per year while post-paramilitary groups charge monthly per cow, although the precise arrangements vary between regions and fronts. Crisis Group interviews, social leader, Florencia, 12 April 2021; local expert, Caquetá, 16 April 2021; social leader, north-eastern Antioquia, 6 February 2021; law enforcement officer, Meta, 25 May 2021.

<sup>89</sup> Crisis Group interview, investigator, Urabá, 28 March 2021.

<sup>90</sup> Crisis Group interview, farmers, Caquetá, 14 April 2021.

<sup>91</sup> Crisis Group interview, state official, Caquetá, April 2021.

<sup>92</sup> Crisis Group interview, senior NGO official, Meta, 26 May 2021.

mals are sold.<sup>93</sup> Meanwhile, the economies of scale of cattle rearing mean that large ranches under absentee owners can be extremely profitable. “They produce so much that they don’t know how much they have”, said a law enforcement officer.<sup>94</sup> While criminal groups such as the Gaitanistas are known to have invested in cattle, security officers reported that politicians and businessmen living in the country’s big cities also bankroll the sector.<sup>95</sup>

Critics of cattle ranching argue that the state has historically allowed the sector to operate in environmentally protected areas, and the available data suggests that they are right. In national parks, where cattle grazing is illegal, cows are a common sight. The Colombian Agricultural Institute, a state body, vaccinates and makes a census of these cows and knows who owns the cattle. The Institute also allows the transport of cattle from national parks to slaughterhouses or markets. The state-owned Agricultural Bank announced only in 2021 that it would stop lending money for cattle ranching in environmentally protected areas.<sup>96</sup>

The bovine supply chain’s opacity facilitates the “laundering” of illegally raised cattle. Since animals in national parks cannot obtain the Institute certificate required for sale, cattle maintained there are rotated into the legal supply chain. Cows are moved back and forth between protected and non-protected areas so they can be “marked” or certified in legal ranches.<sup>97</sup> The lack of traceability helps generate funds for armed groups. Law enforcement officers even claim that cattle are trafficked from Venezuela, where calves are much cheaper, and taken to national parks and forest reserves in Colombia. Large numbers are allegedly moved over the Guaviare River into the Meta and Guaviare departments.<sup>98</sup>

Deforestation for cattle ranching is also a consequence of the failure to fulfil the 2016 peace agreement. In the municipality with the highest levels of deforestation, Cartagena del Chairá, in the Caquetá department, some farmers signed up for a government program encouraging the voluntary substitution of illicit coca crops. But according to a local social leader, after not receiving the promised payments, they “saw that the only economy that could replace coca was cattle ranching”.<sup>99</sup> Cattle proved to be more profitable than any alternative, even when the only route to market is by river: “If you put a cow in a boat, of course it will get thinner”, due to the length of the journey, the social leader added. “But at least ... you know that cow will be sold”.<sup>100</sup>

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<sup>93</sup> Crisis Group interviews, social leader, north-eastern Antioquia, 6 February 2021; social leader, Caquetá, 14 April 2021; law enforcement officer, Meta, 25 May 2021. Crisis Group telephone interviews, law enforcement officers, 21 April 2021.

<sup>94</sup> Crisis Group interview, armed forces, Chocó, 26 March 2021.

<sup>95</sup> Crisis Group telephone interviews, law enforcement officers, 21 April 2021. Crisis Group interviews, law enforcement officer, Meta, 25 May 2021.

<sup>96</sup> “Banco Agrario dejará de entregar créditos en áreas protegidas”, *El Tiempo*, 26 February 2021; “Amazonia: una selva que arde”, *El Tiempo*, 6 April 2021.

<sup>97</sup> Crisis Group interview, lawyer, north-eastern Antioquia, 7 February 2021. Crisis Group telephone interviews, law enforcement officers, 21 April 2021.

<sup>98</sup> Crisis Group interview, law enforcement officer, Meta, 25 May 2021.

<sup>99</sup> Cartagena del Chairá is also part of the PDET’s stemming from the 2016 peace agreements. Crisis Group interview, social leader, Florencia, 12 April 2021.

<sup>100</sup> *Ibid.*

### C. *Timber*

Although a mere 10 per cent of deforestation in Colombia is linked to the timber trade, illegal commerce in wood amounts to about \$750 million per year, and the environment ministry estimates that 47 per cent of the timber supply chain consists of illegally felled trees.<sup>101</sup> Before the peace accord, the FARC imposed restrictions on commercial logging, but allowed locals to cut down a small number of trees, for example, to build housing. Their demobilisation removed this as a barrier to large-scale deforestation.

Although some illegal timber is moved without paperwork, trafficking often occurs with transport permits that, while issued by local environmental authorities, are procured on black markets. For example, in Puerto Asís, Putumayo, near Colombia's southern border, documents enabling timber trafficking from Peru have surfaced.<sup>102</sup> Sources involved in the timber sector allege that regional environmental authorities receive hefty kickbacks for paperwork laundering timber into the legal supply chain.<sup>103</sup> Sometimes intimidation rather than money convinces local authorities to collaborate. Park rangers in north-western Colombia, for example, have been threatened by criminal organisations with harm should they intervene to stop illegal timber from being moved.<sup>104</sup> Authorities tend to refrain from working at night, when much timber is transported.<sup>105</sup>

Armed groups often tax the timber trade and related activities. One small wood mill in rural Caquetá processes approximately 600-700 timber units every two to three months, with FARC dissidents charging \$2.70 per unit.<sup>106</sup> The Gaitanistas tax timber in Urabá and northern Chocó, both at the spot where it is felled and again en route to market, as well as mediate the acquisition of logging permits.<sup>107</sup> Armed groups also trade in wood, connecting regional producers to exporters. "They are not here just for [extortion fees]," said one law enforcement officer.<sup>108</sup>

### D. *Illegal Gold Mining*

The FARC, along with other insurgent and criminal organisations, were directly involved in illegal gold mining. The group's ceasefire and subsequent demobilisation left room for other armed groups to expand their illegal mining operations. Rising

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<sup>101</sup> Helena Calle and Jaime Flórez, "Así funciona el tráfico de madera en Colombia", *Mongabay*, 1 October 2018. The Colombian National Police seized 41,944 cubic metres of illegal timber in 2019, 42,847 in 2020 and 73,071 up to September in 2021. Crisis Group interview, Colombian National Police officer, September 2021.

<sup>102</sup> "Condenando el bosque", Environmental Investigation Agency, June 2019.

<sup>103</sup> Crisis Group interviews, social leader, Chocó, March 2021; farmer, Caquetá, April 2021. Community leaders argue that environmental authorities are easily bribed to allow illegal timber transport to proceed.

<sup>104</sup> Crisis Group telephone interview, state officials, April 2021.

<sup>105</sup> Crisis Group interviews, state officials, Chocó, 25 March 2021; soldiers, Chocó, 26 March 2021; state official, Caquetá, 16 April 2021.

<sup>106</sup> Crisis Group interview, employee timber mill, Caquetá, 13 April 2021.

<sup>107</sup> Crisis Group interview, state official, Chocó, 25 March 2021.

<sup>108</sup> Crisis Group interviews, social leader, Chocó, March 2021; law enforcement official, Meta, 25 May 2021.

gold prices in 2019 and 2020 added to the mines' allure.<sup>109</sup> Alluvial gold mining is taking place on some 100,000 hectares of Colombian land; on 69,000 hectares, the operations are illegal.<sup>110</sup>

Although illegal gold mining is not a major cause of deforestation in Colombia, it does severely degrade the environment. Alluvial mining is the chief offender since it requires removing large quantities of land with motor pumps, dredging boats and backhoes. By contrast, underground hard-rock mining does not require operators to clear much land of vegetation, though the discharge of toxic substances such as mercury and cyanide gravely damages the ecosystem in the vicinity.<sup>111</sup> Colombia has the highest mercury emissions in all Latin America – about 60 metric tonnes per year – due to illegal and informal gold mining.<sup>112</sup>

The FARC extorted cash and gold from miners in the territories they controlled while at the same time trying to contain the environmental harm the mining caused: in Putumayo, the group forced miners, after they extracted the gold, to bury mercury-contaminated sediment 50m from the river.<sup>113</sup> Today, armed groups such as the ELN, Gaitanistas and Caparros that are involved in illegal gold mining or extorting formal and informal mining companies show less interest in curbing environmental harm. Subsistence miners who work with traditional extraction methods have often been absorbed or displaced by heavily mechanised operations backed by criminal money. In Bajo Cauca, for instance, criminal groups bought dredging boats, called *dragones*, and backhoes, which put the artisanal miners out of business.<sup>114</sup> *Dragones*, as seen on the Nechí river, dredge the most promising riverbeds for gold ore, and together with backhoes have turned parts of Bajo Cauca into a moonscape. In

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<sup>109</sup> Some observers estimate that illegal gold mining generates more revenue than cocaine in Colombia. The two sectors are in fact complementary, as gold mining and trading provide opportunities to launder cocaine profits. Frédéric Massé and Philippe Le Billon, "Gold Mining in Colombia, Post-war Crime and the Peace Agreement with the FARC", *Third World Thematics*, vol. 3 (2018), pp. 116-134; Jim Wyss and Kyra Gurney, "Dirty gold is the new cocaine in Colombia – and it's just as bloody", *Miami Herald*, 23 January 2018; "Organized Crime and Illegally Mined Gold in Latin America", The Global Initiative Against Transnational Organized Crime, April 2016. In 43 per cent of the areas where alluvial gold mining takes place, farmers grow coca. See "Colombia: Explotación de oro de aluvión", UNODC, October 2020.

<sup>110</sup> "Colombia: Explotación de oro de aluvión", op. cit.

<sup>111</sup> In areas such as Remedios, Antioquia, illegal mining consists of hard-rock tunnel mining and rarely contributes to deforestation directly. Rather, cattle and the timber trade cause deforestation. Where there is a link between mining and deforestation, it relates to the wooden beams that miners need to support their tunnels. Crisis Group interviews, state official, Remedios, 8 February 2021; mine operator, Segovia, 10 February 2021.

<sup>112</sup> "The Amazon Biome in the Face of Mercury Contamination", World Wildlife Fund, 2019. To halt the trade in mercury and its use in mining, Colombia ratified the UN Minamata convention in 2019, designed to ban the use of mercury, but prohibitions led to a rise in illegal sales as profits increased. Black-market mercury prices increased roughly fourfold after the ban. Crisis Group interviews, social leader, north-eastern Antioquia, 6 February 2021; mine operator, Segovia, 10 February 2021; NGO representative, Bajo Cauca, June 2021.

<sup>113</sup> Bram Ebus, "Crackdowns on illegal mining in the Colombian Amazon not enough", *Mongabay*, 25 October 2017.

<sup>114</sup> Many of the subsistence miners who were displaced in Bajo Cauca ended up harvesting coca crops. Crisis Group telephone interview, senior NGO representative, 10 May 2021.

2019, more than 200 units of heavy mining equipment were operating in 177 illegal mines in the region.<sup>115</sup>

### E. *Land Speculation*

Much of Colombia's land deforested since the ceasefire is in publicly owned, environmentally protected areas, such as the national parks of Tinigua, Macarena or Chiribiquete.<sup>116</sup> Environmental experts argue that local authorities and notaries have fuelled a black market in real estate by illegally providing settlers with paperwork that asserts ownership.<sup>117</sup>

The higher value of land that has been cleared of vegetation makes it a prime target for real estate speculators. The price differential is marked: one hectare of forest in Antioquia's north east costs slightly more than \$200, while one hectare of cleared grassland can fetch up to \$800.<sup>118</sup> In Caquetá, one hectare in a forest reserve sold on the black market is worth \$300 to \$400, while land outside environmentally protected areas sells for as much as \$1,400 per hectare.<sup>119</sup> Speculators sometimes use political influence to reclassify the land in environmentally protected areas and resell it to mining, hydrocarbon or agribusiness companies.<sup>120</sup>

Criminal groups often grow coca, engage in illegal cattle ranching and logging, and speculate in real estate simultaneously. In the areas of Colombia most affected by conflict, such as Bajo Cauca, in Antioquia, several illicit economic activities are normally going on at once, magnifying the environmental damage.<sup>121</sup> Of more than 848,000 hectares of privately owned land in Bajo Cauca, 360,000 have been acquired for gold mining or have applications pending to start such operations; 441,000 are used for cattle ranching; and about 5,000 hectares for illicit crops.<sup>122</sup> Most of the region's private land is therefore used for activities that, to one extent or another, contribute to both conflict and environmental harm, including deforestation.<sup>123</sup>

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<sup>115</sup> Colombian state internal document seen by Crisis Group, 2019. Deforestation and other environmental harms have also been linked to legal mining in various areas of the country. Crisis Group interviews, miners and social leaders, north-eastern Antioquia and Bajo Cauca, 2019-2021.

<sup>116</sup> Crisis Group interviews, environmental experts, farmers and state representatives, February-August 2021.

<sup>117</sup> Crisis Group interviews, social leaders, Caquetá, April 2021. Crisis Group telephone interview, environmental expert, 13 May 2021.

<sup>118</sup> Crisis Group interview, social leader, Antioquia, 6 February 2021.

<sup>119</sup> Crisis Group interview, state official, Caquetá, 16 April 2021.

<sup>120</sup> Crisis Group telephone interviews, environmental expert, 13 May 2021; land expert, 17 May 2021.

<sup>121</sup> Over 80 per cent of Bajo Cauca's residents are registered as victims of conflict and more than 42,000 people have been forcibly displaced in the last three years. Juan Camilo Gallego Castro, "La única reparación es que el Estado entre al Bajo Cauca: líder social", *El Espectador*, 14 June 2021.

<sup>122</sup> "La única reparación es que el Estado entre al Bajo Cauca: líder social", op. cit.; "Segregación y Vaciamiento", Instituto Popular de Capacitación, 30 March 2021.

<sup>123</sup> "Segregación y Vaciamiento", op. cit.

## V. Building a Peaceful Environment

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Deforestation and the exploitation of Colombia's natural resources more generally will continue to fuel violence if that bounty is not properly managed and protected, including violence directed at Colombians working for better stewardship of the environment.<sup>124</sup> Conversely, well-designed environmental policies – especially if they create economic opportunity for former combatants and other rural residents – could be a means both to encourage peace, and to strengthen the ability of Colombia's rural and conflict-affected people to withstand extreme climatic events.<sup>125</sup>

### A. Effective Law Enforcement

Effective law enforcement is a necessary component of environmental reform, and Colombia has taken some steps to bolster its capacity. Some international organisations have rebuked the Colombian state and courts for allowing environmental crimes to be committed with impunity.<sup>126</sup> In response, several ministries (including defence and environment), together with the Attorney General's Office, unveiled Operation Artemisa in 2019, which deployed over 22,000 security officers charged with environmental protection missions.<sup>127</sup>

Artemisa has so far led to 94 arrests and helped protect over 20,000 hectares of forest in national parks, according to police sources, but it has also encountered significant criticism.<sup>128</sup> In particular, critics complain, with some justification, that the campaign has targeted the lower ranks of illicit businesses and local farmers while sparing the upper echelons.

Corruption is also reported to have bedevilled Artemisa from the start. Senior law enforcement officials claim that politicians involved in activities such as cattle ranching have bribed officers or manipulated judicial investigations.<sup>129</sup> Prominent figures have evaded punishment even in cases where authorities have identified them as financiers of illegal land clearing.<sup>130</sup> Information about the government's work on specific cases has been leaked to armed groups, which then attempt to bribe or threaten the relevant officials.<sup>131</sup>

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<sup>124</sup> Social leaders defending the environment have been targeted systematically by criminal groups. Crisis Group Latin America Report N°82, *Leaders Under Fire: Defending Colombia's Front Line of Peace*, 6 October 2020. See also "A Dangerous Climate. Deforestation, climate change and violence against environmental defenders in the Colombian Amazon", World Wildlife Fund, Adelphi, Fundación Ideas para la Paz and Frankfurt Zoological Society, 2021. In 2020, 65 environmental activists were killed in Colombia, the highest number worldwide for the second year in a row. "Last Line of Defence", Global Witness, 13 September 2021.

<sup>125</sup> Elisa Castrillón Palacio, "Prepararse para lo inevitable: la nueva prioridad de Colombia frente al cambio climático", *La Silla Vacía*, 12 August 2021.

<sup>126</sup> "Environmental Performance Review", OECD, 2014.

<sup>127</sup> "Fuerzas Militares y la protección del ambiente: Roles, riesgos y oportunidades", Fundación Ideas Para la Paz, September 2020.

<sup>128</sup> Crisis Group telephone interviews, Colombia National Police officers, September 2021.

<sup>129</sup> Crisis Group interviews, law enforcement officials, social leaders and environmental experts, 2021.

<sup>130</sup> Crisis Group interviews, law enforcement officials, social leaders and environmental experts, 2021.

<sup>131</sup> Crisis Group interviews, law enforcement officials, social leaders and environmental experts, 2021.

Many small-hold farmers, meanwhile, oppose Artemisa out of frustration that they appear to attract most of its attention. During the strikes that paralysed Colombia in May and June, rural inhabitants demanded that the campaign be cancelled as a condition for lifting road blockades.<sup>132</sup> One subsistence farmer complained that big loggers bribe the departmental environmental authority, allegedly giving officials up to \$55,000 to obtain a licence to get timber from protected areas into the legal supply chain.<sup>133</sup> Small farmers say such corruption reflects the systemic disadvantages of poor rural residents: “Because we do not have the money to buy licences, they treat us as criminals and bandits”.<sup>134</sup>

Artemisa is also underfunded. “There are no planes, no cars, no fuel, nothing”, said one law enforcement officer. In May, Artemisa had more than a dozen operations planned – but lacked sufficient funds to execute them. The operation borrows resources and equipment from other state offices when they are available.<sup>135</sup>

Faced with these limitations, activists welcomed a new environmental crimes law, issued by the Colombian Congress in July 2021, which creates a comprehensive penal framework and establishes firm definitions for environmental offences such as deforestation, wildlife trafficking and pollution. Until now, most environmental crimes have been classified as illegal uses of natural resources. Even when caught, offenders were rarely convicted, while prison sentences and fines were minimal for those few who were.<sup>136</sup> The new law, on the other hand, specifies that financiers backing businesses committing environmental crimes get stiffer prison sentences and fines than labourers.

While the new law’s greater precision and equity are welcome, its enforcement will nevertheless continue to depend on cooperation between police and other government bodies as well as the provision of sufficient resources. Environmental, agricultural and law enforcement offices must improve their ability to exchange information and operate transparently if they are to prosecute the people behind the drive to deforest.

Meanwhile, the anger expressed in Colombia’s mid-2021 protests underlined that the state should avoid focusing its prosecutorial efforts on vulnerable rural people if it wishes the citizenry to see environmental law enforcement as legitimate and effective.<sup>137</sup> But the state must go farther. Legal livelihood alternatives for farmers who

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<sup>132</sup> Crisis Group Latin America Report N°90, *The Pandemic Strikes: Responding to Colombia’s Mass Protest*, 2 July 2021.

<sup>133</sup> Crisis Group interview, logger, Caquetá, April 2021.

<sup>134</sup> Ibid.

<sup>135</sup> Crisis Group interviews, law enforcement officers, April, May and August 2021.

<sup>136</sup> A law enforcement source admitted that to justify the cost of investigations and connected raids (which can run up to \$54,000 each), officers would look into the possibility of accusing suspects of additional – non-environmental – crimes. Two Black Hawk helicopters (at the cost of \$4,000 an hour) and a Huey helicopter (\$1,600 an hour) are involved in a typical Artemisa operation. Some operations take two to four days. Crisis Group interview, law enforcement officer, May 2021.

<sup>137</sup> Aside from denunciations of Operation Artemisa, thousands of farmers and rural dwellers congregating between late April and June in departmental capitals and Bogotá also protested against non-compliance with the peace agreements, for instance in coca substitution programs, and lack of investment in the countryside. Crisis Group interviews, social leaders, Meta, May 2020. These protests took place alongside prolonged mass demonstrations in urban areas focused on inequality,

have been living and working illegally in protected areas, many for generations, are essential. State bodies such as the National Parks Institute should work in tandem with these farmers to design viable ways for the residents of these communities to make a living while preserving woodlands.<sup>138</sup>

Lastly, it is vital to do more to guarantee the physical safety of investigators and other officials applying the new law. Given the profits at stake and the armed groups' penchant for retributive violence, the risks are high. Threats from armed groups have also scared environmental authorities and park rangers enough that they have restricted their own movements.<sup>139</sup> Colombia has only one park ranger for every 25,000 hectares, far fewer than the one-per-1,000-hectares standard that is regarded as best practice.<sup>140</sup> Colombia's partners should step up with resources and technical assistance to help Bogotá in obtaining the requisite staffing and training.

### B. *Following Through on the Peace Agreement*

Despite some progress, when it comes to implementation, most "green" aspects of the 2016 peace deal remain stuck. Core parts of the envisaged package of rural reforms are underfunded by at least 50 per cent.<sup>141</sup> Inefficient spending and lack of political will compound the problem.<sup>142</sup> According to the Kroc Institute, which has evaluated the agreement's progress, by November 2020 only about 4 per cent of the accord's rural reform provisions had been fulfilled, while work on 18 per cent had not yet begun.<sup>143</sup> Some are especially important. In particular, to check the agricultural frontier's expansion, the state should rectify shortcomings in regulating land tenure; return land to the displaced; produce formal deeds for owners countrywide; and assign unused productive land to victims who cannot return to their places of origin.

The Colombian state started the process of redistributing misappropriated or idle land to the landless and victims of conflict when it passed the 2011 Victims and Land Restitution Law, years before the peace deal was signed, but its efforts have since got bogged down.<sup>144</sup> Many victims were not able to return to their homes since the areas

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police abuses of power and perceived government indifference to public grievances. See Crisis Group Report, *The Pandemic Strikes: Responding to Colombia's Mass Protest*, op. cit.

<sup>138</sup> Crisis Group telephone interview, NGO representative, 29 August 2021.

<sup>139</sup> Crisis Group interview, state official, 16 April 2021. During the pandemic, National Parks Institute employees abandoned ten parks due to threats from armed groups. See Dimitri Selibas, "Double blow to Colombian Amazon and Indigenous groups from armed militants, COVID-19", *Mongabay*, 31 July 2020.

<sup>140</sup> According to the International Union for the Conservation of Nature, the ideal number of park rangers is one per 1,000 hectares. "Understaffed and under threat: Paraguay's park rangers pay the ultimate price", *Mongabay*, 5 August 2020; "Guardaparques amenazados y parques nacionales en jaque por las disidencias", *Semana*, 1 March 2020; and "Fuerzas Militares y la protección del ambiente: Roles, riesgos y oportunidades", Fundación Ideas para la Paz, September 2020.

<sup>141</sup> "Cuarto informe sobre ejecución de los recursos y cumplimiento de las metas del componente para la Paz del Plan Plurianual de Inversiones. Noviembre de 2016 a 31 de marzo de 2020 – Vigencia 2019", Office of the Comptroller for the Post-conflict, 2020.

<sup>142</sup> *Ibid.*

<sup>143</sup> "The Colombian Final Agreement in the Era of COVID-19", Kroc Institute for International Peace Studies, 2021.

<sup>144</sup> "Ley de Víctimas y Restitución de Tierras", Law 1448/2011, 10 June 2011.



were still under the control of post-paramilitary or guerrilla groups.<sup>145</sup> Landmines were also detected in around 70 per cent of the regions whose uprooted inhabitants were eligible for restitution.<sup>146</sup> Many displaced people have also faced extremely hostile conditions on their return: 43 per cent of those who returned to the Urabá Antioqueño region endured property damage or intimidation, while in Cesar 45 per cent were threatened.<sup>147</sup> Proving rightful ownership remains a challenge since the armed groups that seized rural estates have in many places already sold these properties, and the current owners may not know, or deny knowing, that the seller from whom they purchased the land obtained it by force. Implementation of the measures included in the sections of the agreement on rural reform and on reparations for victims would go a long way toward addressing these issues.

Certain core aspects of the peace accord that can help bolster or complement restitution efforts appear to be progressing, though at varying paces. President Duque claims to be making major strides in creating the new land registry, which will be essential for preventing disputes over ownership or land misuse.<sup>148</sup> The Duque government insists it will have registered 60 per cent of Colombia's land by the time it leaves office in 2022 – a huge improvement over the 2.25 per cent in the 2020 cadastre, although some experts see the target as unattainable.<sup>149</sup>

The accord's land fund for victims has also made progress finding lands that might be suitable for restitution, albeit slowly. Due to delays, including in finding out whether the fund's one million hectares are already occupied, administrators have distributed only about 233,000 hectares so far. (The peace agreement aimed to have three million available for distribution by 2028.<sup>150</sup>) Recent reports accuse the government of inflating the numbers, suggesting that the real area of redistributed land might be much smaller.<sup>151</sup>

Other aspects of the peace agreement that could help rein in deforestation rates while boosting economic prospects for rural residents have foundered or hit snags. The Environment Zoning Plan discussed above should have been operational by 2018,

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<sup>145</sup> "Radiografía de la Restitución de Tierras en Colombia", Comisión Colombiana de Juristas, 9 May 2019.

<sup>146</sup> Alejandro Reyes Posada, *Guerreros y campesinos: el despojo de la tierra en Colombia* (Bogotá, 2016), p. 288.

<sup>147</sup> "Campesinos despojados de sus tierras sí están retornando pero sin vivienda", Fundación Forjando Futuros, 28 May 2016; Reyes, *Guerreros y campesinos*, op. cit., pp. 287-288.

<sup>148</sup> President Iván Duque, "Humanity in Motion and Colombia", presentation at the Wilson Center, Washington, 20 September 2021.

<sup>149</sup> "El catastro avanza, pero ¿qué tan multipropósito es?", *El Espectador*, 8 February 2021. Some 15 per cent had been registered by March 2021. See "El Catastro Multipropósito Avanza: 17,56 millones de hectáreas ya están actualizadas", Agustín Codazzi State Geographic Institute, 4 March 2021. One land management expert, however, said the government target of 60 per cent "borders on the impossible". Crisis Group telephone interview, land expert, 21 September 2021.

<sup>150</sup> "Informe de Resultados de Paz con Legalidad", Presidential Commission for Stabilisation and Consolidation, 26 August 2021; "Ya hay 1,2 millones de hectáreas en el fondo de tierras para la paz", *El Tiempo*, 26 January 2021; "The Colombian Final Agreement in the Era of COVID-19", op. cit.; "¿En qué va el acuerdo de paz a un año del Gobierno de Duque?", Colombian Congress multiparty follow-up to the implementation of the peace process, August 2019.

<sup>151</sup> "La agencia de tierras infla las cifras de predios que ha entregado a campesinos sin tierra", *La Silla Vacía*, 29 August 2021.

within two years of the accord's conclusion, but it is still in the planning phase.<sup>152</sup> The local development plans, or PDETs, mentioned above have made more progress, with the first plans approved in 2020.<sup>153</sup> Yet the fate of these initiatives hangs in the balance. Their funding is far from guaranteed, the bureaucratic demands on local authorities are cumbersome and many rural people sense that they have had little influence over their implementation.<sup>154</sup>

Meanwhile, moves by President Duque's administration toward a more coercive counter-narcotic policy have weakened the voluntary substitution plan for coca growers, which was already suffering from high costs and slow rollout.<sup>155</sup> Even less progress has been made in creating more Campesino Reserve Zones – which, as noted, are designed to redistribute idle or inefficiently used land to small-hold farmers. These have been absent from national development plans and largely ignored by the Duque government.<sup>156</sup>

In the judicial sphere, the transitional justice court system created under the 2016 accord needs financial and institutional support to strengthen investigations into the environmental damage caused by conflict, including by assessing the harm resulting from oil spills, river pollution and illegal logging. Where appropriate, external bodies, such as the UN Environment Programme, might be in a position to help bolster investigations with independent assessments of natural resources and environmental harms.

Among other benefits, the implementation of these elements of the 2016 accord could, in helping curb deforestation, also help unlock funding from donors, especially European ones, that have thus far been unable to release the bulk of the funds committed under cooperation schemes with Bogotá for emissions reduction. By failing to take these and other measures to combat deforestation, Colombia risks the loss of several hundred million dollars that it could spend on sustainable development and environmental protection.<sup>157</sup>

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<sup>152</sup> “El llamado MinAmbiente a rendir cuentas sobre el Plan de Zonificación Ambiental”, *Las Dos Orillas*, 12 November 2019. The Environmental Zoning Plan is to manage land use in areas with certain environmental characteristics. “The Colombian Final Agreement in the Era of COVID-19”, op. cit.

<sup>153</sup> More than 11,000 proposals with community approval have been included in local development plans for the period 2020-2024. “The Colombian Final Agreement in the Era of COVID-19”, op. cit.; “El nuevo escándalo de corrupción con los dineros de la Paz”, *El País de Cali*, 7 February 2020.

<sup>154</sup> “Participación de las comunidades, el reto para implementar los PDET”, *El Espectador*, 13 July 2020.

<sup>155</sup> For a comprehensive analysis of the substitution plan and why it is faltering, see Crisis Group Report, *Deeply Rooted: Coca Eradication and Violence in Colombia*, op. cit.

<sup>156</sup> Crisis Group interviews, social leaders, Meta, May 2021. “Las zonas de reserva campesina retos y experiencias significativas en su implementación aportes para una adecuada aplicación de la ley 160 de 1994, la reforma rural integral y las directrices voluntarias para la gobernanza responsable de la tenencia”, UN Food and Agriculture Organization, 2019, p. 109.

<sup>157</sup> Taran Volckhausen, “Despite foreign aid, Colombia struggles to rein in Amazon deforestation”, *Mongabay*, 29 January 2020. Crisis Group telephone interview, environmental expert, 11 August 2021.

### C. *Strengthening Natural Resource Governance*

Strengthening management of natural resources is vital to protecting them from legal and illegal businesses and the designs of armed groups.

Local authorities in particular need support if they are to handle ecosystems with proper care. One challenge that requires attention is corruption, which has plagued local environmental authorities, called Regional Autonomous Corporations, weakening their ability to curb deforestation.<sup>158</sup> In 2018 alone, the Inspector General's Office applied 398 sanctions on corporation staff.<sup>159</sup> In many places, local politicians are reported to wield excessive influence over these bodies, leading to calls for reforms that would increase operational transparency and better vetted executives. Around twenty attempts to reform these institutions have floundered due to political resistance.<sup>160</sup> The next administration should make a priority of working with Congress to pass a bill that addresses the corporation's weaknesses.

A second challenge is to get local communities more involved in natural resource management, and specifically in helping farmers work with business and the state to reduce greenhouse emissions caused by deforestation and forest degradation, while also earning a living.<sup>161</sup> One means of organising this effort could be through the Territorial Councils for Peace, Reconciliation and Coexistence, which were created in 1998 but languished with little support until they were revitalised as part of the 2016 peace accord. The Councils could in principle help farmers develop markets for sustainable local products by liaising with external parties, such as foreign governments interested in conservation, civil society organisations and relevant UN agencies. Should they have these markets, farmers might feel less of the economic pressure that drives them to participate in deforestation.

As they address resource governance, Colombian officials could benefit from additional technical assistance from the European Union and the UN Food and Agriculture Organization, which have provided some technical support for community forestry programs in some regions but could do more. By cooperating with these and other international partners, the Colombian state could establish programs in places where they do not currently exist throughout the country.<sup>162</sup> The international community could, for example, spearhead forestry initiatives that are essential in cases where farmers are living in national parks, as well as to meet the needs of Indigenous and tribal groups who are, according to a UN study, the best forest stewards in Latin America but who struggle to meet their basic economic needs through farming.<sup>163</sup>

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<sup>158</sup> Crisis Group interviews, environmental experts and state officials, February-September 2021. An official of the association representing the Corporations reported that various mechanisms are in place to curb corruption and wrongdoing. Crisis Group online interview, 29 September 2021.

<sup>159</sup> "Procuraduría adelanta 398 acciones que involucran a las Corporaciones Autónomas Regionales", press release, Inspector General's Office, 23 July 2018.

<sup>160</sup> Crisis Group telephone interview, environmental expert, 9 September 2021. Natalia Arbeláez Jaramillo and Steffy Lorens Riquett Bolaño, "En pleno cambio climático las Corporaciones Autónomas Regionales no son autoridad ambiental", *La Silla Vacía*, 30 August 2021.

<sup>161</sup> "El rol de los Consejos Territoriales de Paz en la construcción de paz", *El Espectador*, 1 May 2021.

<sup>162</sup> "Community Forest Management and Its Contribution to ODS in Colombia", UN Department of Economic and Social Affairs, 2018.

<sup>163</sup> "Forest Governance by Indigenous and Tribal Peoples", UN Food and Agriculture Organization, 2021.

There are also programs that link environmental stewardship and good resource governance to funding opportunities. One such prospect is a program called Payment for Environmental Services, which has been successful in countries such as Costa Rica and has been sporadically used in Colombia already.<sup>164</sup> Landowners or land managers are paid by international partners via these schemes for providing what are termed “ecosystems services” that benefit outside stakeholders, ranging from a specific outcome (such as conserving a minimum threshold of forest cover) to engaging generally in conservation. Corruption and mishandling, including claims of wrongful payments, have tarnished this program in a number of cases, making it crucial that Colombia proceed carefully and with strong controls if it pursues any initiatives along these lines.<sup>165</sup>

Improving the traceability of products that have been grown or are extracted from deforested areas, such as minerals, meat or cattle, and timber, would be another measure that could help strengthen Colombia’s resource governance. Improving traceability would help national and foreign corporations conduct due diligence and report on the impact of land clearance in their supply chains. Bodies such as the Organization for Economic Co-operation and Development (OECD) and national-level legislation could produce stricter guidelines to galvanise these efforts. So, too, can actions by foreign governments. For example, U.S. President Joe Biden’s proposed Amazon Protection Plan contemplates import bans on products originating in illegally deforested lands.<sup>166</sup> The plan also proposes debt relief for countries in exchange for action on climate and forest protection.<sup>167</sup>

These strategies are promising, but they rely on the sort of tracking capacity that is not available in Colombia at present. Civil society groups, private firms and international bodies such as the UN and OECD with experience in monitoring supply chains could all help introduce robust tracing mechanisms.

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<sup>164</sup> Examples of how Payment for Environmental Services initiatives have worked in Costa Rica can be found at the website of the Costa Rican national forestry service, FONAFIFO.

<sup>165</sup> Crisis Group telephone interviews, environmental expert, NGO representative, September 2021. In the Colombian Amazon, for example, payments that should have reached Indigenous communities ended up with business entrepreneurs while the calculation of carbon bonuses was unsound. See Andrés Bermúdez Liévano, “El mayor proyecto de bonos de carbono de Colombia podría estar vendiendo aire caliente”, *Mongabay*, 30 June 2021; “En Colombia empresas estarían comprando “bonos de carbono” que exageran resultados”, *El Espectador*, 30 June 2021.

<sup>166</sup> “The Amazon Protection Plan”, Climate Principals, 2021.

<sup>167</sup> Belize is at an advanced stage of negotiations aimed at restructuring its debts with the help of guarantees to conserve its coral reefs. See “Belize leans on coral reefs to drive bargain with bondholders”, *Financial Times*, 17 September 2021.

## **VI. Conclusion**

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Much has changed in Colombia since the FARC insurgents laid down their weapons. Rising deforestation and other environmental destruction are unintended consequences of the peace accord that are causing undeniable harm. Deforestation makes rural people more vulnerable to natural disasters such as flooding and extreme drought – which climate change is making more frequent and severe – in addition to accelerating land degradation and depleting biodiverse systems. Deforestation also enables economic activities that make money for organised crime and guerrilla groups. Yet these activities are in some cases the only way for poor farmers to earn an income in areas where the peace agreement has spawned a new generation of competing armed outfits.

The Colombian government should pursue two main routes to dealing with the interwoven threats of conflict and deforestation. First, it needs to confront and hold to account more effectively the criminal and other armed groups that have been razing the forest for financial gain. Secondly, it needs to take better care of displaced families and other conflict victims who find themselves tasked with the dirty work of pushing the country's agricultural frontier outward just to survive. A new environmental crime law offers Colombia an opportunity to rethink its flagging anti-deforestation campaign and develop a new strategy that targets offenders at the pinnacle of licit and illicit enterprises rather than lowly loggers. Meanwhile, renewed efforts to honour environmental parts of the 2016 peace accord should play a crucial role.

Building a state that has authority across the entire national territory will not be easy or quick. But creating a comprehensive land registry and providing land to small-hold farmers would help deter deforestation by landless farmers and internally displaced families who are forced to settle in the jungles and forests of Colombia in order to survive. If these victims of violence can return to their homes, or are given other suitable arable lands, Colombia will move in the direction of robust legal defence for the environment and improved security at the grassroots.

Safeguarding the forests will benefit the Colombian people above all. But the country's environmental agenda can serve as an example beyond its borders. Colombia's contribution to global deforestation may be slight, but carbon emissions caused by deforestation on a global scale contribute substantially to climate change.

Colombian state officials, meanwhile, have compelling reasons to stick to their pledges. Even though it sits at a distance from the front line of cleared land, the government can only be apprehensive at how deforestation is fuelling the growth of Colombia's armed groups, their diversification into lucrative new enterprises and their shifting alliances with legal business and political elites. Preserving woodlands could also bring tangible benefits. If it can show the means and willingness to protect the trees, Colombia could position itself to attract funding from the new global streams intended to strengthen conservation. Beyond being an environmental good in and of itself, protecting Colombia's forests would help bring in new donor funding, mitigate the sources of rural conflict and bolster the cause of peace. It is an agenda that Bogotá should pursue wholeheartedly.

**Bogotá/New York/Brussels, 4 November 2021**

Appendix A: Map of Colombia



## Appendix B: Methodological Note

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**Computing Yearly Deforestation Rates.** Crisis Group has computed the yearly deforestation trends by municipality based on two datasets. The first one is kept by the Global Forest Change (GFC) project, which measures forest change worldwide between 2000 and 2019 using high-resolution satellite images.<sup>168</sup> The second is Colombia's Institute of Hydrology, Meteorology and Environmental Studies (IDEAM).

GFC first identifies tree coverage, which is defined as all vegetation higher than 5m (16.4 feet) in altitude, irrespective of canopy density. Some commercial crops, with similar altitude and canopy density, are likely to confound GFC's estimates of forest cover.<sup>169</sup> Following a methodology recently applied for Colombia, this report therefore used IDEAM's data to reduce the potential bias that this GFC feature entails when computing forest cover.<sup>170</sup> In particular, IDEAM uses the same satellite input as GFC but includes a field validation protocol carried out by experts. This step allows IDEAM to exclude from the forest cover estimates areas that grow commercial crops. The advantage of GFC, however, is that it computes forest cover and forest loss measures for every year since 2000. Instead, IDEAM has only scattered cross-sections until 2010 (1990, 2000, 2005 and 2010) and only recently has it assembled annual estimates.

This report thus took the forest cover area computed by IDEAM (and hence net of commercial crops) in the first year of data availability (2000), calling it the "base" year. GFC data were then used to compute a measure of forest loss (that is, if tree coverage disappears in a particular pixel image from one year of measurement to the other) for every year of the sample period (2010 to 2019).

From such input Crisis Group computed two different but complementary measures of deforestation. The first one is the annual rate of forest loss relative to the "original" forest cover (that computed by IDEAM for the baseline year). This is then a *relative* deforestation estimate. Specifically, for each year of the sample period, Crisis Group coded each 30m×30m pixel of the country with a dummy variable that takes value 1 if the pixel lost its forest cover relative to the previous year and 0 if it kept it.<sup>171</sup> Secondly, Crisis Group multiplied this dummy figure by the base year amount of forest cover in that same pixel as computed for the base year by IDEAM. Therefore, if the pixel was completely covered by forest in 2000 the dummy remains at value 1; if only half of it was covered by forest it becomes 0.5 and so on. Thirdly, this fraction was added across all the pixels of a given municipality and the result divided by the area covered by forest in the base year to obtain an estimate of the share of the base forest cover of that municipality that got deforested each year.

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<sup>168</sup> M.C. Hansen et al., "High-resolution global maps of 21st-century forest cover change", *Science*, 15 November 2013.

<sup>169</sup> This point was originally made in R. Tropek et al., "Comment on 'high-resolution global maps of 21st-century forest cover change'", *Science*, 30 May 2014. Moreover, for the case of Colombia, it has been shown that GFC includes oil palm trees in its measure of forest cover. See L. Fergusson, S. Saavedra and J.F. Vargas, "The perils of misusing remote sensing data: The case of forest cover", *Documento CEDE*, 13 May 2020.

<sup>170</sup> *Ibid.*

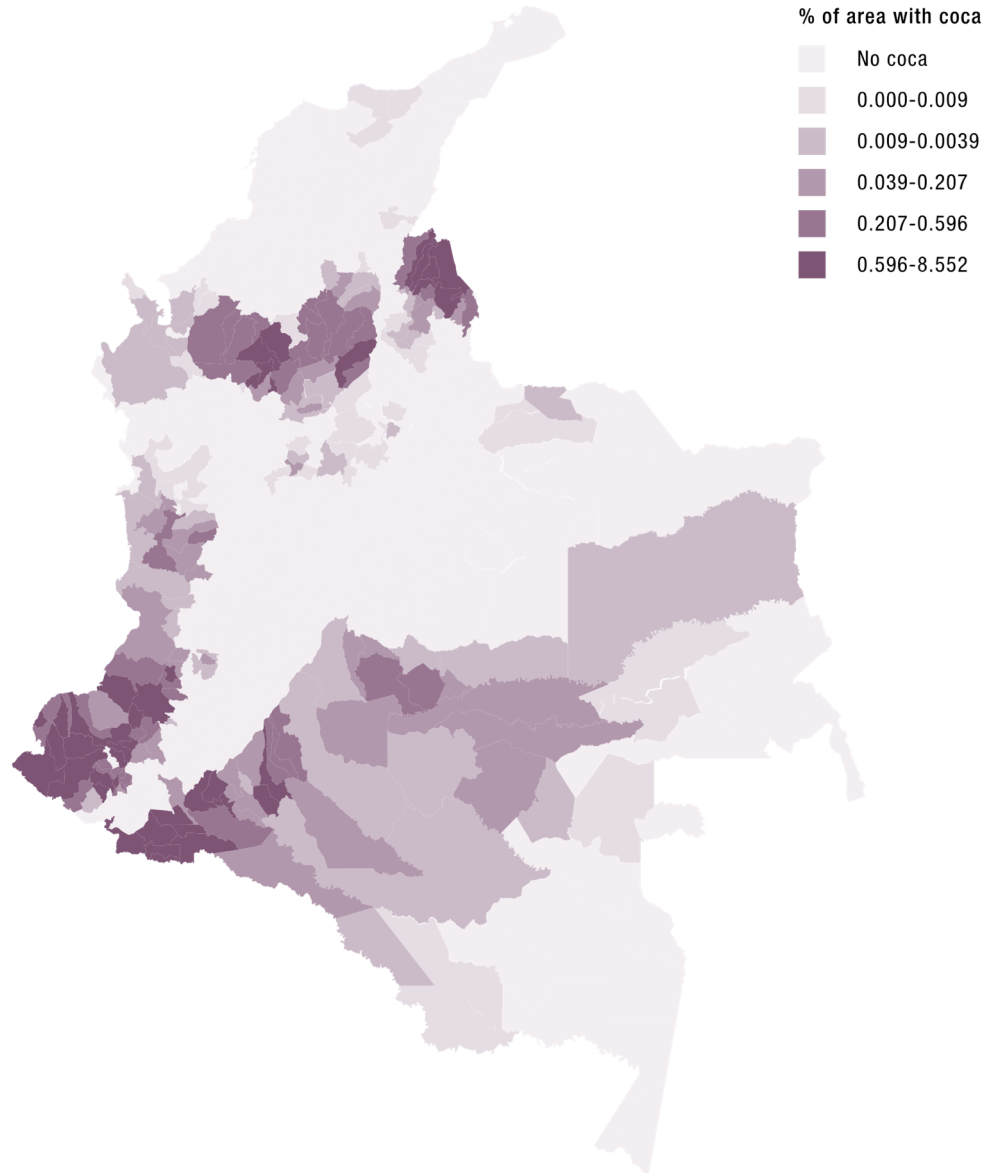
<sup>171</sup> 30m×30m is the resolution of the satellite images used by GFC.

There are clear advantages to this relative measure. A relatively urban municipality, with little forest cover in the base year, may take a high value of relative deforestation if most of the remaining forest is lost during a given year. Moreover, since Colombia's over 1,000 municipalities have very different areas, a relative measure makes the forest loss independent of the municipal size.

But there are also disadvantages. Specifically, a large municipality in the Amazon that loses thousands of hectares of forest during a given year may end up with small relative deforestation values if forest cover in the base year is very large. Thus the relative measure could understate the seriousness of large deforestation patches. For this reason, the second measure employed in this report is an *absolute* measure of deforestation. It is simply the number of square kilometres of forest (as measured in the base year) that were lost during each year of the sample period.

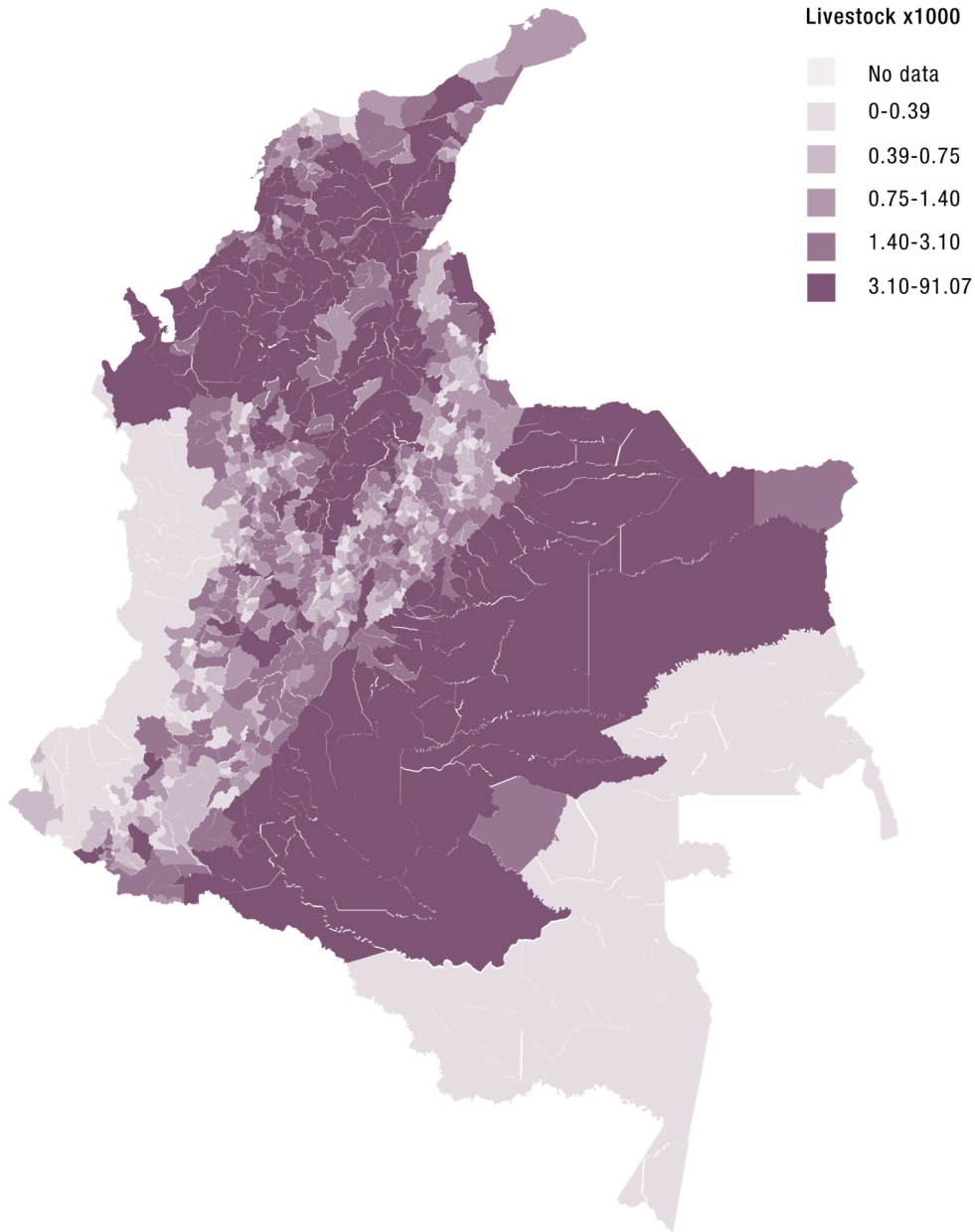


**Appendix C: Map of Coca Crop Cultivation**



Source: SIMCI Project (Sistema Integrado de Monitoreo de Cultivos Ilícitos) of UNODC's Colombia Office.

**Appendix D: Map of Livestock Grazing Areas**



Source: Division of Rural Agricultural Planning (UPRA from the Spanish acronym) of Colombia's Ministry of Agriculture.

## Appendix E: About the International Crisis Group

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The International Crisis Group (Crisis Group) is an independent, non-profit, non-governmental organisation, with some 120 staff members on five continents, working through field-based analysis and high-level advocacy to prevent and resolve deadly conflict.

Crisis Group's approach is grounded in field research. Teams of political analysts are located within or close by countries or regions at risk of outbreak, escalation or recurrence of violent conflict. Based on information and assessments from the field, it produces analytical reports containing practical recommendations targeted at key international, regional and national decision-takers. Crisis Group also publishes *CrisisWatch*, a monthly early-warning bulletin, providing a succinct regular update on the state of play in up to 80 situations of conflict or potential conflict around the world.

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After President & CEO Robert Malley stood down in January 2021 to become the U.S. Iran envoy, two long-serving Crisis Group staff members assumed interim leadership until the recruitment of his replacement. Richard Atwood, Crisis Group's Chief of Policy, is serving as interim President and Comfort Ero, Africa Program Director, as interim Vice President.

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**November 2021**

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