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Article

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POLICY COMMENTARY

Illicit Crop Cultivation in Colombia's National Natural Parks: Dynamics, Drivers, and Policy Responses

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The purpose of this paper is to understand the dynamics behind the expansion and consolidation of coca crops in the National Natural Parks of the Colombian National System of Protected Areas –SINAP-, based on fieldwork carried out in the national parks Catatumbo Barí (Norte de Santander), Alto Fragua Indi Wasi (Caquetá), and Farallones de Cali (Valle del Cauca), which have approximately 1,500 hectares of coca crops. This fieldwork has allowed us to identify the drivers behind the growth of coca in areas destined for environmental protection, as well as the different policies and programs that the Colombian Government has designed to respond to the presence of coca crops in these territories. Based on these inputs, we opened the discussion on the need to rethink the governance model for Colombia's protected areas. To this end, we propose the formulation of a Special and Transitional Management Regime for Peasants (REMC) in protected areas, which will allow for a balance between the conservation objectives of these territories and respect for the rights of the peasants who have historically settled there.

Keywords: Illicit crops; protected areas; national parks; Colombia; drug policy; eradication

Introduction

Colombia is the world's leading producer of coca leaf. The most recent report by the United Nations Integrated Illicit Crop Monitoring System (SIMCI) showed that by 2019, the country had a total of 154,000 hectares of coca crops (UNODC 2020). A significant part of these crops—approximately 61%—are located outside the agricultural frontier, i.e., in areas where agricultural activities are prohibited or conditioned by law, including protected areas covered by the National Natural Parks System (SPNN).¹ Indeed, according to the United Nations, by 2019, there were 6,785 hectares of coca plantations in 14 National Natural Parks (PNN), representing about 4.4% of all coca plantations in Colombia (see **Figure 1**).

Although the area planted with coca is relatively small, illicit crops in National Natural Parks have major environmental effects, such as water and soil contamination due to the use of agrochemicals and deforestation. Illicit crops also exacerbate violence, as activities related to the planting, processing, and trafficking of drugs are often accompanied by threats, extortion, displacement, and confinement of the inhabitants of protected areas and of the officials in charge of administering these territories.

Although these events threaten the ecological and cultural values of a significant number of PNNs and the ecosystem services they provide,² there has been no concrete, coherent, and effective response from the Colombian State. The connection between protected areas and illicit crops in Colombia has not been extensively analysed. The specialised literature has only rarely discussed the drivers that lead to the establishment of illicit crops in these areas (Bonilla-Mejía & Higuera-Mendieta 2019) and has failed to examine the public policies created and implemented to tackle this phenomenon.

¹ Legal figure that groups 59 protected areas managed by the Colombian National Natural Park Authority (PNNC).

² PNNs supply water directly to 31% of the Colombian population and indirectly to 50%. They also preserve biological diversity, which is of great importance in the fourth most biodiverse country in the world.

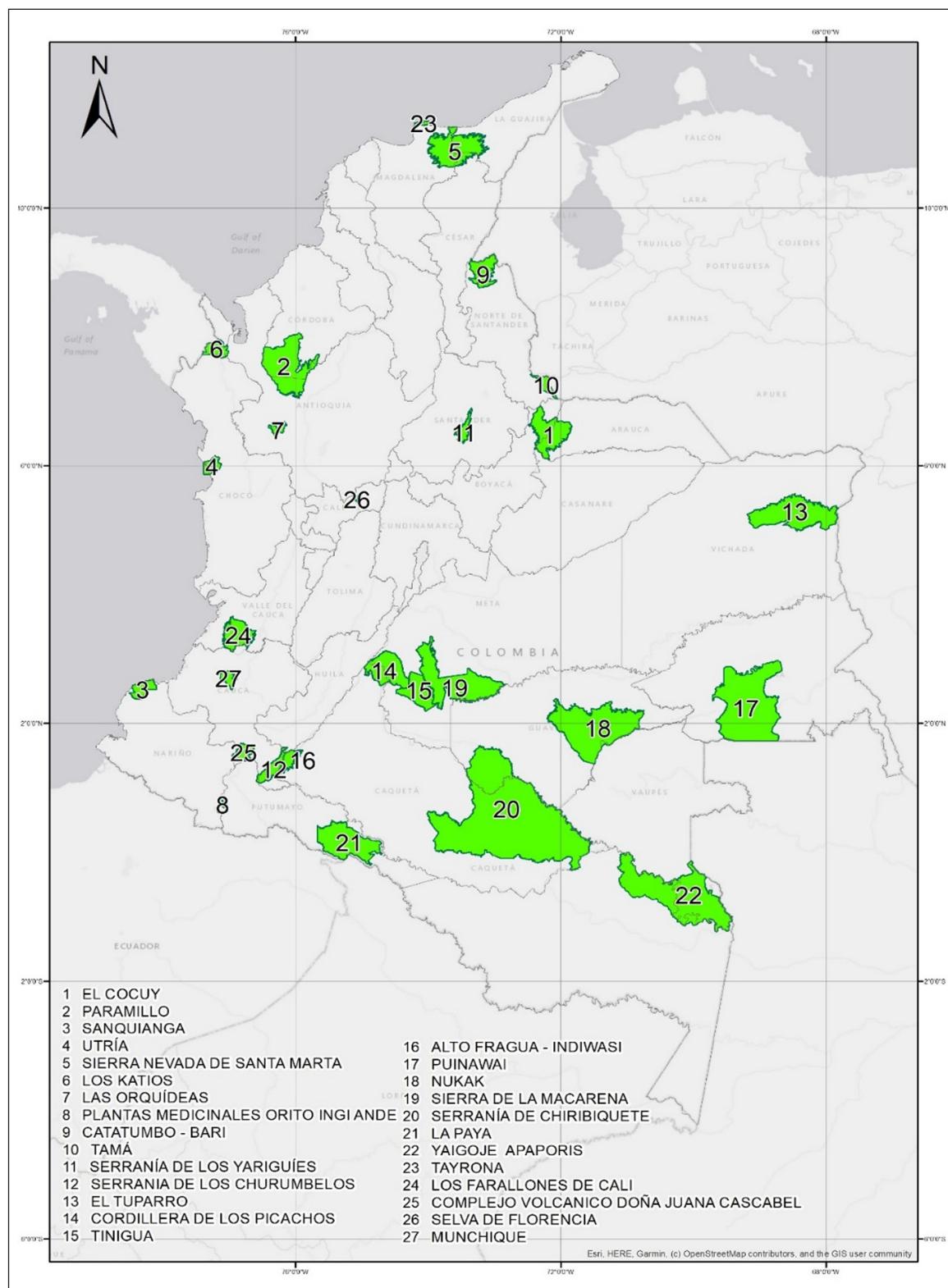


Figure 1: Map of the SPNN protected areas affected by illicit crops at some point in time between 2001–2019.
Source: Authors.

The following policy brief is intended to contribute to closing this gap by exploring the drivers of the expansion of coca plantations in the SPNN and the main policies and measures aimed at providing a response to the challenges posed by illicit crops in these areas.

The main drivers are related to the strategic location of protected areas, their colonisation dynamics, the role of illegal armed groups and criminal organisations, the decline of regional economies, coca eradication policies, and the legal land regime. The authorities' response to the problem has fluctuated between drug policy and environmental policy, with no synergy between the two. The different policies have oscillated

between two extremes: A conservative and restrictive approach, and other more conciliatory approaches, geared towards consensus and gradualism; but neither have managed to solve the problem.

With the signing of the peace agreement between the National Government and the FARC (*Fuerzas Armadas Revolucionarias de Colombia*) guerrilla in 2016, a new window of opportunity opened up, insofar as it was agreed to implement the Comprehensive National Programme for the Substitution of Illicit Crops (PNIS)³ in protected SPNN areas. This led environmental authorities to work hand in hand with those in charge of economic and social reactivation and institutional strengthening in rural areas affected by the conflict,⁴ resulting in the adoption of an alternative model of voluntary substitution.

However, despite these important advances, the new illicit crop substitution model for protected areas is still quite restrictive and, as such, hampers the implementation of medium- and long-term licit income-generating alternatives that can help to avoid the replanting of coca. As the Peace Accord is implemented, the Colombian government has not renounced heavy-handed policies, as evidenced by a growing trend towards green militarisation and military operations being deployed within the PNN (Garzón, Riveros & Tobo 2020), highlighting the continuing tension between different approaches. Thus, the search for near-future alternatives must continue.

Evolution and trends of illicit crop cultivation in the Colombian National Natural Parks System

The presence of illicit crops in SPNN areas is not a recent phenomenon. The parks where illicit crops were first recorded were the Sierra Nevada de Santa Marta and Tayrona National Natural Parks, located on the Colombian Caribbean coast where the “marimba” bonanza occurred. In the former, marijuana cultivation has been recorded since 1955, but it was not until 1978 that any idea of its magnitude became apparent. That year, there were 19,000 hectares under cultivation in the park, from which 9,500 tonnes of the drug were produced (El Tiempo 2010).

Colombia began to gather the first public and systematic data on coca cultivation in protected areas in 2001, after the United Nations Integrated Illicit Crop Monitoring System (SIMCI) included the first figures on this phenomenon in its annual report. Since then, SIMCI has been monitoring coca cultivation in these areas on an annual basis.

Measurements show that between 2001 and 2019, the presence of illicit crops in the SPNN has followed the same two trends as coca cultivation in the rest of the country. A sharp drop between 2005 and 2006, when cultivation fell by 42%, and then stabilised at a historic low until 2013. Coca cultivation in these territories then took an upward trend, reaching a record high of 8,301 ha of coca in 2017 (see **Figure 2**).

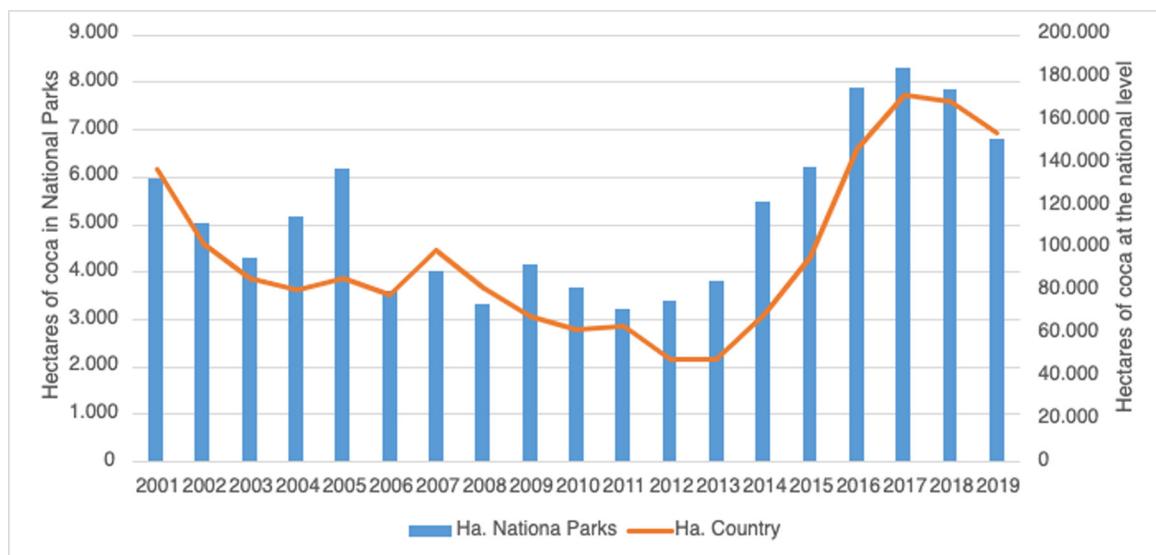


Figure 2: Hectares of coca crops in protected areas of the National Natural Park System 2001–2019.
Source: Authors based on SIMCI.

³ Alternative development programme created as part of the peace agreement between the national government and the FARC guerrilla group.

⁴ In Colombia, the entity leading this process is the Agencia para la Renovación del Territorio, which has been responsible for the development and implementation of the substitution of illicit crops since 2019.

Finally, for the last two years, figures have shown a slight decrease both nationally and in protected areas. However, as highlighted by the fact that in 2019 coca in La Macarena, Catatumbo-Barí, and Nukak National Natural Parks amounted to about 3,600 ha, the problem remains.

Coca crops in SPNN areas equal 4 to 8 per cent of all coca crops in the country existing between 2001 and 2019. The crops have been concentrated in 7 protected areas: Sierra de la Macarena (Meta), Nukak (Guaviare), Paramillo (Córdoba), La Paya (Putumayo), Catatumbo Barí (Norte de Santander), Tinigua (Meta), Munchique (Cauca), and Farallones de Cali (Valle del Cauca); these have accounted for 93% of all coca crops recorded in the SPNN between 2001 and 2019.

When reviewing the different trajectories of coca in protected areas using SIMCI data three categories were established based on the degree of affectation: Permanent, intermittent, and slightly affected.

National Natural Parks permanently affected by coca cultivation

This category groups seven protected areas where coca cultivation has been recorded consistently between 2001–2018, which also coincides with the group of protected areas with the highest historical concentration of coca cultivation. (Figure 3) The crop trend in these areas presents a similar behaviour to the national shown above: A peak in 2005, followed by a fall, then by a period of stabilisation until 2013, when coca cultivation starts its increase to historic highs (Figure 4).

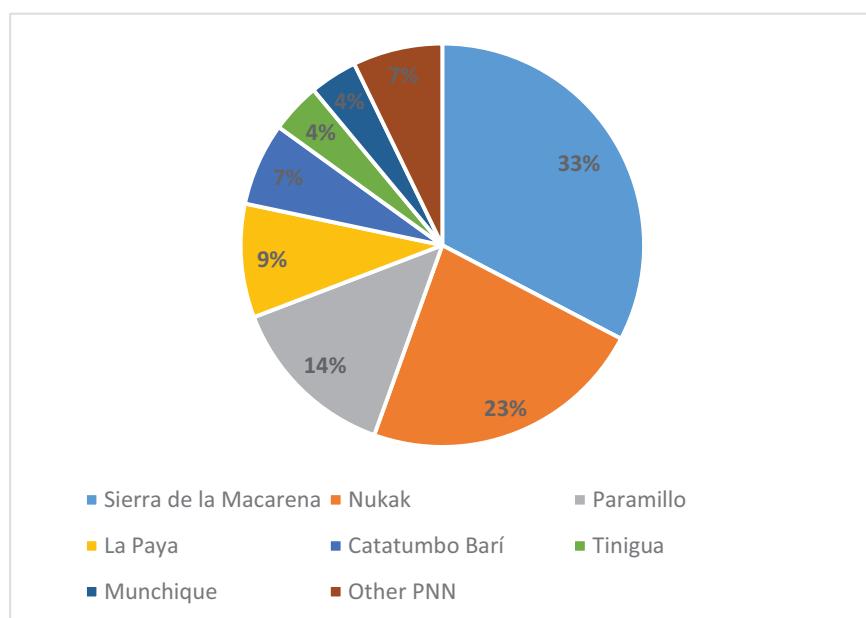


Figure 3: Distribution of coca crops by National Natural Park, 2001–2019.

Source: Authors based on SIMCI.

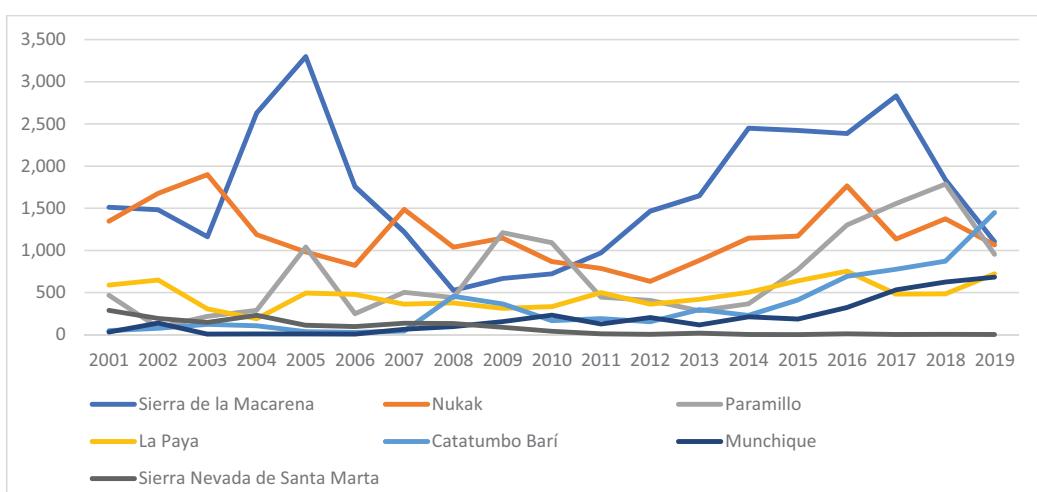


Figure 4: Evolution of coca crops in National Natural Parks permanently affected by coca cultivation, 2001–2019

Source: Authors based on SIMCI.

With the exception of the Sierra Nevada de Santa Marta, all other permanently affected parks are located in the production enclaves where coca has been concentrated in the last ten years: Catatumbo; Pacific (Nariño and Cauca); Meta-Guaviare; Sur de Córdoba; and Putumayo (UNODC 2020).

National Natural Parks intermittently affected by coca cultivation

The six National Natural Parks with intermittent presence are marked by periods of time with – and without – coca between 2001 and 2019 (Figure 5). A detailed review shows that the period when most of the parks had no coca crops was between 2001 and 2010, a period that coincides precisely with the approval of eradication by aerial spraying in the protected areas and, more generally, with the most intense stage of the eradication policy in Colombia.

National Natural Parks slightly affected by coca cultivation

The twelve National Natural Parks only slightly affected correspond to those protected areas that have had periods of time with a low presence of illicit crops (Figure 6). This category groups most of the protected areas that have ever had coca between 2001 and 2019. These are the least worrying cases of the whole universe of National Natural Parks, as low levels of coca cultivation have remained stable in recent years.

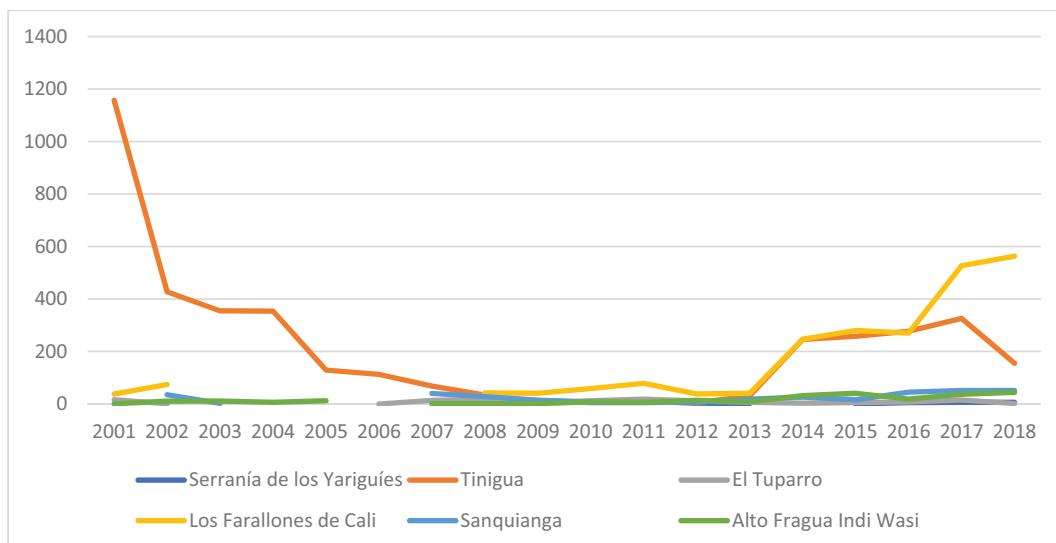


Figure 5: Evolution of coca crops in National Natural Parks intermittently affected by coca cultivation, 2001–2019.
Source: Authors based on SIMCI.

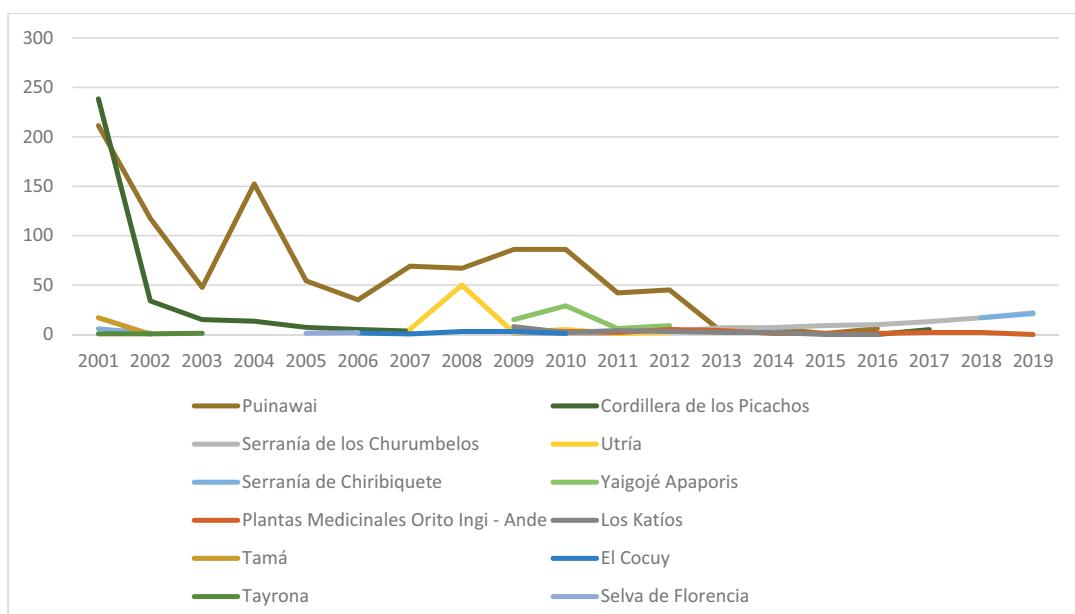


Figure 6: Evolution of coca crops in the National Natural Parks slightly affected by coca cultivation, 2001–2019.
Source: Authors based on SIMCI.

The cases of Cordillera de los Picachos and Puinawai stand out, with more than 200 ha of coca crops, which ended up disappearing completely. Serranía de los Churumbelos and Serranía de Chiribiquete are also noteworthy, where coca cultivation has appeared in the last three years, although still only slightly.

Methodology

The contents of this article are based on the work conducted by the authors in the framework of the Illicit Crop Substitution, Rural Development, and Environmental Protection in the SPNN project implemented by the Fundación Ideas para la Paz with backing from the GIZ Global Programme on Drug Policy and Development, between 2019 and 2020.

The authors used semi-structured interviews, workshops, and review of primary and secondary sources and databases to collect the information analysed in this article. The interviews were held in Bogotá and in the Farallones de Cali (Valle del Cauca), Catatumbo Barí (Norte de Santander), and Alto Fragua Indi Wasi (Caquetá) PNNs. These parks were selected because they were safe for field work, because of the presence of illicit crops, the presence of coca leaf growers and non-coca leaf growers, and because they were prioritised for the illicit crop substitution programmes.

A central criterion in the identification of the actors consulted was their plurality of opinions, experiences, visions, and interest in terms of the coca cultivation in PNNs phenomenon. Over the course of 10 months, 40 people were interviewed, including PNN officials (local and national), employees in governors' and mayors' offices, and the entities in charge of land and rural development and illicit crop substitution. Interviews were also conducted with members of grassroots farmers' and coca growers' organisations, researchers, journalists, employees of various UN offices, and representatives of the business sector.

The diversity of the interviewees allowed for different versions and conceptual readings of the regions and their problems. The semi-structured interviews explored the history of the protected area in question, the arrival of coca, the economic alternatives to this activity, the impact of the peace agreement on the territory, the dynamics of the armed conflict, and the State's responses to these problems.

Besides the interviews, four workshops were held—three regional and one national—between August and December 2019, which were intended to capture a plurality of opinions on: 1) Current alternatives for illicit crop substitution; 2) characteristics of coca-growing populations in National Natural Parks; 3) background and current experiences of voluntary eradication and crop substitution in National Natural Parks; and 4) local, regional, and national views on illicit crop substitution, rural development, and environmental protection in Colombia. These spaces were attended by members of local organisations representing those inhabiting the parks, including farmers and non-coca leaf growers, indigenous people, and as members of the PNN team and the DSCI.

All participants in the workshops and interviews were informed that they were subjects of this study and all gave their consent. Their names and those of their organisations were withheld for security reasons and to avoid conflicts with the entities in which they work by expressing their own opinions.

This information was complemented and corroborated by reviewing primary and secondary sources on the nexus between illicit crops and protected areas. This included the review of PNN Management Plans,⁵ reports issued by the Colombian Drug Observatory, technical guidelines on the design and implementation of different alternative development policies in protected areas, and academic papers on the phenomenon. The authors also identified upward and downward coca growing trends in these territories by analysing the database of the UN Office on Drugs and Crime (UNODC), Integrated Illicit Crop Monitoring System (SIMCI), and the database on eradication operations implemented by the Colombian Ministry of Defence in the PNN, containing the annual figures of hectares of illicit crops eradicated by protected area.

Drivers of illicit crop cultivation in National Natural Parks

The following section presents the drivers associated with the expansion of illicit crops in SPNN areas, identified by the authors through semi-structured interviews, workshops involving communities, and a review of secondary sources.

Strategic location of protected areas for drug trafficking

Coca cultivation in protected areas has been determined by their particular strategic location, generally characterised by difficult geographical conditions, a vast territorial extension, and little State presence, which generates a low perception of risk that in turn influences people's decision to cultivate coca.

⁵ According to Colombian legislation, SPNN areas must be subject to special management actions designed to achieve their conservation objectives. The Management Plan contains information that regulates the area's management; it defines the zoning; establishes the rules for the use of resources and the development of activities; and contemplates the strategies, procedures, and activities that are considered most appropriate to meet the conservation goals.

This is the case for Sierra Nevada de Santa Marta, where the presence of marijuana crops in the 1970s was determined by the Sierra's geographical isolation at the time (Perafán 1999). This geographical isolation along with the lack of State presence also explains coca cultivation in some of the National Natural Parks of the Amazon region, such as Cahuinarí, Amacayacu, and Chiribiquete, where drug traffickers have encouraged coca growing and established airstrips and laboratories to process coca paste (PNNC 2011).

On the other hand, in parks such as Catatumbo Barí, El Tuparro, Munchique, Paramillo, and Sanquianga, coca growing has been stimulated by their geographically strategic location for cocaine processing or trafficking. Paramilitary groups settled and promoted coca cultivation in National Natural Parks such as Sierra Nevada de Santa Marta, Los Katíos, Paramillo and Catatumbo Barí, as they were ports and routes for legal and illegal exports (CNMH 2018a).

The Farallones PNN in Cali is another reflection of the above (PNNC 2013a). In this protected area, illicit crops have been strategically located in the southern zone in the Naya region—one of the most important corridors for cocaine production and trafficking to the Pacific (Ministry of Justice 2015)—and in the northern zone, which is within easy access to the port of Buenaventura.

Another similar case is El Tuparro National Natural Park, which is strategically located on the border with Venezuela. This proximity to the border has meant that, according to the Colombian National Natural Park Authority (PNNC), the park's territory has been used strategically by members of the FARC's 16th Front to control the outflow of cocaine to Venezuela and the entry of gasoline, chemical inputs, and contraband goods into Colombia (PNNC 2007).

Colonisation dynamics in protected areas

The colonisation of protected areas has served as a driver for the growth of illicit crop cultivation in these spaces. As mentioned by Thoumi (2005), in Colombia, coca and poppy are grown in recently colonised areas with very scarce State presence, making many PNNs perfect places for this to occur.

Munchique PNN was colonised in the 1970s by indigenous people and peasant farmers, who introduced marijuana and the first coca crops at the end of the 1980s (PNNC 2005). In Paramillo PNN, illicit crops were linked to the peasant colonisation of the 1970s and 1980s that took place in the south of Córdoba as a result of land accumulation by businessmen and cattle ranchers. Coca cultivation began sometime later (PNNC 2013b) (Observatorio del Programa Presidencial de DDHH y DIH 2013).

Some of the protected areas in the Amazon region have also been affected by this phenomenon. Peasant farmers from other parts of the country have boosted illicit crop cultivation and generated money flows that have contributed "to configure an unprecedented process of occupation and urbanisation" (PNNC 2019). This has been the case for parks such as: La Paya, Cahuinarí, and Amacayacu, where settlers have cultivated and processed coca leaf used for drug trafficking (PNNC 2011).

Entry of illegal armed groups and criminal organisations

Besides peasant settlers and indigenous communities, a third group has played an important role in driving coca cultivation in National Natural Parks: Armed groups and criminal organisations, who have driven the populations inhabiting the National Natural Parks to plant coca.

This happened in the 1970s in the municipality of Puerto Leguízamo, Putumayo, where the Cali and Medellín cartels promoted the planting of coca as a measure to avoid the application of the provisions on narcotics that had been ordered by the Colombian State (CNMH 2015). As Carillo (2017) points out, years later these areas where drug traffickers encouraged illicit crop cultivation ended up forming part of the La Paya National Natural Park.

The FARC intervened in the coca production chain in the Catatumbo-Barí National Natural Park and its area of influence, where they established an important enclave in the late 1980s (CNMH 2018b). The role of the guerrilla in this region was not limited to taxing the grammage and purchase of coca paste, but also to encourage the cultivation of coca crops. The FARC's recent departure has meant that coca crops are no longer controlled or regulated, but they are still fomented by new criminal organisations. This explains the recent increase of coca cultivation in this park, which has extended from 692 ha in 2016 to 1448 ha in 2019.

In the Paramillo PNN, cultivation has been stimulated by various armed actors. In the 1990s, the crops were introduced by the Medellín cartel (FIP 2011) followed, over the next decades, by other groups such as the AUC, the Aguilas Negras, Los Urabeños, and the FARC. Illicit crops increased significantly within this park between 2014 and 2018 (from 367 ha to 1786 ha) due to the influence of new actors such as the Autodefensas Gaitanistas de Colombia (AGC) and the dissidents of the 18th Front, who, after the signing of the peace agreement with the FARC, have sought to take control of drug trafficking activities in this territory (González 2020) (Verdad Abierta 2017).

A recent emblematic case is that of the Serranía del Chiribiquete PNN, a protected area that was free of coca crops between 2003 and 2015 and in which recent years have witnessed the establishment of several plantations. The most recurrent hypothesis to explain this phenomenon is the departure of the FARC, which for years acted as the park's "de facto guardian". The group's disarming and reincorporation process, paved the way for the arrival of new armed groups, such as the dissidents of the 1st and 7th Fronts, which are currently promoting colonisation, coca cultivation, and deforestation (Clerici, Salazar & Pardo-Díaz 2019) (FIP 2018) (Murillo-Sandoval, Van Dexter, Van Den Hoek, Wrathall & Kennedy 2020).

The decline of regional economies

Coca cultivation in SPNN areas is also linked to the economic cycles that occur in the regions where they are located. In this sense, another explanation for this phenomenon can be found in the decline of some regional economies, which has led many families to transition to the coca-growing economy.

In Catatumbo, the decline of the rural economy as a result of economic liberalisation policies, and the end of Ecopetrol's oil refining activities in Tibú, led farmers to resort to coca leaf cultivation as a response (CNMH 2018b).

A similar dynamic occurred in Putumayo when, in the early 1970s, the oil reserves of the Orito Concession, managed by the multinational Texaco, began a progressive decline. In the 1980s, the coca boom robbed the oil industry of its predominant role in Putumayo's economy and, as a consequence, settlers and farmers who had precariously gained access to jobs at Texaco were employed in coca cultivation and processing (CNMH 2015) in places that later became part of La Paya National Natural Park.

Coca crop eradication policy

The expansion of illicit crops in SPNN areas has also been linked to the different cycles of the Colombian State's eradication policy. In some cases, interdiction and eradication actions by the authorities have pushed growers to plant coca in National Natural Parks where it is more difficult to eradicate, among other reasons because Colombian legislation has prohibited the use of herbicides in these areas, barring the period between 2003 and 2013.

This occurred in the 1970s, when illicit crops appeared in protected areas in the south of the country, once marijuana production became more difficult on the Caribbean coast as a result of government actions (Molano 1989). Several recent studies have found an association between the aerial spraying policy and the growth of illicit crops in protected areas in the south (Vargas 2004) and in the Colombian Pacific (Rincón-Ruiz & Correa 2016).

In fact, several of the testimonies gathered in the fieldwork coincide in pointing out that the use of glyphosate in the buffer zones of Catatumbo-Barí and Alto Fragua Indi Wasi National Natural Parks led to crops being moved inside the parks. In other words, coca cultivation has expanded in the parks as a result of a balloon effect generated by the pressure of the national government's eradication policies.

Legal status of land within protected areas

A final driver for understanding why coca cultivation has appeared in National Natural Parks is linked to the legal status of the land. Colombia's Political Constitution establishes that the lands within the National Natural Parks are inalienable, unseizable, and imprescriptible. Once an area has been declared protected, no individual may establish a formal tenancy relationship with such land⁶ and all persons must conform to a land use regime that prohibits agricultural activities; the temporary or permanent introduction of animals, seeds, or flowers; the marketing, sale, or distribution of products of any kind; and the transit of commercial or private vehicles, among other actions.⁷

Despite being based on the ecological function of property and the primacy of the general interest over the individual, these restrictions have prevented peasant families historically inhabiting protected areas, or for those who have been pushed into them by armed conflict or by scarcity of land within the agricultural frontier—from formalising their land tenure and developing productive projects. As pointed out by some of the testimonies collected from fieldwork in Catatumbo-Barí and Alto Fragua parks, it is such barriers, added to lack of access to formal bank loans or to activities that generate profitable income, that have encouraged them to plant coca. Besides this, the fact that they cannot own their land means that the costs and risks of participating in this illicit activity are low, as they cannot be subject to the authorities' expropriation (Garzón & Riveros 2018).

⁶ As a result, the Office of the Comptroller General of the Republic has estimated that 87% of land tenure in PNNs is informal.

⁷ The above, in accordance with the provisions of Decree 622 of 1977 compiled in the Single Decree 1076 of 2015.

Public policy responses

Despite the fact that many drivers have led to the appearance of coca crops in protected areas for over 50 years, the authorities' response to this problem has been much more recent, and is framed in two dimensions: Drug policy and environmental policy. These two dimensions have historically not been linked in any way and it is only recently that synergies have been established between the two as a result of the Peace Accord.

Under the supply reduction approach, drug policy has prioritised the use of tools, such as forced eradication, to reduce coca crops while relegating alternative development programmes—intended to provide long-term responses and create the conditions for families dependent on these crops to be able to transition to the legal economy—to second place.

The environmental policy response has oscillated between two types of policies. On the one hand, we have those that prioritise the preservation of protected areas, rigid in the face of peasant occupation, and intended to move people out of these areas as a solution. On the other, there are more flexible measures that address the reality of occupation in protected areas, and propose conservation solutions involving the communities that inhabit these spaces.

Finally, there are the policies created and implemented after the signing of the peace agreement, in which, for the first time, a joint effort is being made between those leading substitution policies and environmental policies. These policies lead to the same mistakes made in the past, as they attempt to resolve the drug problem in protected areas through a series of rules and regulations that are extremely rigid in relation to what can and cannot be done in these areas.

In order to better understand these responses, **Figure 7** is a reconstruction of the different stages of public policy that addresses the problem of coca cultivation in SPNN protected areas.

Environmental policy and illicit crops in protected areas

Phase I. Respect for the ancestral use of coca leaf in protected areas (1960): A first approach to coca cultivation in National Natural Parks was based on the recognition of the ancestral use of coca in indigenous communities that inhabited areas that were later declared protected areas.⁸

Phase II. Declaration of crops as illicit and repressive policies by the State (1970–1980): In the 1970s, marijuana cultivation proliferated in the country and coca began to be cultivated for purposes other than its traditional use. These activities were declared illegal by the Colombian State leading the military and police authorities to begin to repress those who cultivated and processed the narcotics.

Phase III. "Parques en peligro" (Parks in Danger) (1990): In the 1990s, it became clear that many protected areas in Colombia and other countries in the region were in danger. To deal with this, a strategy called "Parques en peligro" was implemented to ensure the minimum conditions for their conservation and management, strengthening the work with indigenous communities whose living space intersected with protected areas, especially in the Amazon region (PNNC 2011).

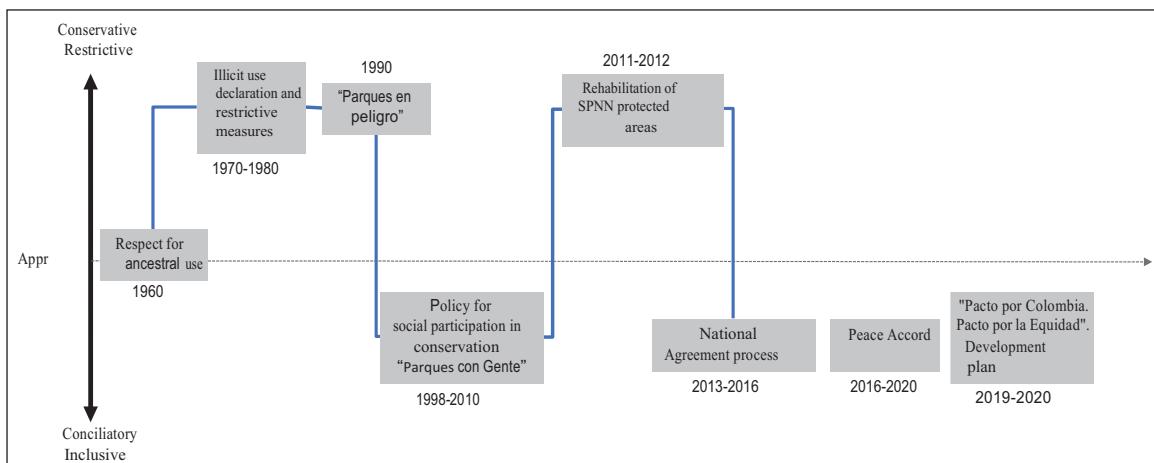


Figure 7: Stages of environmental policy associated with responses to illicit crop cultivation in PNN.
Source: Authors.

⁸ This was recorded by colonial chroniclers, in testimonies such as the following: "Coca satiates hunger, gives new strength to the weary and exhausted and makes the unhappy forget their sorrows" (PNNC 2011: 182).

Phase IV. “Parques con Gente” (Parks with people) Participatory conservation policy (1998–2010): During this period, a series of strategies were implemented to address the factors that were causing the deterioration of protected areas, including those related to the drug trafficking economy (Mayr 2014). These included the “Sustainable Agrarian Systems for Conservation,” the issuing of the Policy for Social Participation in Conservation, adopted in 2001, and the design of a first differential strategy for the management of illegal settlements and uses in SPNN areas.

Phase V. Rehabilitation of SPNN areas (2011–2012): In 2011, a policy shift was made in order to prioritize strategies for a “clean-up” of protected areas, intended to transfer peasant farmers out of the PNN and therefore put an end to unpermitted uses, including those related to illicit crops. This implied a hardening of policies, as growers were considered invaders or irregular occupants of protected areas, which led to them being stigmatised and, on occasion, prosecuted (Betancourt, Posada, Lastra, González & Monteaulegre 2017).

Phase VI. National Concertation (2012–2016): The same year in which the peace negotiations began 2012, the National Government signed an agreement with the inhabitants of the protected areas for the implementation of a public policy to develop alternatives for SPNN conservation management. In November 2014, a National Consultation Table (MCN) was formed to create alternatives for the recovery and restoration of National Natural Parks and to improve the living conditions of the peasant communities.

Drug policy and illicit crops in protected areas

Drug policy responses to illicit crop cultivation in National Natural Parks can be organised in 3 phases (**Figure 8**).

Phase I. Alternative development without a differential approach (1980–2004): The alternative development programmes created in the first phase did not target coca growers in protected areas, but included some indirect interventions affecting this population. In the mid-1990s, for example, the National Alternative Development Plan (PLANTE) included land titling, land acquisition, and adjudication programmes, as well as the regulation of indigenous territories for the population occupying National Natural Parks or forest reserves (DNP 1997).

Phase II. Aerial spraying in PNN (2005–2009): Under the implementation of Plan Colombia, between 2005 and 2009, Álvaro Uribe's government promoted the eradication of illicit crops by aerial spraying in some National Natural Parks. For example, approximately 3,936 hectares of coca were sprayed in the Sierra Nevada de Santa Marta and the Sierra de la Macarena (Varón 2008). At the same time, environmental authorities financed several operations designed to strengthen environmental governance as a mechanism to prevent coca cultivation and minimise its impacts. These included the consolidation of some indigenous communities' Life Plans.

Phase III. Forced manual eradication in National Natural Parks (2009–2017): The controversy generated by the use of herbicides in National Natural Parks to eradicate coca led to a ban on aerial spraying and, consequently, to the government focusing its efforts on the use of forced manual eradication as the main tool to eliminate coca from these territories. According to the Ministry of Defence, at that time, the security forces eradicated a total of 21,262 hectares of coca in 25 PNN. This measure has also had a high human cost, with 786 civilians and members of the security forces killed or wounded between 2009 and June 2020.

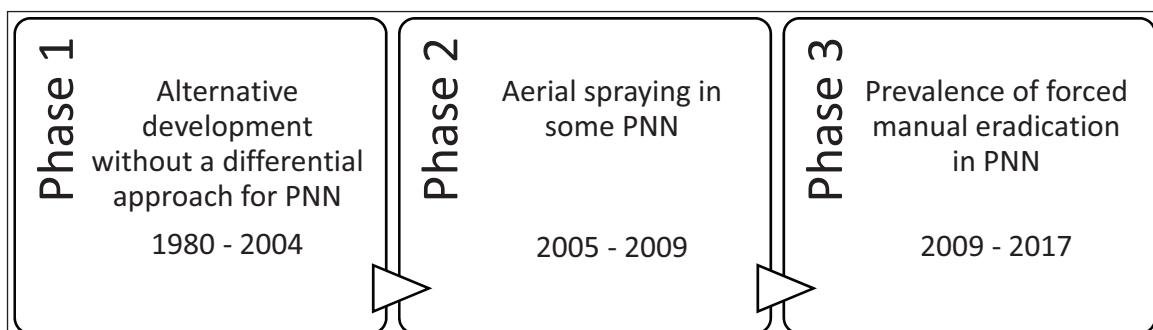


Figure 8: Phases of drug policy and responses to illicit crop cultivation in the PNN.
Source: Authors.

Post-Agreement Policies

The peace agreement between the National Government and the FARC-EP guerrilla recognised the need to formulate solutions for the communities living within protected areas. In this respect, an important window of opportunity was opened in 2016, with the implementation of the Comprehensive National Programme for the Substitution of Illicit Crops (PNIS) in these areas.

In addition, Iván Duque's National Development Plan authorised the environmental authorities to enter into agreements with the peasant population that inhabits, occupies, or establishes traditional uses associated with the peasant economy in National Natural Parks. These agreements, applicable to people in vulnerable conditions, may continue as long as the concurrence of the different State entities allows them to be attended with definitive alternatives.

Against this background, an alternative model of voluntary substitution called "Territories for Conservation" was adopted in 2020, intended to harmonise the conservation processes of special management areas such as the National Natural Parks,⁹ with the development of alternatives for the generation of legal income for coca growers, to help them improve their socio-economic conditions. The strategy is based on exploring innovative income-generating alternatives that ensure a balance between conservation and productivity, such as production lines derived from the bioeconomy, green and sustainable businesses, the forest economy, sustainable tourism, and Payments for Environmental Services (PES).

However, an analysis of the alternative model shows that it is still quite restrictive, as it establishes that all production lines, or any activity that is carried out in terms of voluntary substitution and alternative development, "must begin with a review of the limitations and opportunities for land use and exploitation permitted by the regulations" (ART 2020: 5). This means that the solutions proposed for former coca growers have to be aligned with existing regulations and planning instruments, including protected area management plans, which, being preservation-oriented, limit the activities that can be carried out within the protected area.

Thus, within the framework of the new substitution model, solutions end up depending on activities that cannot be carried out across the board in PNNs. For example, ecotourism;¹⁰ ecological restoration (which is expensive); activities that by their very novelty generate uncertainty as to whether they can be truly profitable for families, as in the case of biotechnology and green markets; and activities that have to be carried out outside protected areas, a strategy that has failed before, due to inequitable land distribution in Colombia (Guereña 2017).¹¹

These solutions are also threatened by new heavy-handed policies, such as green militarisation—in operation since 2019 with the start of the Artemisa campaign—to protect National Natural Parks from coca, deforestation, and the presence of illegal armed groups. The balance of these interventions has been unfavourable for the State, among other reasons, because of their high economic costs and their concentration on the weakest links in the criminal chains (peasant farmers and other vulnerable populations), which has generated an atmosphere of social unrest and resistance to the institutions (Garzón, Riveros & Tobo 2020).

Future alternatives

This overview of the different government-formulated policies and programmes to address the existence of illicit crops in protected areas and to offer alternatives to coca-growing peasants shows that it has, so far, been impossible to achieve a balance between drug policy and environmental policy. Neither of these has been able to solve the problem, and, in the absence of a State policy, the approach varies according to which government is in office (Bonilla-Mejía & Higuera-Mendieta 2019).

The reason behind this lack of synergy is not an institutional issue alone, as drug policy and environmental policy for protected area management are handled by different entities. It also depends on the fact that the conservation and illicit crop substitution processes have completely different methodologies, timelines, and

⁹ It also applies to Collective Territories of Black Communities, Indigenous Reserves, and Forest Reserve Zones established by Law 2 of 1959.

¹⁰ Ecotourism activities are not possible in all parks where there is coca, either because of the dynamics of the conflict (presence of illegal armed actors, actions by the security forces or the presence of anti-personnel mines) or because it is not an activity contemplated in the Management Plan.

¹¹ According to Oxfam, Colombia is the most unequal country in Latin America in terms of land distribution, with the top 1% of farms owning more than 74% of the land, while the remaining 99% share less than 26% of the land. These calculations exclude the collective territories of ethnic groups (Guereña, s.f.). In order to reverse this trend and provide land free of charge to landless peasants or those with insufficient land, it was agreed, as part of the Peace Accord agreed to create a Land Fund. However, as noted by the Kroc Institute (2020), "the Land Fund has 12 years to deliver 3 million hectares, but it has been three years since the implementation began, and land distribution has not begun". The Attorney General's Office (2020) has also noted that little progress has been made with regard to the allocation of these 3 million hectares.

objectives. While the response to illicit crops is designed to be implemented in the short/medium term, and the main goal is to eliminate coca and help families to live from legal productive alternatives, the conservation of protected areas is designed for long-term actions – where the main goal is the recovery and conservation of biodiversity and ecosystem services.

While one of the most important advances that has taken place in the implementation phase of the Peace Agreement in Colombia is that, for the first time, environmental and illicit crop substitution authorities are working together to ensure coca crop substitution in National Natural Parks, the proposed alternative model is rather limited. Thus, authorities still need to continue to strive to design a new model with compatible objectives that help to conserve SPNN areas, while respecting and guaranteeing the rights of peasant farmers, and reducing illicit crops and the dynamics associated with them. To this end, a Special and Transitional Management Regime is needed in SPNN areas, which includes the following features.

Firstly, it must allow for the participation of all actors involved in management, from the most influential to the least influential, ensuring recognition of the role that communities can and should play (Delgado 2014). As seen throughout this document, most of the solutions proposed by environmental policy and drug policy have lacked social and community participation, which has contributed to their failure.

Secondly, inter-organisational collaboration mechanisms must be guaranteed, as these are the only means by which to impose a comprehensive and organised attack on the different drivers. We must remember that the presence of coca in such areas is due not only to the peasant-coloniser communities, but also to the strategic location of these areas for drug trafficking, the presence of illegal armed groups and criminal organisations, the decline of regional economies, and land tenure issues. Hence, the solution will necessarily have to be based on a joint effort between the pertinent state organisations.

As evinced in this paper, the peace agreement succeeded in aligning the environmental authorities (PNNC) and those responsible for illicit crop substitution (ART); now we must focus on the Ministry of Defence, the Military and Police Forces, and the entities in charge of access to and formalisation of land titles, especially the National Land Agency (Agencia Nacional de Tierras).

Thirdly, different alternatives must be made available for those in crop substitution processes to be able to formalise their relationship with the land. These include the signing of use agreements, based on Article 7 of the National Development Plan, with the following conditions: The agreements can only be made with coca growers in vulnerable conditions who were occupying the PNN before November 30, 2016;¹² the agreements will be valid for a period of five years, extendable according to the results of periodic evaluations; they can be terminated in case of non-compliance with the agreement; and they will allow settlers to access incentives, plans, and state programmes. This is an alternative that is being pursued by the communities that inhabit and make use of Farallones de Cali National Natural Park, and is also supported by some local officials (Montoya 2019).

Fourthly – and most controversially – consideration should be given to the possibility of modifying, repealing, or amending the regulations that define the permitted uses and prohibitions that apply in the protected areas of the SPNN, in order to allow some uses related to the peasant economy, based, for example, on the principles of agro-ecology. The above is considered, insofar as it has been demonstrated that the restrictive legal regulations in force are an obstacle to voluntary substitution. This also implies adjusting the Management Plan to allow other activities in certain parts of the protected area, defined jointly by PNNs and the communities.

The peasant settlers living in the National Natural Parks and their representative organisations are in favour of this alternative, as are many of the local and (some) national officials. The strongest opposition to this possibility comes from officials living in the capital, who believe that it could increase the number of occupants in the protected areas. Although this fear is well-founded, measures can be taken to mitigate the risk, including the application of population censuses and the creation of a geo-referenced inventory of occupied land, which should be carried out before modifying the use regime. Such measures can be promoted by implementing the multi-purpose cadastre, which was also contemplated in the Peace Accord.

The truth is that the problem of the existence of coca crops for drug trafficking purposes in the protected areas of the SPNNC will not be overcome unless alternatives are implemented that can generate sufficient and stable legal income for the people and families who enter the substitution programmes, some of which will have to be established within the national natural parks. To insist otherwise is to ignore the reality of a country that has allowed this type of crop to be grown in such important areas in terms of their biodiversity and ecosystem services. Accepting this will allow us to move forward more quickly in resolving a scourge that is threatening our unparalleled natural heritage.

¹² Date on which the Peace Agreement was signed between the national government and the FARC.

Competing Interests

The authors have no competing interests to declare.

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