

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
http://ageconsearch.umn.edu
aesearch@umn.edu

Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.

No endorsement of AgEcon Search or its fundraising activities by the author(s) of the following work or their employer(s) is intended or implied.

Documentos CEDE ISSN 1657-5334

An Evaluation of the Macarena Integral Consolidation Plan (PCIM)

Daniel Mejía María José Uribe Ana María Ibáñez

13MARZO DE 2011





Serie Documentos Cede, 2011-13 ISSN 1657-5334

Marzo de 2011

© 2011, Universidad de los Andes–Facultad de Economía–Cede Calle 19A No. 1 – 37, Bloque W. Bogotá, D. C., Colombia Teléfonos: 3394949- 3394999, extensiones 2400, 2049, 3233 infocede@uniandes.edu.co http://economia.uniandes.edu.co

Ediciones Uniandes Carrera 1ª Este No. 19 – 27, edificio Aulas 6, A. A. 4976 Bogotá, D. C., Colombia Teléfonos: 3394949- 3394999, extensión 2133, Fax: extensión 2158 infeduni@uniandes.edu.co

Edición, diseño de cubierta, preprensa y prensa digital: Proceditor Itda.

Calle 1ª C No. 27 A – 01

Bogotá, D. C., Colombia

Teléfonos: 2204275, 220 4276, Fax: extensión 102

proceditor@etb.net.co

Impreso en Colombia - Printed in Colombia

El contenido de la presente publicación se encuentra protegido por las normas internacionales y nacionales vigentes sobre propiedad intelectual, por tanto su utilización, reproducción, comunicación pública, transformación, distribución, alquiler, préstamo público e importación, total o parcial, en todo o en parte, en formato impreso, digital o en cualquier formato conocido o por conocer, se encuentran prohibidos, y sólo serán lícitos en la medida en que se cuente con la autorización previa y expresa por escrito del autor o titular. Las limitaciones y excepciones al Derecho de Autor, sólo serán aplicables en la medida en que se den dentro de los denominados Usos Honrados (Fair use), estén previa y expresamente establecidas; no causen un grave e injustificado perjuicio a los intereses legítimos del autor o titular, y no atenten contra la normal explotación de la obra.



AN EVALUATION OF THE MACARENA INTEGRAL CONSOLIDATION PLAN (PCIM)

Daniel Mejía*, María José Uribe† y Ana María Ibáñez‡

Abstract

This paper presents a description of the new strategy for the fight against drugs implemented in Colombia since the year 2007. The Strategic Leap Forward, as the Colombian government has called the program, or the Strategic Development Initiative, as the United States Agency for International Development (USAID) calls it, is a step forward in the design of anti-drug policies that are more sustainable and effective in the mid-term. Currently, a pilot project is being implemented in the Macarena region, in the department of Meta (southeast of Bogotá), where coca crops and illicit activities were the norm just a few years ago. The Colombian State, partially financed by the United States governments and European countries, consolidates its presence in this region with the different instances and programs of the state apparatus to recover territorial control and combat the production of illicit drugs. But even more important is that this new approach in the fight against illegal drugs is based on a regional economic development plan, to avoid that peasants become involved in the first stages of cocaine production and trafficking process. The adequate functioning of this strategy can be a reference point to other countries that face similar problems of illicit drug production and conflict associated with these activities.

Key words: Macarena, Consolidation Plan, Colombia, Anti-drug policies.

JEL classification: H44, H56, I38, O18.

^{*} Associate Professor, Economics Department, Universidad de los Andes, E-mail: dmejia@uniandes.edu.co.

[†] Research Assistant, Economics Department, Universidad de los Andes. E-mail: <u>jose-uri@uniandes.edu.co</u>.

[‡] Associate Professor and Director of CEDE, Universidad de los Andes. E-mail: aibanez@uniandes.edu.co.

UNA EVALUACIÓN DEL PLAN DE CONSOLIDACIÓN INTEGRAL DE LA MACARENA (PCIM)

Daniel Mejía[§], María José Uribe^{**} y Ana María Ibáñez^{††}

Resumen

Este artículo presenta una descripción de la nueva estrategia de la lucha contra las drogas implementada en Colombia desde el año 2007. El Salto Estratégico, como ha llamado el gobierno colombiano a este programa, o la Iniciativa de Desarrollo Estratégico, como lo llama USAID (la agencia del gobierno de Estados Unidos para la ayuda a los países en desarrollo) es un paso hacia adelante en el diseño de políticas anti-droga más sostenibles y efectivas en el mediano plazo. Actualmente, se está implementando un plan piloto en la Sierra de la Macarena, en el departamento del Meta (suroriente de Bogotá), donde los cultivos de coca y las actividades ilícitas eran la norma hace unos pocos años. El Estado colombiano, con financiación parcial de los gobiernos de Estados Unidos y países de Europa, consolida su presencia en la zona con las diferentes instancias y programas del aparato estatal para recuperar el control territorial y combatir la producción de drogas ilícitas. Pero más importante aun es que esta nueva aproximación de las políticas anti-droga se ha fundamentado en un plan de desarrollo económico regional, para evitar que los campesinos se vinculen con actividades ilícitas asociadas a los primeros eslabones de la producción y tráfico de cocaína. El adecuado funcionamiento de esta estrategia puede ser un punto de referencia para otros países que enfrentan problemas de producción de drogas ilícitas y de conflicto asociado a estas actividades.

Palabras clave: Macarena, Plan de Consolidación, Colombia, Políticas antidroga.

Códigos JEL: H44, H56, I38, O18.

§ Profesor Asociado, Facultad de Economía, Universidad de los Andes, E-mail: dmejia@uniandes.edu.co.

** Asistente de Investigación, Facultad de Economía, Universidad de los Andes. E-mail: jose-uri@uniandes.edu.co.

^{††} Profesora Asociada y Directora del CEDE, Facultad de Economía, Universidad de los Andes. E-mail: aibanez@uniandes.edu.co.

2

1. Motivation

The new strategy in the fight against illicit drug crops in Colombia has been framed around two fronts: policies of forced eradication and policies for voluntary eradication. For the development of this strategy, the Colombian government has obtained international support. From the part of the United States government, the Colombian government has received economic and strategic aid, through *Plan Colombia*, which is a joint strategy between the governments of the two countries implemented since the year 2000. Initially, this *Plan* was thought to last for six years, which meant it was to end in 2006. However, after negotiations between the governments and some evaluations of the strategy, the program was continued with a slow reduction of the resources delivered by the United States government in the mid-term and a change of focus in the fight against drugs in Colombia. One of the results of the revision made to Plan Colombia indicated that the disarticulation between the efforts of the two components of the strategy (military and social efforts) did not generate a substantial reduction of illicit crops that was sustainable in the midterm. To correct this flaw, the *Integral Consolidation Plan* (PIC for its Spanish acronyms) was created, framed within the *Democratic Security Consolidation Policy*¹, with the goal of giving continuity to the *Democratic Security Policy*², which in turn obtained support and resources from funds of Plan Colombia.

The *Democratic Security Policy* was part of the government plan of the first presidential period of Álvaro Uribe Vélez (2002-2006). Its primary objective was to recover territorial control over wide areas of the country that were under the control of the illegal armed groups. To achieve this objective the presence of the National Armed Forces was taken to every municipality in the country. At the start of the second government of Álvaro Uribe (2006-2010), the *Democratic Security Consolidation Policy* was established. This strategy emerged in the Defense Ministry and its objective, given the already established control over wide regions of the country, was to maintain and consolidate the presence of the State in these municipalities and strengthen other

¹ The *Democratic Security Consolidation Policy* was established in the National Development Plan 2006-2010: "Communitarian State: Development for All", of President Álvaro Uribe Vélez. This Policy corresponds to the Defense Ministry's strategy to specify where the efforts of this sector should be focused (Ministerio de Defensa, 2007)

² The *Democratic Security Policy* was the strategy of President Álvaro Uribe Vélez's government (2002-2006), which's objective was to achieve security in all the national territory through the presence of Colombian Armed Forces and Police in all the country's municipalities. This policy was based on the National Development Plan (2002-2006): Towards a Communitarian State.

accomplished goals. This implied not only recovering control but also remaining in the area with an integral presence of the different State levels and institutions. To define the way to act, regions were classified according to their level of violence and territorial control by the State. In regions with low levels of violence the strategy consisted in raising the presence of institutions; in regions that still exhibited a high density of illicit crops and presence of the illegal armed groups the strategy was to start recovering territorial control and then raise the presence of the remaining instances of the State.

Under the principle of co responsibility between the different levels of the State, the National Armed Forces and civil society, a new pilot project of the integral territorial control recovery policy was established, the *Macarena Integral Consolidation Plan* (PCIM), in the Macarena mountain range region found in the department of Meta, 300 kilometers southeast of Bogotá, the capital of the country. For this, six municipalities that border the mountain formation were selected to implement the program. This area has represented symbolic and strategic wealth for the guerrilla group *Fuerzas Armadas Revolucionarias de Colombia* (FARC). From its early days, this group has been located in the region and has had control over the area, which has allowed it to turn it into the core of one of the main narcotrafficking routes and a stronghold with high density of illicit crops (see Semana, 2006).

Given these characteristics of the area, the National Government selected this region to implement this pilot program, which aims to, in broad outlines, recover territorial control, eradicate illicit crops and encourage sustainable economic development based on licit activities. The implementation of the *Plan* is done in three stages. The first one consists in the arrival of the military forces and the police to clear the area of the illegal armed groups and prevent attacks from these groups that impede the start-up of the following stages of the program. When the first stage is finished and it is verified that the area has been recovered in terms of security conditions, the programs to eradicate illicit crops are initiated (primarily coca): forced eradication programs (aerial aspersion campaigns and manual eradication of illicit crops) and alternative development programs to offer peasant families dedicated to illicit activities different and legal options for their economic sustenance. Next, the State apparatus, in all its instances, exercises its presence in the area to consolidate its presence in terms of basic institutions such as the provision of justice, education programs, and the basic provision of sanitary and health services. Offices of the three branches of power (Executive, Legislative and Judiciary) are installed, such as police, prosecutor

and judicial posts, the National Registry of Civil Status and offices for the social assistance programs officials, among others.

The strategy has great potential and importance given that if the established objectives are accomplished in the mid-term, it has the potential to become a starting point to redesign the fight against drugs, not only in other regions of Colombia, but also in other illicit drug producing countries like Perú and Bolivia, in the case of coca, and Afghanistan and Myanmar, in the case of opium.

The studies that have so far analyzed the PCIM strategy and the results that have been accomplished since it was implemented have concentrated in making a precise description of the Plan, explaining what occurred in the area before and after it was established and making some recommendations. On the one hand, Deshazo et al. (2009) and Isacson and Poe (2009) made visits to the intervened region to define what is happening in the area and the accomplishments of the program up to 2009. Additionally, each study explains with precision the functioning frame of the strategy, the involved organizations and the dynamics of power that existed in the area before and after the implementation of the PCIM; the latter in terms of the presence of the illegal armed groups and the role of the State. Both studies present some recommendations to improve the way in which the program is implemented so to be able to accomplish the established objectives in terms of security, presence of illicit crops and the establishment of the State apparatus. From another point of view, Reyes and Duncan (2009) make a descriptive evaluation of the results of the PCIM, posing the accomplishments and the challenges, without showing precise figures of what the program has done. The document of Reyes and Duncan is one in which, besides presenting a few criticisms to the program, some policy recommendations are given in line with what the former two studies presented. The United Nations Office on Drugs and Crime (UNODC) presents the figures of illicit crops in the area and the efforts to eradicate them, which is a platform to observe the evolution of one of the principal objectives of the program: the reduction of illicit crops (UNODC (2009) and UNODC (2010)).

On the other hand, some of the organizations involved in the functioning and financing of the PCIM have presented some documents that look to clarify the challenges that the program faces and establish a frame of action to accomplish its objectives. For example, USAID (2009a) presents the evolution of some of the indicators associated with security, illicit crops, displacement and the

presence of illegal armed groups in La Macarena area until 2007. Based on these figures, it presents the future perspective of the program in terms of the relationship between the entities that participate in the execution of the program and the budget that is destined towards it. The civil director of the PCIM, Álvaro Balcázar, in a working document for the Integral Action Coordination Center (CCAI for its Spanish acronyms) posed the weaknesses of the strategy as the basis to improve the program operation (Balcázar, 2009). Later, CCAI (2010) makes a description of the National Consolidation Plan, of which the PCIM makes a part of. It presents the central points of the strategy and shows some of the Plan's accomplished results in each region where it has so far been implemented and some of the challenges the program faces in each of them. For the particular case of La Macarena, it presents the amount of resources invested, the projects that are under development and shows some figures related to the program's results: homicide rates, illicit crops and social programs coverage, among others. However, this study, although valuable in presenting the strategy that is being developed and making a detailed description of the strategy and presenting some figures, does not show the evolution of the indicators throughout the decade that allows to see the change and evolution of some of the objective variables before and after the implementation of the program.

The objective of this study is to provide a series of wide social, economic, security and illicit crop indicators that allow permanent monitoring of the program and its results. In particular, this study, without the purpose of being exhaustive in what refers to all the indicators that should be monitored, does want to call attention about the importance of measuring, with objective indicators, the visible and tangible results of the program. Taking into consideration the evolution of the variables that the program wants to tackle allows capturing the medium and long-term effects that this strategy might have in the regions where it has been implemented. Considering the short period of time in which the PCIM has been implemented, its principal results and challenges are analyzed, to later make some recommendations that serve as a base for the execution of these programs in other Colombian zones and in other countries that have had to confront the production and trafficking of illicit drugs and the social, economic and security consequences associated with this illegal phenomenon.

The document has four additional sections to this introduction. A brief recount of the fight against drugs in Colombia is presented in the second section to establish the precedents on the creation of the PCIM. The third section describes the program in detail, its primary pillars and the principal

actors involved in its implementation. The next section poses some results and challenges of this pilot project. Lastly, the fifth section presents conclusions and recommendations for the future of the fight against drugs in the producing countries.

2. Precedents

The fight against illicit drugs in Colombia has had several fronts and several stages. On the one hand, the government has implemented a frontal strategy against the drug cartels (see Arreaza et al. (2010) and Mejía (2010) for a description of what has been the fight against drugs in Colombia). On the other hand, since 1985, in the fight against illicit drug production, eradication campaigns and alternative development programs were implemented (UNODC, 2010). The strengthening of the drug cartels at the end of the eighties and start of the nineties brought with it an increase of the cultivated area in the country. This was a strategic response by the narcotraffickers to the government efforts to prevent coca leaf from coming into the country from Peru and Bolivia for cocaine production, which imposed major controls over national borders. The evolution of coca crops shows that the cultivated area has increased during the late nineteen's and then slowly decrease since 2000 with the implementation of Plan Colombia (Figure 1).

Thousand hectares

180

160

140

120

100

80

60

40

20

Source: UNODC (2010).

Figure 1. Area with coca crops in Colombia 1998-2009

During Andres Pastrana's government (1998-2002), negotiations for a Peace Process with the FARC were established. The so called *Distension Zone* was created, a region in the country under the control of that group, in which the Colombian State Armed Forces were not allowed to enter. This region was located south east of the country between the departments of Meta and Caquetá, covering four municipalities of the Meta department in which the *Macarena Integral Consolidation Plan* (PCIM) is currently being implemented (Mesetas, La Uribe, La Macarena and Vistahermosa) and a municipality in the department of Caquetá (San Vicente del Caguán). Altogether, the demilitarized zone covered an area of 42,000 Km², larger than Switzerland's territory (see Map 1). These negotiations started on January 7, 1999 and ended on February, 2002.³ This zone was utilized by FARC as a shelter to guard kidnapped victims, cultivate illicit crops, organize the cocaine export trafficking networks and hold training camps, among other things, with which this guerrilla group was further strengthened (Vicepresidencia de la República, 2004).

⁻

³ The president in office at the time ended the peace talks and gave the FARC three hours to evacuate the area after they kidnapped an airplane from Colombian airline Avianca and took prisoner the Senate Peace Commission's President, Jorge Eduardo Gechem Turbay, whom they held hostage for six years (El Tiempo, 2002).

Bogota

Distension Zone

100.620201.240 402.480 Metros

Map 1. Distension Zone region 1998-2002

Source: Authors

In parallel, in 1999 the governments of Colombia and the United States created the so called *Plan Colombia*, a joint strategy for the fight against illicit drugs and the armed organizations associated with the production and trafficking of illicit drugs. The central objective of this *Plan* was to attack narcotrafficking with three specific objectives: (i) reduce illicit crops by half within six years, (ii) promote judicial and economic justice, and (iii) strengthen institutions (see DNP, 2006 and Mejía, 2010). The principal mechanisms that were adopted to accomplish the first of these objectives were the illicit crops forced eradication campaigns and alternative development programs to provide families dedicated to illicit crops the opportunity to dedicate themselves to licit activities. The forced eradication campaigns involved aerial aspersion with herbicides (glyphosate) over the coca crops and the so called *Eradication Mobile Groups* (GME for its Spanish acronyms), that started with the coca crops manual eradication programs in the year 2005. The role of the United States Government consisted in giving strategic help and partial financing for the start-up of the

Plan. Initially, this strategy would last for five years since its implementation. However, in practice, *Plan Colombia* has been expanding since 2006 with some refinements and partial adjustments (and changes of its name).

With the arrival to power of Álvaro Uribe in 2002, there was a policy change in the fight against drugs. Plan Colombia was still in place, but emphasis was no longer made only to combating illicit drugs production but also to strengthening the Armed and Police Forces. Under the Democratic Security Policy, the government looked to recover territorial control, through the presence of State institutions in all the country's municipalities. In this way, the anti-drug policies of *Plan Colombia* and the *Democratic Security Policy* were jointly articulated. Initially, priority was given to forced eradication of illicit crops, leaving behind alternative development programs. Up to that point, the strategy for voluntary eradication and support to the families was framed under the program Plante. This program delivered resources to peasant families in areas with presence of illicit crops to encourage the production of licit ones. In 2003, this component of the fight against drugs is modified and a set of Alternative Development Programs⁴ composed by Forest Ranger Households (PFGB for its Spanish acronyms) and Productive Projects Programs (PPP for its Spanish acronyms) is created.⁵ Through the Forest Ranger Households Program, it is sought to reach the families found in vulnerable ecosystems in order to encourage them to abandon illicit crops and dedicate themselves to licit activities and the protection of the ecosystem. On its part, Productive Projects Programs hands families resources and technical support for them to abandon illicit agricultural activities and dedicate themselves to licit activities. These programs are headed by the Presidential Agency for Social Action and International Cooperation (Acción Social, henceforth), which arrives at different regions to deliver the subsidies and coordinate the execution and adequate start-up of these programs. The resources to finance these programs come from national resources and international aid. The United States executes its resources through the USAID agency for international aid and Germany and the Netherlands deliver their resources for these programs directly to Acción Social.

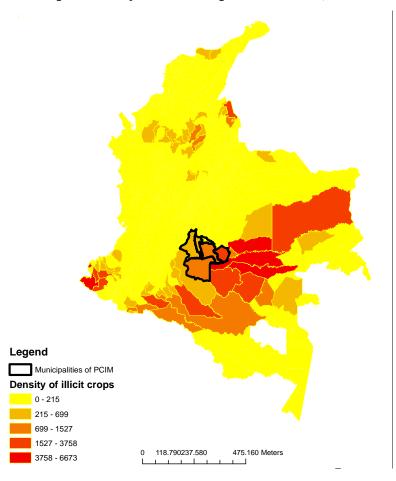
For the strengthening of the Colombian Armed Forces, in 2003 the *Patriot Plan* was created, with a military base in the department of Putumayo, located south of the country and that until then was

_

⁴ The Alternative Development Programs were posed in the CONPES document number 3218 of 2003.

⁵ See Cano (2002), Zorro (2010) and Vargas (2010) for a detailed description and analysis on the alternative development programs and crop substitution in Colombia.

the region with highest density of illicit crops in Colombia (see Map 2). From this location the aerial spraying brigades were coordinated for the eradication of illicit crops. Facing international criticisms and the collateral effects that these campaigns generated in environmental terms, ecosystem destruction, among others, the National Government then tried to concentrate its efforts on manual eradication campaigns, especially in vulnerable areas such as national parks and environmental reserves, and later, in the border with Ecuador. In 2005, the *Mobile Eradication Groups* were created, which consisted of military, police and civil groups in charge of eradicating coca plants manually in the regions with illicit crops and difficult access for the alternative development programs. During the first campaigns in the southern region of the country, many members of the Army and Police were killed as a result of land mine planted by illegal armed groups within the coca fields, reason for which the government decided to return to the aerial spraying campaigns, but without abandoning the manual eradication efforts in those areas where security conditions allowed it (Vargas, 2006).



Map 2. Density of illicit crops in Colombia, 2003

Source: Authors based on information from SIMCI

Plan Colombia was effective in reducing violence and recovering territorial control on behalf of the State, but it wasn't so much in reducing the production of narcotics in Colombia, at least until 2006 (DNP, 2006; GAO, 2008; Mejía and Restrepo, 2010; and Mejía, 2010). Cocaine production was held constant throughout the implementation period of this *Plan*, and only in 2008 an important drop in the primary cocaine production indicators in Colombia has been observed.

Regarding the alternative development programs component, it has been observed that these programs were not articulated and the disorganization in their implementation resulted most times

⁶ However, the last available data (for 2008) shows an important drop in the potential production of cocaine in Colombia. The reasons behind this important drop are several. Among others, the intensification of the eradication campaigns has caused the average age of coca crops to fall and this makes them less productive. Also, 2008 was a very dry year and this may have contributed to less productive harvests in terms of the alkaloid content of the plants. See Mejía and Rico (2010) for a detailed analysis and the quantification of the cocaine production process and trafficking in Colombia.

⁷ See Mejía and Restrepo (2010) for a detailed study on the effectiveness and costs of the war against drugs under *Plan Colombia*.

in failure to accomplish their proposed objectives. USAID implemented the alternative development programs *More Investment for Sustainable Alternative Development* (MIDAS for its Spanish acronyms) and *Alternative Municipal Development Areas* (ADAM for its Spanish acronyms) and the Colombian government carried out the *Alternative Development Programs* (PFGB and PPP). Each agency operated its programs in a disarticulated manner and without much coordination between the different actors involved. Moreover, the Colombian government exercised presence in the regions with all its aid apparatus, which includes programs such as Familias en Acción, Jóvenes en Acción, Empleo en Acción, among others. This set of social and alternative development programs was not centrally coordinated, which led to the unnecessary overlapping of these programs in many regions of the country and their total absence in some others.

In 2004, and with the idea to correct some of the flaws detected in *Plan Colombia*, the *Integral Action Coordination Centre* (CCAI) was created, which's principal function was to articulate the efforts of the different State levels to achieve territorial control and promote the co responsibility action between the government and civil society. In its beginnings, the direction of this centre was primarily placed upon members of the Armed Forces, due to its creation by the Defense Ministry. The remaining members of the Directive Committee belonged to the other ministries which were involved directly or indirectly in the fight against drugs. Later on, in 2005, the Directive Committee was divided into two committees: a directive committee and an operative committee, with the objective of giving more participation to civilians in the direction of the program. The CCAI offices were installed in regions most vulnerable to violence and the presence of illegal crops, according to the centre's own classification. In 2006, a mechanism for the coordination centers was implemented with the purpose of assigning a person in each regional office in charge of the coordination duties. The Macarena region, where the PCIM is currently being implemented, was one of the selected regions at that time for the set up of a CCAI office.

Moreover, the start-up of *Plan Verde* took place in the Macarena region, which consisted in forced eradication of illicit crops giving priority to manual eradication (see Vargas, 2006 and Semana, 2006 for a detailed description of *Plan Verde*). During these brigades, undertaken by the *Mobile Eradication Groups*, several members of the group were killed by the explosion of land mines that

illegal armed groups had planted in the area, which again led the government to give higher priority to aerial eradication campaigns.⁸

That same year the second presidential period of Álvaro Uribe started (2006-2010) and a transformation of the *Democratic Security Policy* took place, which's objective was to consolidate the accomplished results. For this, the *Democratic Security Consolidation Policy* was created in the Defense Ministry with the idea of strengthening the results obtained thus far in terms of security and the recovery of territorial control, and to continue with the efforts to extend the accomplishments to the remaining regions of the country that had not, until then, been intervened by the aforementioned programs.

This policy became one of the action plans that were posed in the new strategy in the fight against drugs, which started in 2007. Through the Security and Defense Direction of the National Planning Department, the Colombian government presented the document "Estrategia de Fortalecimiento de la Democracia y la Promoción del Desarrollo Social (2007-2013)" (Democracy Strengthening and Social Development Promotion Strategy) DNP (2007), in which the fight against drugs is reformulated and a search to attract more resources from international cooperation is undertaken at a time when the United States was ad portas of ending Plan Colombia.9 In that document, the Colombian Government presents the strategy as financed only with its own resources. At the same time, Plan Colombia II, or the Strategic Leap, also emerges, which gave continuity to *Plan Colombia* but with a change of focus and action plans. First, the military and social efforts of the fight against drugs are articulated. Despite giving continuity to the aerial spraying campaigns and the Mobile Eradication Groups, the Alternative Development Programs and the remaining government social programs are coordinated in the areas where the program is being implemented to encourage peasant families to eradicate illicit crops and replace them with licit crops. To accomplish the objectives, two action plans were formulated: (i) the *Democratic* Security Consolidation Policy, and (ii) the Integral Doctrine Action (DNP, 2007).

The Democratic Security Consolidation Policy's action plan and the alignment of the military, social and antinarcotics efforts were adjusted to the conditions of each region where the plans were

⁸ Besides the use of mines to attempt against the lives of eradicators and the Armed Forces, illegal armed groups associated with cocaine production like FARC and paramilitaries also created handcrafted explosive mechanisms, which were fired when the plant was uprooted from the ground, causing severe injuries to some eradicators and sometimes their death.

⁹ Plan Colombia ended in 2006, after an extension given to it in 2005.

to be implemented. For this, the regions were classified according to their level of violence. At that moment three levels were defined and for each of them an associated strategy. These levels corresponded with phases of State control, and as the security implementation and presence of the State advanced, a step was taken towards the next phase to accomplish an integral control over the national territory. The first group corresponded with territorial control and was implemented in areas with active presence of the illegal armed groups. In this phase the State's effort was primarily military and the objective was to disarticulate illegal armed groups and consolidate territorial control on behalf of the State. The second group was of stabilization, which was planned to be achieved by giving presence to the different State institutions. The third and last group corresponds to the consolidation of the State authority and the presence of institutions with social and political efforts.

ALIGNMENT EFFORTS: MILITARY AND POLICE + SOCIAL + ANTINARCOTIC CONSOLIDATION **CONTROL** Areas with active Stabilized presence of Groups areas outside the law (GOL) Consolidating state Objective: authority and to break and expel GOL establish institutions and public services INTENSIVE MILITARY **EFFORTS** INTENSIVE MILITARYAND POLICE EFFORTS

Figure 2. Strategy of the Democratic Security Consolidation Policy

Source: Ministry of Defense (2007), modified by authors.

The second action plan of the strategy of the fight against drugs, the *Integral Doctrine Action* (DAI for its Spanish acronyms), consisted of articulating the State's efforts with those of civil society in order to secure territorial control and achieve long-term sustainable effects of the accomplished goals. This doctrine was established in the Presidential Directive 01 of 2009 under the name of *Regional Action Plan for Consolidation*. This same mechanism allowed advancing in the accomplishment of the objectives of the *Democratic Security Consolidation Policy* and was able to strengthen the alignment between the military, antinarcotics and social efforts. This is what

is known as the *Strategic Leap*, which functions under the direction of the *Integral Action Coordination Centre* (CCAI) in charge of coordinating the national authorities with the territorial authorities (Presidencia de la República de Colombia, 2009). Under this strategy, continuity is given to forced eradication campaigns (aerial and manual) and the voluntary eradication campaigns are consolidated through the *Forest Ranger Households Alternative Development Programs* and *Productive Projects* (DNP, 2007). It was within this frame that the *Macarena Integral Consolidation Plan* (PCIM) was established as a pilot project. This plan looks to recover territorial control on behalf of the State in the Macarena region, located 300 kilometers southeast of Bogotá. This plan began to be implemented in 2007, time in which the Integral Fusion Centre was established in the municipality of Vistahermosa, from where all the actions are coordinated to accomplish the outlined objectives of the program and where the work commissions are hosted, which get together in a building that the United States government donated (Semana, 2009).

The region covered by the PCIM was selected for the great value that it represents to FARC and for its high density of illicit crops. This area is not only representative for this group for historical reasons, as it was there that the group emerged in the 1950s, but also because it represents wealth in strategic terms, for it is located in the central point of the illicit drug corridor that the FARC has handled during the last decades (USAID, 2009). Since the *Plan Patriota* operations began in Putumayo, the Macarena Mountain Range turned into an operations centre for the FARC Eastern Block's actions, under the command of important FARC leaders such as Jorge Briceño a.k.a. "el Mono Jojoy" who was killed in high scale operation by the Military Forces (Semana, 2006 and El Tiempo, 2010). At the time of intervention, the area was under the control of different FARC fronts: number 40 which actively operated in the municipality of La Uribe; number 26 in Mesetas; number 27 in Vistahermosa; numbers 1 and 7 in the municipality of La Macarena; and front number 43 in Puerto Rico (Semana, 2006).

Due to these characteristics, this area was selected to establish the consolidation strategy's pilot project, which will be described in detail in the next section.

3. Program Description

Beginning in 2007, the Colombian government implemented the *Macarena Integral Consolidation Plan* (PCIM). Although similar efforts have been implemented in Colombia and countries like Afghanistan, the Macarena area program constitutes a novel case (Reis, 2007)

As mentioned before, the PCIM was implemented in six municipalities of the Meta department: La Macarena, La Uribe, Mesetas, Puerto Rico, San Juan de Arama and Vistahermosa. This department is located southeast of Colombia (see Map 3). The total area covered by these municipalities is of about 29,200 Km². This is a region with a high environmental value, since it is composed of three National Natural Parks: La Macarena, Los Picachos and Tinigua. Moreover, several rivers cross the region (Humea, Guataquí, Arai, and Guarayuriba) and it is a meeting point between the Amazon and Andean regions of the Colombian territory. The Meta department's economy is based on diverse activities such as agriculture, commerce and industry, besides some oil and gas extraction activities.

The presence of illegal armed groups and the confrontations between guerrilla, paramilitaries and the National Armed Forces have been the norm in the region. During the government of Andrés Pastrana (1998-2002) when the *Distension Zone* was established in the region, the State presence in the area was minimal and FARC exercised almost total hegemony over many of the economic and social activities in the area. Moreover, since the 1970s, this area has been characterized by a high density of illicit crops and by being a strategic corridor for the FARC's illegal activities (USAID, 2009).

Map 3. PCIM's covered region



Source: Authors

The program places consolidation of territorial control at the center of its strategy. A recent document by the National Planning Department specifies how this strategy should be implemented. In particular, the document indicates that "the Integral Action Doctrine (DAI) will be started in areas where illicit crop concentrations and terrorist groups persist, and in those where paramilitary groups have been demobilized. Through the DAI, the legitimate use of force will be successfully articulated and combined with the State's social action to respond in a more efficient and effective way to the current security threats and set the basis for the post-conflict security strategy" (DNP, 2007 p.46). The strategy requires coordinated and sequential efforts by the Army, the Police and the civil authorities with the purpose of, once the transition has finished, making the State's presence permanent. The institutions in charge of coordinating the program are: (i) the International Cooperation and Social Action Presidential Agency; (ii) the Integral Action Coordination Centre-CCAI; (iii) *The Office of Transition Initiative* of the United States Agency for International Development-OTI of USAID; and (iv) the Fusion Centre, located at the principal

town of the Vistahermosa municipality. These four organizations work in a joint and coordinated way to accomplish security consolidation and control recovery over the area. Acción Social's responsibility is to deliver the set of social programs for the population and the Alternative Development Programs to the area. The function of the CCAI, as its name indicates, is to coordinate the actions of the different State levels in order to accomplish the program's objectives, which are explained ahead. USAID gives the attention programs under its care and it constitutes a channel for the strategy's implementation in the area and support for the different institutions doing joint work. Last, the Fusion Centre in Macarena establishes the program's directives in the area and fosters the PCIM's operators. Likewise, hand in hand with the CCAI, it is a centre where the integral actions that are carried out in the area are coordinated. Despite a complex institutional architecture, the duties of each entity in the area are clear and coordination mechanisms exist between them to achieve the policy objectives and raise their effectiveness. The fundamental objective of the PCIM is to accomplish the integral and permanent presence of the State in the area with the purpose of rendering the necessary conditions to: (i) recover the institutional control of the territory and reestablish security; (ii) accomplish local governance and effective citizen participation; (iii) eradicate illicit crops and develop the licit economy; (iv) recover the National Natural Parks; and (v) achieve access to justice and guarantee the effective protection of human rights (CCAI, 2009).

The strategy to accomplish these objectives is framed within the scheme of the *Democratic Security Consolidation Policy*, intensifying coordination between national and local entities of the State. This strategy's action is sequential in time and in the different places of the territory according to the security levels and the presence of illicit crops. The strategy covers three phases that mark the *Integral Consolidation Plan's* time and territorial sequences and determine the type of mechanisms that should be implemented. The first stage, before the first phase, is termed *Isolation*, and consists in the installment of the regional coordination centers and the formulation of the action plans for that region. The first phase, termed *Recovery*, consists, as its name indicates, in recovering security control over the areas with presence of illegal armed groups and low participation of State Institutions. The second phase is of *Transition*, in which a step is taken from a military control effort over the area to the permanent establishment of State institutions. A central point of the strategy is to improve the population's conditions in specific and objective indicators such as education, health and security. Last, the third phase is of *Stabilization*, in which

the integral and permanent presence of all State levels is consolidated to guarantee social and economic conditions that generate more welfare for the population and that are self-sustainable in the long-run. Figure 3 presents the different phases of the *Integral Consolidation Plan* and the combination of strategies implemented at each stage.

Development State's efforts Economic. Social and institutional Citizens protection **Territorial** security Phase 0 Phase 1 Phase 2 Phase 3 **Isolation Transition** Recovery **Stabilization Phases of Consolidation**

Figure 3. Territorial control recovery phases and composition of the PCI

Source: CCAI (2009), modified by authors.

The programs directed towards the civil population differ in each of the stages. In the first phase, emergency humanitarian attention is given to the inhabitants of the area, as the Armed Forces recover territorial control over the area. Beginning in the second phase, actions are implemented for the organization of property, economic and social development, governance, justice and security. Clarifying territorial planning through land titling allows attacking a historical and structural problem of property rights and the allocation of wastelands, which have been a source of feedback for the armed conflict in Colombia (CCAI, 2010). With the purpose of promoting social and economic development, it is needed, on the one hand, to improve the situation of the regions covered by the PCI in what refers to education, health and security, of which the indices are under the national average and, on the other hand, mitigate the economic effects of the transition from illicit activities to licit activities. To consolidate governance, it is a priority to improve State institutions and raise citizen participation in the control over public administration. Last, in terms of justice and security recovery, it is crucial to protect citizens by strengthening the State's

presence in order to prevent threats against civilians. The next section presents some results related to the different objectives of this strategy.

4. Some preliminary results of the program

The Macarena Integral Consolidation Plan (PCIM) has less than three years of being implemented, and thus, the observable results are limited to the immediate effects that have taken place during the short time of its implementation. Given that the PCIM is a long term strategy with different stages, it is still not possible to identify many definitive impacts of the program. However, some effects related to the fight against drugs can be analyzed (especially in the reduction of illicit crops), the improvements in security and socioeconomic conditions, particularly access to social programs, as well as the improvements in infrastructure endowments shown in the areas intervened by the program. To determine how large the variation in the indicators has been due to the PCIM intervention, some of the results are compared to those of La Macarena region's neighboring municipalities. The way in which the neighboring municipalities ('control group') were determined for this comparison is described in Appendix 1. The six municipalities used to represent the group of neighboring municipalities are: El Dorado, Mapiripán, Lejanías and Puerto Concordia in the department of Meta, Colombia in the department of Huila and Cartagena del Chairá in Caquetá. These municipalities were chosen due to their proximity to the intervened area and to their similarity in various crucial dimensions before the implementation of the program, described in detail in Appendix 1.

In order to accomplish these goals, since 2007 the level of resources invested has increased in the municipalities covered by the PCIM. The disbursements of the budgetary executions destined toward investment in La Macarena region's municipalities increased by 79 percent between 2006 and 2007, while the increase in the Meta department's remaining municipalities (including Villavicencio) was in the order of 15 percent, and in La Macarena's neighboring municipalities total investment fell by 19% between 2006 and 2007. The major increases in the PCIM's municipalities took place primarily in the justice, health and road components of investment, with increases of 532, 40 and 462 percent, respectively. In contrast to this growth, the agricultural sector investment component was reduced by approximately 8 percent during these same years. Figure 4 presents the evolution and composition of investment in the municipalities subject to help

from the PCIM. It is worth noting that health investments represent close to 49 percent of the invested resources.

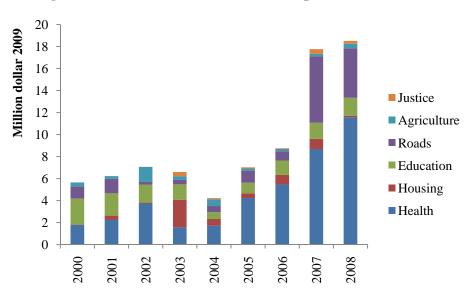


Figure 4. Investment in PCIM's municipalities, 2000-2008

Within the composition of investments on the specific resources for the PCIM, the infrastructure investment component is the most important. According to UNODC (2010), total investment in the PCIM was raised up to US\$ 107 million, of which 89 percent was destined to infrastructure and the remaining 11 percent to other components for the development of the region (see Figure 5). The paving of the road that connects San Juan de Arama with La Uribe is one of the main infrastructure projects of the PCIM (Semana, 2009). This road is part of the route that communicates the departments of Meta and Huila with the purpose of connecting the Eastern Plain lands with the central part of the country, to then clear way to the Pacific Ocean through the port of Buenaventura.

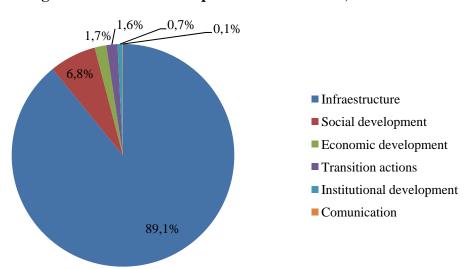


Figure 5. Investment composition of the PCIM, 2009

Source: Authors calculations based on information from DNP (2010).

Note: Investment information corresponds to the sum of resources assigned to Macarena's municipalities by budget executions.

These resources have been disbursed in the different municipalities of La Macarena region to comply with the objectives outlined by the PCIM. Just as there are stages in the consolidation strategy, results are accomplished in a sequential manner. First, the efforts made by the Armed Forces to recover the area from illegal armed groups and illicit crops constitute the first stage of the process. Second, the infrastructure endowment and the implementation of social programs arrive at the zone once some minimal security conditions are guaranteed. And third, long-run socioeconomic effects are the result of such efforts when the integral presence of the State has been consolidated. In what follows, the PCIM's accomplished results are analyzed in the aforementioned order.

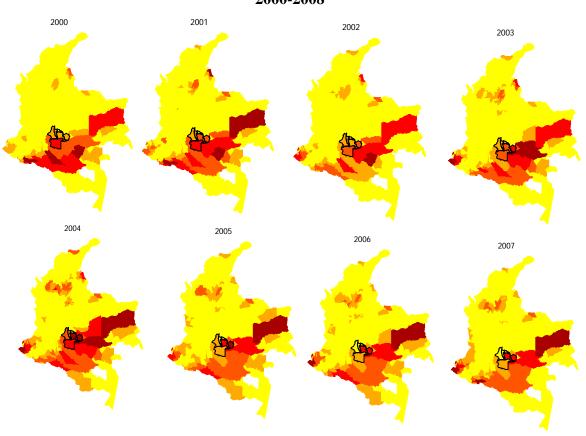
4.1. Short-run results

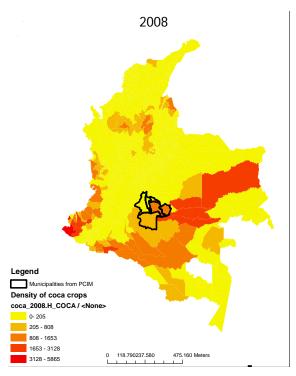
First, to accomplish the objective of clearing the area from illicit crops, forced eradication campaigns have been developed through manual eradication, carried out by the *Mobile Eradication Groups*, and through aerial aspersion, mainly of areas with coca cultivation. Map 4 shows the density of coca crops at the national level, highlighting the municipalities that make up

La Macarena region. Throughout the 2000 decade the density of illicit crops was reduced in the area compared to other regions of the country. By 2008, which is the last registry available up to date, La Macarena region did no longer show the highest density of coca crops. Crop eradication in the area has been concentrated in the municipalities of Puerto Rico and Vistahermosa, which at the start of 2007 reported the highest density of coca crops in La Macarena region.

Map 4

Density of coca crops in La Macarena region within the national picture 2000-2008





Source: Authors based on information from SIMCI.

Figure 6 shows the evolution of the hectares eradicated (through aerial or manual campaigns) in the area covered by the program. Throughout the years previous to the establishment of the Distension Zone, the illicit crops eradication efforts were increased with the intensification of the aerial spraying campaigns. These efforts were reduced almost completely during the period of peace negotiations (1998-2002). Once the peace talks were canceled and the *Distension Zone* was eliminated, in February of 2002, aerial spraying of coca crops continued. In 2005, with the arrival of Plan Verde for the manual eradication campaigns and the creation of the Mobile Eradication Groups, the eradication strategy in the area was modified, giving higher priority to the manual mechanism. This turn in the composition of eradication efforts is clearer with the arrival of the PCIM in 2007, a time when the number of sprayed hectares is reduced and the number of manually eradicated hectares is increased. This is a first fact that reflects the change in the strategy in the fight against drugs with the PCIM; although spraying campaigns are not completely abandoned, they were slowly replaced by manual eradication startegies. In 2008, 62 percent of illicit crops eradication in La Macarena region was accomplished through manual eradication, and the remaining 38 percent with aerial spraying. While in 2006, the year previous to the PCIM implementation, 85 percent of eradication was made through aerial aspersion and only 15 percent was done manually. This transition has been less marked at the national level. By 2008, the

number of manually eradicated hectares corresponded to 53 percent and the remaining 47 percent corresponded to aerial aspersion.

Hectars

18000

16000

14000

12000

10000

8000

6000

4000

2000

0

Total

Aerial

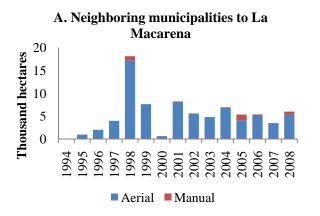
Manual

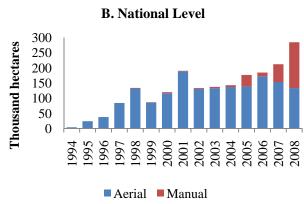
Figure 6. Coca crops eradication in the area covered by the PCIM, 1994-2008

Source: Dirección Nacional de Estupefacientes (2010).

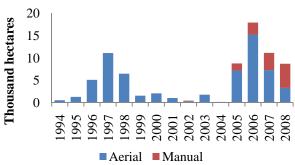
Figure 7 presents the evolution of forced eradication (manual and aerial spraying) in the neighboring municipalities to the region covered by the PCIM (A), the national total (B) and in the municipalities of La Macarena (C). At the national level, eradication has kept a growing trend from 1994 until 2008, with a gradual substitution of manual for aerial eradication. In the case of La Macarena's neighboring municipalities, this growing trend has not taken place, but on the contrary, the number of eradicated hectares has been kept at a stable level. Regarding the substitution of manual for aerial eradication, it has not occurred in La Macarena's neighboring region as it has in the municipalities covered by the PCIM. However, the appearance of manual eradication in La Macarena in 2002 is lagged, as from 1998 manual eradication campaigns have been developed both at the national level and in the neighboring municipalities.

Figure 7. Coca crops eradication, 1994-2008.





C. Municipalities of La Macarena



Source: Dirección Nacional de Estupefacientes (2010).

Note: (*). Neighboring municipalities to La Macarena correspond to: Meta: Puerto Lleras, Puerto Concordia, Mapiripán, Fuente de Oro, Lejanías, Granada, El Castillo, Cubarral, El Dorado y San Martín; Huila: Colombia, Baraya y Tello; Guaviare: San José del Guaviare y Calamar; and Caquetá: San Vicente del Caguán.

In the PCIM strategy, these forced eradication campaigns are articulated with the alternative development programs to encourage families to voluntarily abandon the production of illegal substances. Resource allocation for these programs in the area was presented on two occasions. Between 2000 and 2003 resources from the program *Plante* were allocated to the municipalities of the area that is currently covered by the PCIM. This program gave support to peasant families, providing them with technical assistance and resources that were conditioned to them substituting illicit crops for licit ones. In 2003, when this program was transformed into the set of *Alternative Development Programs*, made up of the *Forest Ranger Households Program* (PFGB) and the *Productive Projects Program* (PPP), resources were no longer delivered to these municipalities. Only until 2006, for the PFGB, and 2007, for the PPP, were these programs again implemented in the area due to the start-up of the PCIM. The budget allocations to the PFGB in La Macarena region have taken place in the municipalities of Puerto Rico and Vistahermosa, which were, as

mentioned before, the two locations with the highest density of coca crops in the area (see Map 4). The resources were executed beginning in 2006 and were increased until 2008 (see Figure 8). Again, the increase in resources reflects the change in strategy in the fight against illegal drugs, which gave more importance to alternative development programs than to forced eradication campaigns. However, it is worth noting that the amount of resources allocated to alternative development programs in 2008 is lower than the one executed in 2001 for the program *Plante* in La Macarena region. In particular, in 2008 the resources are equivalent to 75 percent of the resources that were allocated to the area in 2001. It is worth highlighting that *Alternative Development Programs*, particularly the *Forest Ranger Households Program*, brought a reduction of violence in the areas where they were implemented during the first execution phases of the program (Martinez, 2008).

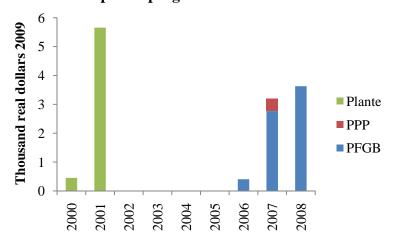


Figure 8. Alternative development programs' resources in La Macarena, 2000-2008

Source: Authors calculation based on information from Acción Social (2009).

The efforts to reduce illicit crops in the area have been accompanied by a fall in the number of coca cultivated hectares. Figure 9 shows the evolution of total coca crops in the department of Meta and in La Macarena region, separating the Exclusion Zone, which corresponds to 387,000 hectares, within the municipalities covered by the PCIM, where aerial aspersion campaigns are not carried out to eradicate crops (UNODC, 2009). The largest reduction of the cultivated area in the municipalities of the PCIM took place between 2005 and 2006, which coincides with the largest increase in the number of eradicated hectares in the area. The behavior is not the same as in the

_

¹⁰ This zone was established to protect the ecosystems in this area (UNODC, 2009).

decreasing trend. Between 2006 and 2007 there was a slight increase in the number of cultivated hectares in the municipalities of La Macarena, which was counteracted in 2007 with the arrival of the PCIM, when the tendency was once again reverted, making it decreasing again until the last available figures for 2009. Although most of the reduction took place in years previous to the PCIM, it could be asserted that the establishment of the program allowed consolidating the reduction of illicit crops in the area. This behavior shows that the new strategy has been effective in reducing illicit drugs production in the region. However, it is not clear at plain sight which of the program's components has had the largest impact on such a reduction, although it does reflect that the coordination between the different instances and the different programs has permitted the accomplishment of one of the outlined objectives: the reduction of coca crops in the region.

Hectares **Exclusion Zone** PCIM Meta

Figure 9. Area with coca crops in the Meta department, 2002-2009

Source: UNODC (2010).

Note: Exclusion Zone corresponds to a region in La Macarena where there are not implemented

forced eradication campaigns.

The reduction of the area under coca cultivation has been accompanied by a reduction in the productivity of coca crops and of potential cocaine production. While the number of coca cultivated hectares in this region went from 22,127 in 2005 to 2,782 in 2009 (going from 76 to 10 percent of the total covered area by the PCIM), UNODC (2010) reports a fall in the productivity of coca crops in La Macarena area, which went from 6.6 harvests per year in 2005 to 5.4 harvests in

2008. Moreover, potential cocaine production in the area was reduced by 46 percent between 2008 and 2009 going from 26 mt to 14 mt (UNODC, 2010 pp.82).

Additionally, the presence of the State in the region is a channel to fight illicit drugs production. Between 1998 and 2008, 453 laboratories used for the production of narcotics in the region were dismantled. During the *Distension Zone* (1998-2002), the dismantling of laboratories was not carried out. Between 2002 and 2003, the years following the breaking-off of the peace negotiations with the FARC, close to 20 laboratories per year were destroyed. In 2006, when the area was beginning to be cleared for the start-up of the PCIM, a total of 171 laboratories were destroyed, the largest number of take downs per year observed over the whole period. Vistahermosa, which is the municipality where the Fusion Centre of the PCIM is located, has faced the largest number of laboratories dismantled and raid operations (see Figure 10). It is not surprising that this municipality and Puerto Rico are the two places that show the largest destruction of laboratories and cocaine processing facilities due to the fact that they have the highest density of illicit crops, and thus, access to raw materials (coca leaf) for the production of cocaine is facilitated.

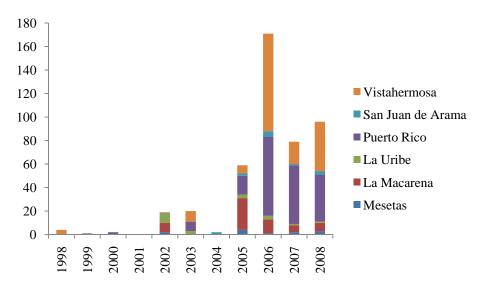


Figure 10. Cocaine laboratory dismantling in La Macarena region, 1998-2008

Source: Observatorio de Drogas de Colombia.

The dismantling of laboratories was accompanied by the confiscation of the coca leaf and its derivatives in the area. The confiscation of coca leaf and coca leaf in process makes up the largest portion of confiscations to drug traffickers, followed by coca base in process. In 2007, the largest

number of kilograms of coca leaf, gallons of coca leaf and coca base in process was confiscated, as can be observed in Figure 11.

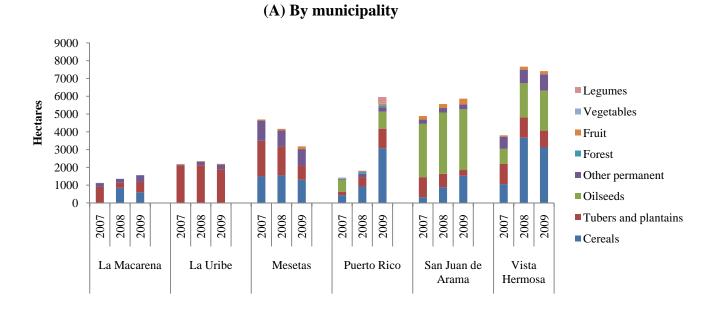
70.000 16.000 14.000 60.000 finished products) 12.000 50.000 Kilograms 10.000 40.000 8.000 30.000 6.000 20.000 4.000 10.000 2.000 0 2003 2006 2008 2002 2004 2005 2007 2001 coca leaf coca paste coca base basuco cocaine coca leaf in process coca paste in process cocaine in process

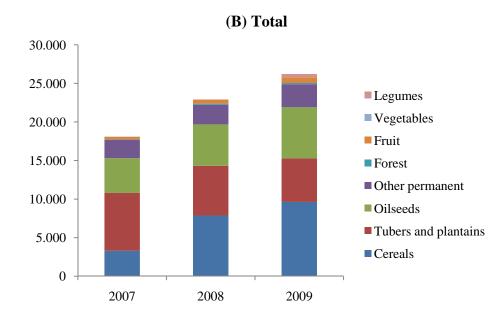
Figure 11. Confiscation of coca leaf and its derivatives in La Macarena region, 1999-2008

Source: Authors calculation based on information from Observatorio de Drogas de Colombia.

Regarding licit crops, which are the alternative to illicit crops, the municipalities covered by the PCIM raised the number of cultivated hectares and agricultural production between 2007 and 2009. Figure 12 presents the evolution of the area with licit crops in the six municipalities that make up the region of La Macarena (Panel A) and the region's total (Panel B) by type of product. There are differences in the behavior of crops across municipalities throughout the whole area. In the municipality of Mesetas there was a reduction of the cultivated area throughout the period, while in the remaining municipalities there was an increase. In the aggregate, there was an increase in the cultivated area of about 44 percent between 2007 and 2009. In La Macarena's neighboring municipalities, the increase in the cultivated area for the same period was of approximately 18 percent, and at the national level it was 9 percent. The composition of agricultural crops in the municipalities of La Macarena has remained stable across the three years considered. In the municipalities covered by the program there is a predominance of cereals, tubers, botany and oilseeds.

Figure 12. Area with licit crops in La Macarena region, 2007-2009





Source: Authors calculation based on information from the Ministry of Agriculture and Rural Development. *Note:* For semester crops the figure includes only the cultivated area that reported the higher area for each year.

Despite the differences across municipalities in the behavior of cultivated areas, the production measured in tons of products increased in the entire region. Figure 13 presents the evolution of the

agricultural production in the municipalities of La Macarena for the period between 2007 and 2009, reflecting the growth of production, and even more important, the growth of productivity.

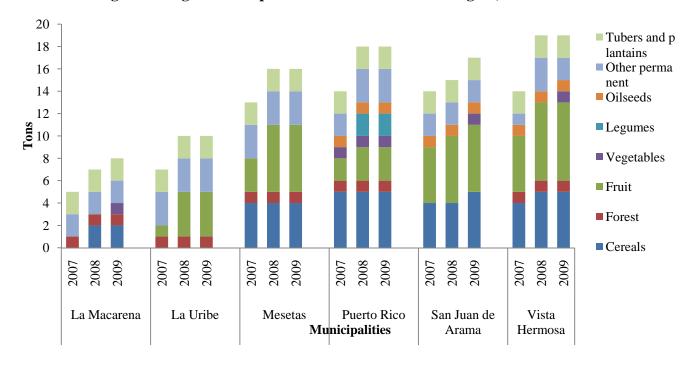
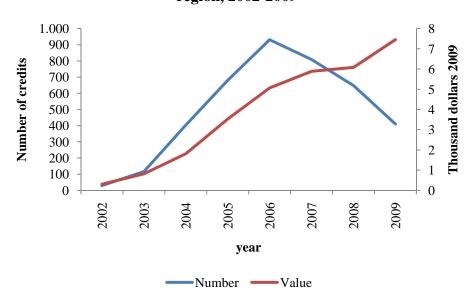


Figure 13. Agricultural production in La Macarena region, 2007-2009

Source: Authors calculation based on information from the Ministry of Agriculture and Rural Development.

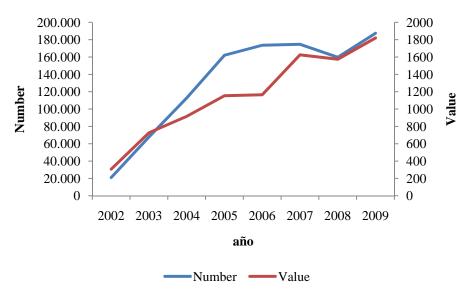
Since the PCIM began to be implemented, the financing for agricultural producers provided by the State in the area of La Macarena has shown a reduction in the number of credits and an increase in their value. In particular, the number of loans granted to producers by Finagro (big and small) has been falling since 2006, but their real value has kept the increasing trend observed since 2002 (see Figure 14). This behavior runs opposite of what had occurred with the number and value of credits granted at the national level, which have increased from 2002 until 2009 (see Figure 15).

Figure 14. Number and value of Finagro credits granted to producers in La Macarena region, 2002-2009



Source: Authors calculation based on information from Finagro.

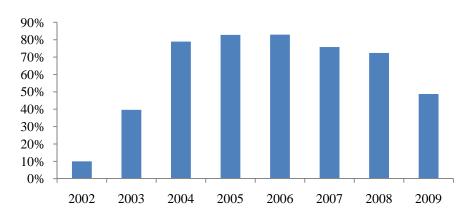
Figure 15. Finagro credits granted to agricultural producers in Colombia, 2002-2009



Source: Authors calculation based on information from Finagro.

It is worth noting that the participation of small producer credits in the total number of credits granted in the region of La Macarena has been falling across time (see Figure 16). In that area, the value of credits has increased for producers, but the value of the credits granted to small producers fallen side by side with the total number of credits.

Figure 16. Participation of small producer credits in the total number of credits in La Macarena, 2002-2009



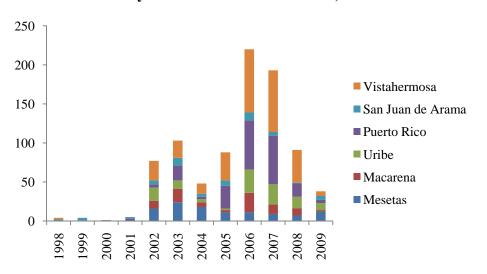
Source: Authors calculation based on information from Finagro.

It is worth highlighting that the previous results indicate that the type of crops that are being encouraged in the intervened region require scale economies to be efficient. If this is the case, it is not questionable that the credits to drive licit activities and encourage the creation of legal jobs have been granted to large producers that have the capacity to operate at a large scale and generate and drive licit employment in the region.

It is also important to analyze the recovery of territorial control and the reestablishment of security, principal objectives of the PCIM. The armed confrontations between the National Armed Forces and the illegal armed groups, initiated by the former, show an increasing behavior throughout the decade, with two important changes, as Figure 16 shows. The first was an increase when the *Distension Zone* ended in 2002 and the State Armed Forces entered to recover territorial control. Then, in 2006, year previous to the arrival of the PCIM, the confrontations initiated by the National Armed Forces increased considerably. This, more than reflecting an intensification of violence in the region, represents the consolidation of territorial control on behalf of the Armed Forces. Given that these confrontations are initiated by the National Armed Forces, it is an indicator of the increase in the presence of the Army and the Police in the region of La Macarena.

Even more important, this argument is reinforced by the sharp fall in confrontations registered between 2007 and 2009. In particular, Figure 17 indicates that despite violence increasing in a considerable way in the phase of recovery, as time went by and as the presence of the State was consolidated, the levels of violence have been falling consistently, going from 220 confrontations at its maximum point in 2006 to less than 40 confrontations in 2009. The largest presence has taken place in the municipalities of Vistahermosa and Puerto Rico. Figure 18 reveals the phase in which each municipality covered by the PCIM is at, according to the CCAI (2010) report. The municipalities that find themselves in the more advanced phase of the consolidation process (stabilization stage) are those in the northeast area of La Macarena region, which rightly correspond to Vistahermosa and Puerto Rico.

Figure 17. Confrontations between the National Armed Forces and the illegal armed groups initiated by the National Armed Forces, 1998-2009



Source: Observatorio de Derechos Humanos from the Office of the Vice President.

Estabilización

Presencia integral y permanente del Estado

Seguridad comunitaria
Subsistencia inmediata
Construcción de Confianza

Operaciones militares para recuperar la seguridad territorial
Acompañamiento humanitario
Construcción confianza

Figure 18. Phases of the municipalities in the PCIM

Source: CCAI (2010). "Conceptos y avances". Ministry of Defence.

The consolidation in the region has been taking place from north to south. Vistahermosa, which is the municipality where the Fusion Centre was established and where the work commissions arrive, is where recovery of territorial control has mostly been achieved.

Parallel to the intensification of confrontations between the illegal armed groups and the National Armed Forces, the number of victims to land mines in the region has increased (see Figure 19). This is because, before the arrival of the PCIM, there was no presence of civilians or Armed Forces in certain places of the region, while the presence of illegal armed groups predominated. In this way, the number of land mine victims is a reflection of the presence of the State forces and civilians in regions where there was no civilian population before. It can be observed that during the *Distension Zone* (1998-2002), there were practically no victims to land mines. Then, in 2005, they strongly increased, a fact that coincided with the arrival of *Plan Verde* for manual eradication of crops in the area. This *Plan* was suspended due to the large number of eradicators dead and injured, consequence, in the majority of cases, of the explosion of land mines while these individuals performed their duty to eradicate illicit crops (Semana, 2006).

1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 —Civils —Militaries

Figure 19. Wounded by land mines in La Macarena region, 1998-2009

Source: Observatorio de Derechos Humanos from the Office of the Vice President.

The presence of the illegal armed groups in the area can be measured by the number of violent acts that they perpetrate. Kidnappings, for example, were reduced between 2005 and 2006, year previous to the arrival of the PCIM, and have kept a decreasing trend until 2009. This, however, reflects a national trend. With regards to the number of terrorist acts, they also fell in 2006, but increased in the last year (see Figure 20).

Number of terrorist acts Number of kidnappings

Figure 20. Violent acts by the illegal armed groups in La Macarena, 1998-2009

Source: Observatorio de Derechos Humanos from the Office of the Vice President.

kidnapping

•terrorism

Desertion in the guerrilla and the number of rescued kidnapped victims increased with the arrival of the PCIM. Desertion in the guerrilla began in 2002 and reached its maximum level in 2008 (see Figure 21).

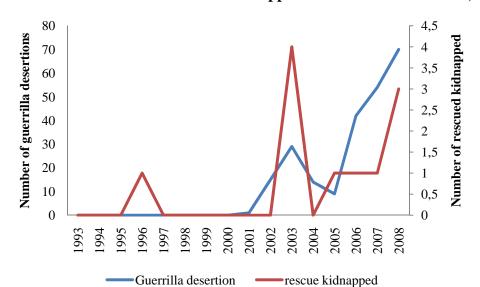


Figure 21. Guerrilla desertion and rescued kidnapped victims in La Macarena, 1993-2008

Source: Observatorio de Derechos Humanos from the Office of the Vice President.

Figure 22 shows the homicide rate in the municipalities of La Macarena. This rate increased beginning in 2001, but the trend was reverted starting in 2007, with the start of the PCIM. This indicates that the arrival of the National Armed Forces to the intervened area has been effective in controlling violence in the area. In contrast to the situation at the national level, the homicide rate in the area still shows levels that are considerably high (Figure 23). However, the reduction has been more marked in this region than at the national level. The neighboring municipalities to those intervened by the PCIM presented a lower reduction, of 16 percent between 2006 and 2007.

500 450 400 350 300 250 200 150 100 50 1993 La Uribe Mesetas La Macarena San Juan de Arama -Vistahermosa Puerto Rico

Figure 22. Homicide rates in La Macarena, 1993-2008

Source: Municipalities Panel from CEDE

■La Macarena average ■ National ■ Neighbors

Figure 23. Homicide rates in La Macarena and at the national level, 1993-2008

Source: Municipalities Panel from CEDE and National Police (2009).

The foreseen improvements in violence indicators have been accompanied by a higher number of Police captures. Figure 24 shows the evolution of this variable from 1993 until 2008. Two peaks are observable in total captures in the municipalities of La Macarena. The first one occurs at the end of the *Distension Zone* in 2002 and the next one in 2006, year previous to the arrival of the PCIM, time in which the homicide rate reached the highest level in the past two decades.

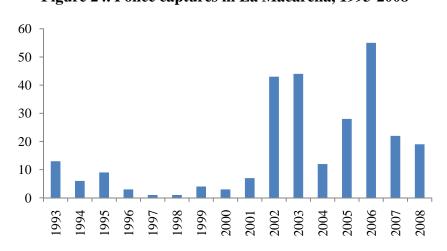


Figure 24. Police captures in La Macarena, 1993-2008

Source: Municipalities Panel from CEDE.

The attacks against civilians also fell in 2008, which contrasts against the increasing trend observed in the zone during the previous years. The principal actors in these attacks are unknown

perpetrators, followed by the FARC. Groups such as ELN and AUC have had little presence in the area, which is reflected in their low participation over the total number of attacks (Figure 25).

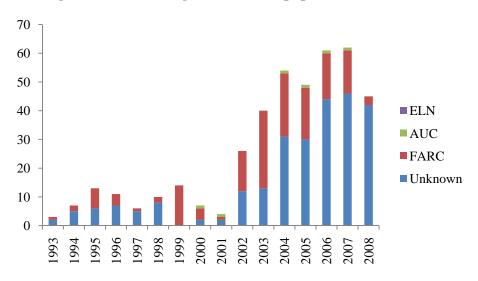


Figure 25. Attacks against the civil population, 1993-2008

Source: Observatorio de Derechos Humanos from the Office of the Vice President.

4.2. Some socioeconomic results of the PCIM

The start-up of social programs offered by the State is another mechanism implemented in the PCIM to accomplish its objectives. This offer is composed by alternative development programs and the programs cared for by the *International Cooperation and Social Action Presidential Agency* to attend the those in need, such as *Familias en Acción*, *Jóvenes en Acción* and *Empleo en Acción*, among others. The selection criteria for the families that can benefit from such programs is the Social Programs Potential Beneficiaries Identification System (Sisbén, for its Spanish acronyms). Figure 26 shows the number of households interviewed by the Sisbén as a portion of the total population of the municipalities of La Macarena between 2004 and 2007, differencing between rural and urban areas. In urban areas there was a larger portion of the population found in Sisbén levels 1 and 2. In San Juan de Arama and Vista Hermosa there are inconsistencies in the household reports of Sisbén levels 1 and 2, as they surpass 100 percent of the population (114 and 148 percent, respectively). The high registries of Sisbén 1 and 2 evidence the need of a high

coverage by social programs in the area given that this group of households holds the potential beneficiaries.

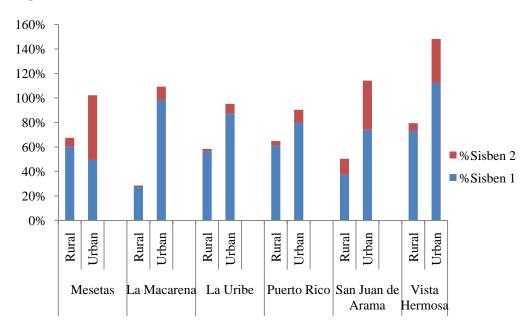
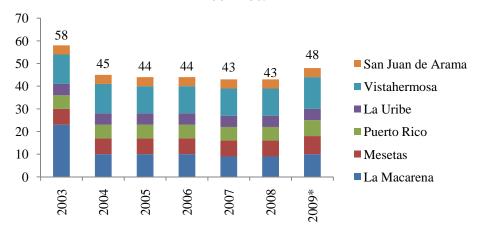


Figure 26. Households in Sisbén levels 1 and 2 in La Macarena, 2004-2007

Source: Authors calculation based on information from Departamento Nacional de Planeación-DNP.

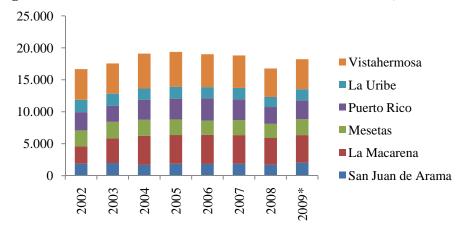
Another of the outlined objectives is to improve the socioeconomic conditions of the families of the Macarena region in terms of education, health, inequality and land property. In general, these programs have improved compared to previous years. However, some of these variables seem to follow national trends more than a particular effect of the program. Investments in education in the region have led to the establishment of new educational facilities for basic and middle education in Vistahermosa (1), La Macarena (1), Mesetas (1) and Puerto Rico (1), going from a total of 43 to 48 institutions in the area between 2008 and 2009 (see Figure 27). The initial reduction between 2003 and 2004 responds to the fact that, in 2003, the fusion of educational facilities at the national level was initiated. However, the situation in 2009 did not reach the levels of 2003. This increase was accompanied by a recovery of the basic and middle education enrollment rates in 2009 compared to 2008, which in previous years exhibited a decreasing trend (see Figure 28).

Figure 27. Educational facilities (basic and middle) in municipalities of La Macarena, 2002-2009*



Source: Ministry of Education, 2010. *Note*: (*) Information for 2009 is preliminar.

Figure 28. Total enrollment in basic and middle education, 2002-2009



Source: Ministry of Education, 2010. *Note*: (*) Information for 2009 is preliminar.

The total number of educational facilities, without restricting them to basic and middle education, increased in the area with the start-up of the PCIM. Between 2006 and 2007 there was an increase of three percent in the number of establishments. However, the first big change in the establishment of educational facilities in the area took place in 2004, when the number of educational establishments increased by ten percent. This occurred primarily in the urban area, while the increase of 2007 was concentrated in the rural areas. In 2008, the number of establishments was reduced until reaching the same level of 2007. 95 percent of such establishments are concentrated in the rural areas of the municipalities (see Figure 29). The net

coverage rate, which indicates how effective the increase in installations to raise assistance has been, fell for primary and basic education and increased for transition and secondary (see Figure 30).

■ Urban ■ Rural

Figure 29. Educational establishments by area in La Macarena region, 2002-2009

Source: Authors calculation based on information from Ministry of Education, 2010.

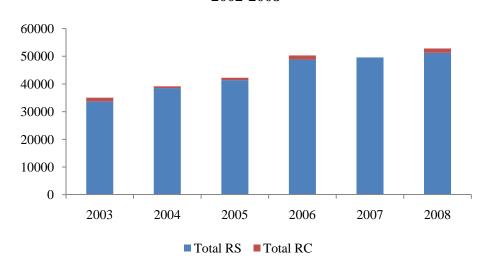
100% 90% 80% 70% Primary 60% •Middle 50% -Basic 40% -Transition 30% 20% Secundary 10% 0% 2005 2006 2007 2008 2009

Figure 30. Net coverage rate by educational level in La Macarena, 2005-2009

Source: Authors calculation based on information from Ministry of Education, 2010.

On the other hand, the coverage of the Health Social Security System has expanded in the area during the last few years. This appears to be the result of an expansion in the national coverage, but even then, it is worth highlighting that between 2003 and 2008 the number of affiliates both to the Contributive Regimen (RC for its Spanish acronyms) and to the Subsidized Regimen (RS for its Spanish acronyms) increased by approximately 50 percent (see Figure 31). Meanwhile, growth at the national level was close to 60 percent and in the neighboring municipalities to La Macarena it was of approximately 33 percent. The RC went from representing 1.65 percent of total affiliates to three percent of total affiliates, which reflects a slight increase in employment formality in the area given that the contribution to the health system is made by people with a formal employment.

Figure 31. Affiliates to the Health Social Security General System in La Macarena 2002-2008



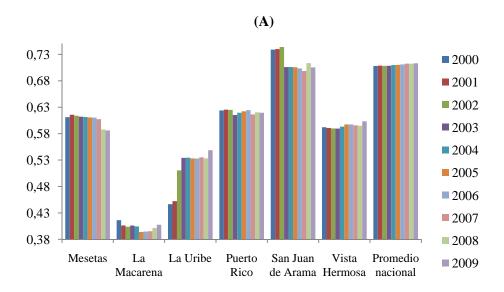
Source: Ministry of Social Protection.

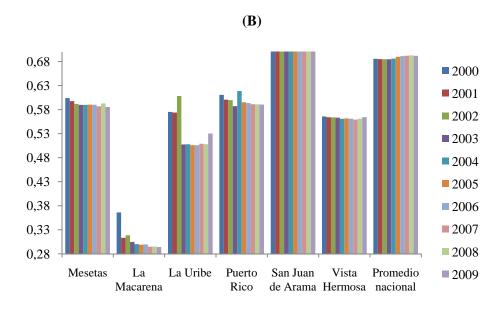
4.3. Some long-run results

Regarding inequality in the region, a crucial issue is land inequality. In the municipalities covered by the PCIM, the land property Gini has fallen slightly throughout the 2000 decade, except in the case of La Uribe which exhibits an increase trend in inequality. The second indicator of land inequality, the land Gini, has fallen slightly in the majority of municipalities, except in La Uribe where, again, an increase in the level of inequality in the tenancy of land is observed (see Figure 32). The situation in the municipalities of La Macarena in terms of inequality is more favorable than in the national average.

¹¹ The construction of the Gini coefficients was based on two approaches: predial (lands) and proprietors. The analysis of property was carried out with the traditional registries, in which each land registry corresponds to a single property. Such registries have information about the land area and the appraisal of each registry. The size of the properties found in the land registry was used to calculate the land Gini, which is the concentration indicator usually calculated for Colombia.

Figure 32
Property Gini (A) and Land Gini (B), 2002-2009





Source: IGAC

Another important factor is registration of property titles. The land informality index, that is, the proportion of properties without a formal title, has fallen between 2000 and 2009 in the six municipalities of La Macarena (see Figure 33). Although in general the level of land inequality is higher than the national average, the reduction that took place in the region is higher than the

one that took place in the country. This reduction reflects that property rights have been assigned in the area, accomplishing one of the objectives of the PCIM. This is explained by the allocation of wastelands to tenant farmers in the region, which goes in line with the reduction of land tenancy inequality. The number of allocated wastelands increased in a pronounced way going from 20 in 2004 to 100 in 2007. Between 2004 and 2007, 13,725 hectares were allocated which is equivalent to 47 percent of the territory under the PCIM (see Figure 34).

Figure 33. Land informality index in the municipalities of La Macarena and at the national level, 2000-2009

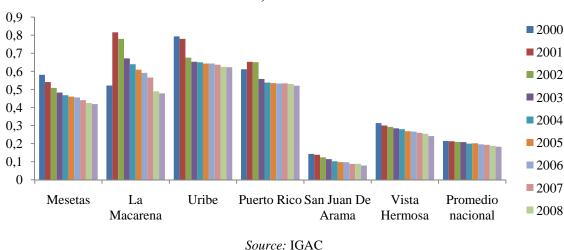
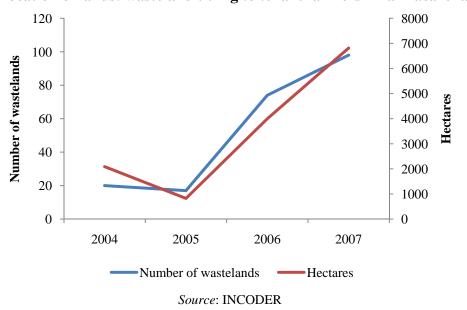
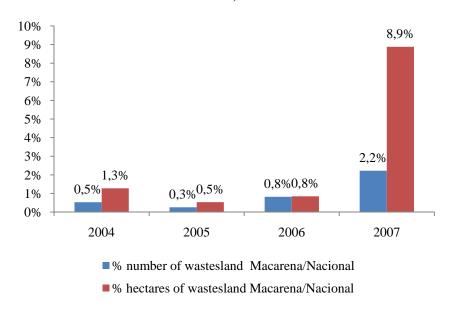


Figure 34. Allocation of lands: wasteland titling to tenant farmers in la Macarena, 2004-2007



Although wastelands were also allocated in the rest of the country, the increase in the Macarena region was much more pronounced than in the rest of the territory. This implied that the number of allocated hectares per year went from representing close to 0.8 percent of the national total to 8.9 percent of the total, and the number of wastelands also increased its participation from 0.8 percent to 2.2 percent (see Figure 35).

Figure 35. Participation of wasteland titling to tenant farmers in La Macarena over the national total, 2004-2007



Source: Authors calculations based on information from INCODER

Another objective to revise, in terms of the accomplished results, has to do with the levels of access to justice and effective protection of International Humanitarian Law (IHL). Forced displacement is a recurrent phenomenon in the area in violation of the IHL. The PCIM has allowed reducing the number of expelled people from the area due to forced displacement since 2006, achieving in 2009 levels close to those observed in 2001 (see Figure 36). In particular, forced displacement in the intervened area was reduced by 74 percent between 2006 (moment just before the PCIM implementation) and 2009.

14.000 12.000 Vistahermosa 10.000 ■ La Uribe 8.000 ■ San Juan de Arama 6.000 ■ Puerto Rico 4.000 ■ Mesetas 2.000 ■ La Macarena 0 2005 2006 2007 2008 2009 2002 2003 2004 2000 2001

Figure 36. Forced displacement (by expulsion) in La Macarena, 2000-2009

Source: Observatorio de Derechos Humanos from the Office of the Vice President.

It is worth noting, however, that there is still much to be done in this field. Despite the marked reduction in forced displacement indicators, the levels continue to be high. In particular, according to 2009 statistics, 2,841 people were displaced, which is equivalent to a displacement rate of 2,778 per 100,000 inhabitants, much higher than in the majority of the country's municipalities, which presented a displacement intensity rate close to 316 (Figure 37).

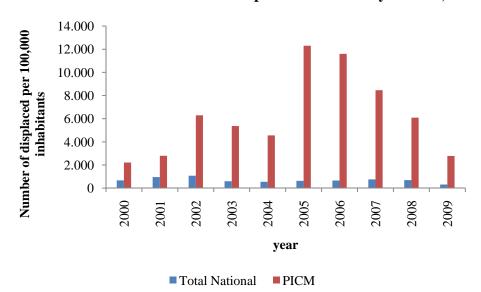


Figure 37. National and La Macarena's displacement intensity indexes, 2000-2009

Source: Observatorio de Derechos Humanos from the Office of the Vice President.

Human Rights protection results are not so positive when the number of massacres that occurred in the region is analyzed. In 2008 there were 3 massacres in the area: one in the municipality of Vistahermosa and two in San Juan de Arama. These were specific facts that mark no trend, but on the contrary, in 2007 and 2009 there were no massacres. However, in previous years to the PCIM there was a higher frequency of massacres per year in the area (Figure 38).

3,5
3,0
2,5
2,0
1,5
1,0
0,0

Wistahermosa
San Juan de Arama
Puerto Rico
Mesetas
La Macarena

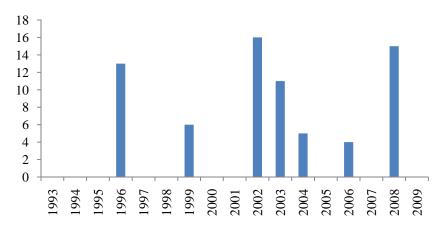
La Macarena

Figure 38. Massacres in municipalities of La Macarena, 1993-2009

Source: Observatorio de Derechos Humanos from the Office of the Vice President.

The number of victims of the massacres that took place in the municipalities of La Macarena is above 10 victims per year in 1996, 2002, 2003 and 2008 (see Figure 39). Particularly in 2008, the number of victims was 15.

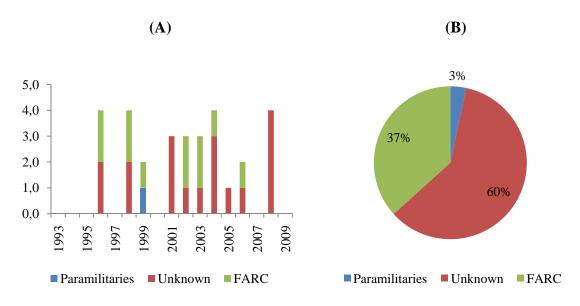
Figure 39. Number of massacre victims in La Macarena region, 1993-2009



Source: Authors calculation based on information from Observatorio de Derechos Humanos from the Office of the Vice President.

The massacres that took place in La Macarena were perpetrated principally by unknown actors, followed by FARC (Figure 40, Panel A). Of the total massacres during the period between 1993 and 2009, unknown actors, FARC and the paramilitaries executed 60, 37 and 3 percent of the massacres, respectively (Figure 40, Panel B).

Figure 40. Number of massacres in La Macarena by type of actor (A) and their participation (B), 1993-2009



Source: Authors calculation based on information from Observatorio de Derechos Humanos from the Office of the Vice President

In terms of access to justice, at the end of 2009 all the Macarena municipalities counted with the presence of at least one judge and in Vistahermosa with an Attorney's office (El Tiempo, 2009).¹²

Last, regarding the objective of achieving local governance and effective citizen participation, the number of votes by the population in elections has increased throughout the last few years. Although this fact is not directly attributable to the PCIM, as its last registry came before to its start-up (2007), a progressive improvement is observed that allows reaching the objective more easily. In mayor elections in 2007 the highest number of votes was registered since the elections of 1988 (see Figure 41). This reflects higher citizen participation and, in turn, a higher legitimacy of the municipalities' mayors.

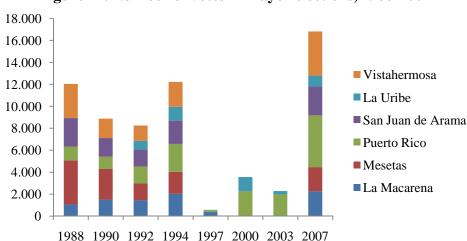


Figure 41. Number of votes in mayor elections, 1988-2007

Source: Authors calculations based on information from Registraduría Nacional de Colombia.

5. Conclusions and recommendations

5.1. Conclusions

The results presented in this study show that since the implementation of the *Macarena Integral Consolidation Plan* in the municipalities that border the mountain range of la Macarena, an

¹² El Tiempo (2009). Regreso del Estado a La Macarena, zona clave par a las Farc, es el desafío del Plan Consolidación. Diciembre 14 de 2009. Available at: http://www.eltiempo.com/colombia/justicia/ARTICULO-WEB-PLANTILLA NOTA INTERIOR-6796945.html

important reduction of illicit crops has taken place in the area. This has been achieved with a substitution of manual eradication efforts for aerial efforts and an increase in the resources for *Alternative Development Programs*. These crops have been replaced by licit crops, as there has been an increase in the number of hectares of legal crops in the region. The financing of these licit crops has increased in real value but not in the number of granted credits, in addition to the reduction in participation of credits to small producers.

Regarding the recovery of territorial control by the State, the homicide rate has fallen more rapidly in the area than in the rest of the national territory. Moreover, the kidnappings and confrontations between the illegal armed groups and the National Armed Forces have dropped. This accompanied by an increase of both guerrilla deserters and the number of kidnapped victims that have been rescued.

Regarding socioeconomic conditions, some social indicators such as land inequality and health and educational coverage have improved. Additionally, access to justice has improved due to the arrival of judges to the area, together with a higher protection of human rights. Nonetheless, there are still important challenges ahead in this field. Investment, principally in infrastructure, has increased, which implies a higher connectivity of the area to other regions of the country, thus improving market access for licit products, and better educational and healthcare facilities.

Up to this moment short-run results have been obtained, but the PCIM is a long-run program and it should be managed and evaluated as such. This represents several challenges for the program. First, given that the area of La Macarena used to have almost no State presence or assistance to the population before the implementation of the program, the consolidation of the State's presence in the territory generates immediate and visible results, but it is important to preserve them through time. Second, the program, focused in a single region, can shift the problems it had before the intervention to neighboring areas or other parts of the Colombian territory. In the indicators that were presented, in which the results for the six neighboring municipalities to the Macarena are shown, it stands out that the improvements in the municipalities in the Macarena region are higher than those of these neighboring municipalities. Thus, measures like these should aim for a wide coverage and make sure to eliminate the structural causes behind these differences. Additionally, other evaluations should monitor what happened in bordering municipalities after the PCIM implementation in the area of La Macarena.

5.2. Recommendations

The studies about the PCIM that exist so far have presented some recommendations to be taken into consideration. In terms of presence of the State's institutions and the relationship with the community, it stands out that the importance of the presence of civil institutions and a bigger leadership of them within the PCIM, is a common point in all the studies (Isacson and Poe (2009), Bálcazar (2009) and DeShazo et al. (2009)). Until now, the Military Forces have carried out additional duties to generating security in the area, which should be taken over by civilians. Additionally, a deeper involvement of the communities in the decision-making process is recommended as well as a reduction of repressive methods against the community for having been linked to the guerrilla (Isacson and Poe, 2009).

Regarding the implementation of the strategy, the time taken to install the programs to achieve security in the area is too long. On the other hand, there is a need for more flexibility on the part of civil agencies in the area as there are many bureaucratic processes to follow (Balcázar, 2009) and there are challenges in the coordination between the institutions that make part of the program implementation (DeShazo et al., 2009).

For the reduction of illicit crops it is necessary to present alternatives to illicit crops before eradication begins, considering that the presence of illicit crops makes it more difficult to generate incentives towards the generation of licit activities in the area (Isacson and Poe (2009), Bálcazar (2009) and DeShazo et al. (2009). In order to be able to accomplish a definitive illicit crops substitution and for the PCIM to be successful, it is important to make efforts in favor of land titling (Isacson and Poe (2009) and Duncan and Reyes (2009)). The latter accompanied side by side by the strengthening of efforts on education, health and the judicial system (DeShazo et al., 2009).

From the results presented in this study, there are some additional recommendations to be considered. Although advances in health and education show a gradual increase in coverage, they require bigger efforts by the State. Land inequality has fallen, but as the other studies well highlight, the efforts in favor of land titling must be a central point to achieve reduction of illicit crops. Additionally, the presence of judicial entities must be widened in all municipalities of the region. Regarding the substitution of licit crops for illicit crops, a point to consider is the financing

of small producers, which have been displaced by the number of credits granted to large producers.

6. References

- Arreaza, C., García, D. y Tickner, A.B. (2010). Actores violentos no estatales y narcotráfico en Colombia. To be published in the book *Drogas Ilícitas en Colombia*, Alejandro Gaviria y Daniel Mejía (editores), Ediciones Uniandes, Universidad de los Andes, Bogotá, Colombia.
- 2. Balcázar, A. (2009). Lecciones Aprendidas del PCIM. *Working Paper*. Centro de Coordinación de Acción Integral. Bogotá, Colombia. Febrero de 2009.
- 3. Cano, C. G. (2002). Reinventando el Desarrollo Alternativo. Colección Punto de Vista, Corporación Colombiana Internacional. Bogotá, Colombia.
- 4. Center for International Policy (2009). Integrated Action. May 26, 2009. Available at: http://www.cipcol.org/?p=873
- 5. Centro de Coordinación de Acción Integral CCAI (2009). Plan Nacional de Consolidación. Presidencia de la República. Bogotá, Colombia.
- 6. Centro de Coordinación de Acción Integral (2010). Reporte Ejecutivo Plan Nacional de Consolidación. Presidencia de la República de Colombia. Available at: http://www.accionsocial.gov.co/documentos/Reporte_Eject_PNC_2010_Vf.pdf
- 7. Departamento Nacional de Planeación DNP (2002). Plan Nacional de Desarrollo para un Estado Comunitario: 2002-2006. Bogotá, Colombia.
- 8. Departamento Nacional de Planeación DNP (2003). Conpes 3218. March 3, 2003. Bogotá, Colombia.
- 9. Departamento Nacional de Planeación DNP (2006). Balance Plan Colombia: 1999–2005. Bogotá, Colombia.
- 10. Departamento Nacional de Planeación DNP (2006). Plan Nacional de Desarrollo 2006-2010. Bogotá, Colombia.
- 11. Departamento Nacional de Planeación DNP (2007). Estrategia de Fortalecimiento de la Democracia y el Desarrollo Social (2007-2013). Dirección de Justicia y Seguridad. Bogotá, Colombia. Febrero.

- 12. DeShazo, P., McLean, P. y Mendelson, J (2009). Colombia's Plan de Consolidación Integral de la Macarena, an Assessment. Center for Strategic and International Studies (CSIS) Americas Program. Washington D.C., United States. June.
- 13. Duncan, G. y Reyes, A. (2009). Policy Paper: Plan de Consolidación de la Macarena. September, 2009. Available at: http://www.nuevoarcoiris.org.co/sac/files/oca/analisis/Policy_Paper_Duncan_Reyes.pdf
- 14. El Nuevo Herald (2009). EEUU replicará en Afganistán estrategias de Plan Colombia. May 5, 2009. Available at: http://www.elnuevoherald.com/414/story/397161.html
- 15. El Tiempo (2002). Fin a la Zona de Distensión. February 21, 2002. Available at: http://www.eltiempo.com/archivo/documento/MAM-1364550
- 16. El Tiempo (2010). Muere el Mono Jojoy.
- 17. Forero, J. (2009). Colombian Farmers Get Broad Incentives to Forgo Coca Crops. The Washington Post Foreign Service (Washington: May 22, 2009). Available at: http://www.washingtonpost.com/wp-dyn/content/article/2009/05/21/AR2009052104318.html?referrer=emailarticle
- 18. Government Accountability Office GAO (2008). PLAN COLOMBIA Drug Reduction Goals Were Not Fully Met, but Security Has Improved; U.S. Agencies Need More Detailed Plans for Reducing Assistance. October.
- 19. Marcella, G. (2009). Democratic Governance and the Rule of Law: Lessons from Colombia. December 2009
- 20. Martinez, C. (2008). Impacto del Programa Familias Guardabosques sobre la Criminalidad. Working paper 2008-26, CEDE. Departamento de Economía. Universidad de los Andes. Bogotá, Colombia. Mayo.
- 21. Mejía, D. y Restrepo, P. (2010). The War on Illegal Drug Production and Trafficking: An Economic Evaluation of Plan Colombia. Documento CEDE # 19, 2010. Universidad de los Andes.
- 22. Mejía, D. (2010). Evaluating *Plan Colombia*. In: *Innocent Bystander: Developing Countries and the War in Drugs* (chapter 4), Norman Loayza y Phil Keefer (editors.). World Bank published by McMillan/Palgrave.
- 23. Mejía, D. y Rico, D. (2010). La dimensión del problema de la droga en Colombia: producción, tráfico y flujos de recursos en Colombia. A publicarse en el libro *Drogas Ilícitas en Colombia*, Alejandro Gaviria y Daniel Mejía (editores), Ediciones Uniandes, Universidad de los Andes, Bogotá, Colombia.

- 24. Ministerio de Defensa (2007). Política de Consolidación de la Seguridad Democrática. República de Colombia. Documento Oficial. Bogotá, Colombia.
- 25. Ministerio de Defensa (2009). Consolidación de la Seguridad Democrática.: un esfuerzo con decisión y resultados. República de Colombia. Bogotá, Colombia.
- 26. Isacson, A. y Poe, A. (2009). After Plan Colombia, Evaluating "Integrated Action" the next phase of U.S. assistance. Center for International Policy. November.
- 27. ONDCP (2005). Drug Crop Eradication and Alternative Development in the Andes. CRS Report for Congress. November 2005.
- 28. Presidencia de la República (2009). Directiva Presidencial No.1. Marzo 20 de 2009.
- 29. Policía Nacional (2009). Revista de Criminalidad. Bogotá, Colombia.
- 30. Reis, B. (2007). Cooperación para el control social y poblacional. El concepto de la cooperación civil-militar en el caso colombiano. Grupo Sur. Noviembre 19 de 2007. Available at: http://www.gruposur.eu.org/El-concepto-de-la-cooperacion.html
- 31. Semana (2006). Plan Patriota. Revista Semana. Colombia, Febrero 5 de 2006. Available at: http://www.semana.com/noticias-on-line/plan-patriota/92574.aspx
- 32. Semana (2009). La Macarena se consolida. Revista Semana. Colombia, Mayo 23 de 2009). Available at: http://www.semana.com/noticias-nacion/macarena-consolida/124302.aspx
- 33. UNODC (2008). Encuentro Nacional del Programa Presidencial Contra Cultivos Ilícitos (PCI). Informe Ejecutivo.
- 34. UNODC (2009). Monitoreo de cultivos de coca, Colombia. Bogotá, Colombia. Junio.
- 35. UNODC (2010). Monitoreo de cultivos de coca, Colombia. Bogotá, Colombia. Junio.
- 36. UNODC (2005). Alternative Development: A Global Thematic Evaluation. Final Synthesis Report.
- 37. USAID (2008). USAID/OTI Colombia Field Report October December 2008. Available at:

 http://www.usaid.gov/our_work/cross-cutting_programs/transition_initiatives/country/colombia2/rpt1208.html
- 38. USAID (2009). Assessment of the Implementation of the United States Government's Support for Plan Colombia's Illicit Crop Reduction Components. April, 2009.
- 39. Vargas, R. (2006). The Sierra de la Macarena, Drugs and Armed Conflict in Colombia. Tansnational Institut. Drug Policy Briefing N° 19. September, 2006.

- 40. Vargas, R. (2010). Desarrollo alternativo en Colombia y participación social: propuestas hacia un cambio de estrategia. DIAL Diálogo Inter-Agencial en Colombia, Bogotá Colombia.
- 41. Vicepresidencia de la República de Colombia (2004). Panorama actual de los municipios que conformaron la Zona de Distensión. Observatorio del Programa Presidencial de Derechos Humanos y Derecho Internacional Humanitario. Available at: http://www.reliefweb.int/rw/RWFiles2004.nsf/FilesByRWDocUNIDFileName/OCHA-64D2RY-govcol-col-28jan.pdf
- 42. Zorro, C (2010). Políticas de desarrollo alternativo en Colombia. A publicarse en el libro *Drogas Ilícitas en Colombia*, Alejandro Gaviria y Daniel Mejía (editores), Ediciones Uniandes, Universidad de los Andes, Bogotá, Colombia.

7. Appendixes

Appendix 1: Selection method of neighboring municipalities to La Macarena

To select the group of six neighboring municipalities to La Macarena that are used as a reference point to analyze the results achieved by the PCIM, a sample of 26 municipalities close to La Macarena was considered. All possible combinations of six municipalities were constructed with and for each set an average on four observable variables in 2002 was calculated: current tax revenues, homicide rate, number of hectares with coca crops and land Gini. Table A1 presents the observed values for these variables for the municipalities considered.

Table A1. Variables considered for the neighboring municipalities to La Macarena and average for La Macarena, 2002

	Taxation revenue from trade and industry	Homicide rate	Hectares of coca	Land Gini		
Caquetá						
Cartagena del Chairá	103.92	10.83	3989	0.39708		
El Doncello	117.34	348.15	3	0.51266		
Puerto Rico	43.02	161.06	246	0.47177		
San Vicente del Caguán	238.48	140.92	606	0.52199		
Solano	16.43	72.50	1067	0.41412		

Huila

T				
Aipe	434.61	17.15	0	0.74775
Baraya	57.96	165.07	0	0.77223
Colombia	3.81	318.23	0	0.79903
Tello	29.62	65.69	0	0.83668
Villa Vieja	69.75	67.59	0	0.84265
		Meta		
Acacías	824.88	93.23	0	0.7719
Castilla La Nueva	366.63	78.76	0	0.69573
El Castillo	5.50	89.53	0	0.5248
El Dorado	3.22	307.60	0	0.52005
Fuente de Oro	17.18	46.66	0	0.62473
Granada	244.16	107.20	0	0.65168
Guamal	70.41	137.13	0	0.67527
Mapiripán	10.86	48.50	2141	0.66007
Lejanías	19.28	29.14	0	0.54734
Puerto Concordia	11.71	6.87	299	0.6653
Puerto López	224.59	46.72	0	0.73553
Puerto Lleras	6.53	118.03	102	0.69579
San Carlos de Guaroa	679.23	18.20	0	0.66781
San Martín	136.86	120.69	3	0.85057
		Guaviare		
San José Del Guaviare	530.66	157.92	4019	0.49698
Calamar	0.00	145.87	4297	0.37219
	La	Macarena average		
La Macarena	25.03	120.68	1088	0.56503

After this, the average of each variable for each set of municipalities was compared to the averages of La Macarena, using the following formula:

$\frac{\textit{Average of neighboring municipalities} - \textit{Average of La Macarena}}{\textit{Average of La Macarena}}$

Adding the differentials of the averages of each variable, the combination of neighboring municipalities that had the minimum value was selected, that is, the one more similar to La Macarena. The obtained result presented a 9% difference compared to the averages of La Macarena. The set of municipalities selected for the comparison was: Cartagena del Chairá in Caquetá, Colombia in Huila, El Dorado, Mapiripán, Lejanías and Puerto Concordia in Meta.

2002 was selected as the year of reference, given that from 2003 the Democratic Security Policy was already being implemented which, as explained throughout the text, is in some way related to the National Consolidation Policy. Map A1 shows the 20 municipalities that were considered but were not selected, the six municipalities that were selected and the six municipalities of La Macarena.

Legend

Neighboring municipalities
Neighboring municipalities chosen
Municipalities from La Macarena
Rest of the country

Map A1. Neighboring municipalities to La Macarena

Source: Authors.