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Local climate change policy and rural development in Colombia's post-peace agreements context

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ABSTRACT

This study provides information on the gap between policy discourse and policy implementation of climate change (CC) management and peace governance. Following international commitments, the Colombian government developed national policies that respond to CC or extremes, coinciding with peace-agreements made with the Colombian Revolutionary Armed Forces. Indeed, CC and peace are embedded issues. Conflict negatively impacts the environment and increases vulnerability to CC or extremes. Moreover, both policy areas aim for effective agricultural development. This study addresses CC adaptation and peace-agreements management as traveling models translated into policies within the agriculture sector. Drawing from development and political anthropology and the notion of a policy mix derived from political science, the analysis method employs semi-structured interviews of governmental and non-governmental actors. Accordingly, gaps exist between policy models and their local translation within the policy mix. CC management and peace governance embrace diverse actors implementing a multiplicity of dispositives concentrated along the Pan-American highway, with distinct durations, responding to diverse interests, and using several approaches. Within the scope of the policy mix, this study observes fragmentation, discontinuity, extraversion, coherence building and fight for local power. The findings can help formulate and implement more relevant policies to improve CC management and peace governance.

KEYWORDS

Climate change; post-peace agreement; political anthropology; Colombia

Introduction

Colombia is vulnerable to climate change (CC), and the government considers agriculture as among the most vulnerable sectors with respect to national production and agriculture development (IDEAM et al., 2017; IPCC, 2014; Ramirez-Villegas et al., 2012).

Following international recommendations, the Colombian government has made international commitments and formulated climate policies and plans to address CC-related challenges at national, sectoral, and territorial levels (CEPAL, 2013; Cevallos, 2013; DNP, 2016; Howland & Le Coq, 2022; Mariño, 2011; Milhorange et al., 2022; Palacio, 2013; Ulloa, 2011). This process induced policy elaborations, first focusing on mitigation, then adaptation, and finally integrating adaptation and mitigation. Moreover, the

approach mainly focused on economic aspects (impact and opportunity of CC) (Cevallos, 2013; Palacio, 2013). Climate issues are emerging as a part of a new development paradigm (along with sustainable development, good governance, decentralization, and the Sustainable Development Goals) promoted by international actors to national governments (Fressoz & Bonneuil, 2016; Mariño, 2011). Despite studies on the process of climate policy elaboration, analyses are scant, and thus insights for department-level implementation are also lacking.

Climate policy development in Colombia has coincided with the establishment of peace agreements (PAs) between the government and the Revolutionary Armed Forces of Colombia (FARC) in 2016 (Colombian National Government and FARC-EP,

2016). The final Agreements ended the armed confrontations between the two parties, and prompted a series of measures for ‘the materialization of the constitutional rights of Colombians’ (Colombian Government and FARC-EP, 2016). Furthermore, post-conflict management became a political and developmental issue, opening access to new or newly redistributed financial resources at national and international levels (Grajales, 2019). The Agreements include the key ‘integral rural reform’ measure to boost rural development and reduce poverty and food insecurity via land use, land right formalization, and land restitution and redistribution programs (Colombian Government and FARC-EP, 2016; Grajales, 2019; León-Rodríguez, 2016).

Evidently, CC and PAs are mutually embedded, sharing agricultural and rural development objectives. Authors estimate that 50 years of conflict in Colombia have impacted the environment significantly, inducing one million hectares of deforestation (Baptiste et al., 2017). According to Baptiste et al. (2017), the conflict-induced degradation of Andean forests negatively affected the regional hydro-climatic regime and its vulnerability to climate extremes (e.g. El Niño). Moreover, there is the risk of post-conflict development occurring at the cost of biodiversity conservation, deforestation, and ecological resilience (Baptiste et al., 2017; Castro-Nunez et al., 2016; Negret et al., 2017). Colombia accounts for 10% of global biodiversity, and there is an international interest in Colombian PAs (foreign investors for energy or food production) (Baptiste et al., 2017).

Nevertheless, at local level challenges to implement coordinated and relevant response persist (Baptiste et al., 2017). Baptiste et al. (2017, p. 2) concluded that governing bodies must coordinate local responses that consider ‘socio-ecological transitions involving economic development and demographic changes.’ The post-conflict context offers opportunities to elaborate development plans and actions that integrate socio-economic and environmental considerations (Baptiste et al., 2017; León-Rodríguez, 2016; Negret et al., 2017). It also allows for meeting international environmental commitments (Baptiste et al., 2017). Even so, despite climate-policy and PAs having been elaborated and adopted at international and national levels, information on their implementation or articulation with other relevant policies is scanty.

Though the influence of international-level organizations on elaborating climate- (Howland & Le Coq,

2022; Mariño, 2011; Pralle, 2009) and PA-related (Grajales, 2019) national policies or in other contexts (Milhorance et al., 2021) have been examined, studies ignore how both policies operate at the local level. Thus, this study analyses the CC adaptation and post-PA context as traveling models translated by several actors at policy-design (theory) and implementation (practice) levels within the agriculture sector. Mosse (2004) questioned the ‘assumption that development practice is driven by policy...’ Based on Mosse’s reflections on aid policy and practice this study addresses the CC-PA policy distinction as policy models and discourses and considers the practices they should generate. Furthermore, as per Mosse (2004, p. 639), development practice is driven ‘by a multi-layered complex of relationships and the culture of organizations rather than policy.’ Thus, we question how CC and PA policies are implemented in Cauca department (Colombia) and by which actors?

We hypothesized that there is a gap between CC and PA policies as discourses and their implementation, especially given the distinct translations of the models at the policy design and implementation stages. CC and PA policies are new traveling models of agricultural and rural development policies. Their implementation is fragmented, interpreted, and reinterpreted within the interface handled by actors with distinct and even contradictory development interests and visions.

Blundo and Le Meur (2009) consider the ‘meso point of view’ interesting because actors’ motivations from distinct levels meet and interact while delivering public services and goods. This location allows for noting local, national, and international interrelations (Olivier de Sardan, 1995). Olivier de Sardan (1995, 2014a) argues that local power furnishes an interesting level at which to study practices, social relations, and representations of development and public delivery. The local scope of this study is also interesting because international aid has transformed the traditional center of powers delivering public services and goods (Blundo & Le Meur, 2009).

Theoretical background

The conceptual framework of this study builds on development and political anthropology, mobilizing exploratory concepts and methods, and articulation with the notion of policy mix from political science.

Development and political anthropology (delivery of public goods and services) and policy mix

This study draws from the anthropological dimension of development (Baré, 1987; Bierschenk, 1991; Olivier de Sardan, 1995); that is, the ‘political micro-sociology of development actions,’ formulated by Bako-Arifari and Le Meur (2001, p. 122). Olivier de Sardan (1995, p. 13) defines development from a methodological perspective as ‘the whole of the social processes induced by voluntary operations of transformation of a social environment, undertaken [via] institutions or actors external to this environment but seeking to mobilize this environment, and based on an attempt to graft resources, [...] techniques, [...] knowledge.’

We focus on public goods and service delivery related to CC adaptation and PAs as two development paradigms in the agriculture sector. Development paradigms are generally formulated externally (e.g. sustainable development, good governance, decentralization, or the Sustainable Development Goals) with a model of action whose solution packages usually mismatch with local problems (Bierschenk, 2014; Ferguson, 2006; Rottenburg, 2009). They are illustrative of the ‘garbage-can model’ by Cohen et al. (1972), where organizations are as sets of solutions in search of problems and decision-makers in search of work, often observed in the development world (Bierschenk, 2014).

We adopt Olivier de Sardan’s (2014a, p. 400) definition of the State, given that the function of delivering (public) goods and services is, as an emic concept, perceived by most users as a ‘social necessity and, either directly or indirectly, as coming under the State’s duties toward these users.’ It comprises the analysis of public service and goods delivery (by State representatives and private and non-profit sectors) and dispositives, such as development projects, decentralized policy implementation, humanitarian actions, and private initiatives (Blundo & Le Meur, 2009). Le Meur (2015) (based on Latour (2002)) claims that policy comprises a particular enunciation system to build a collective and common world from disparate elements. These definitions help open up the analysis of policy implementation beyond civil servants and local and national levels.

The theoretical framework also draws from policy studies. The concept of ‘policy mix’ emerged as a common analytical concept to address the ‘messy

and complex, multi-level, multi-actor reality’ of policy interaction (Flanagan et al., 2011, p. 19; Magro & Wilson, 2019). According to Flanagan et al. (2011), the policy mix concept can underline and make explicit the trade-offs and tensions among policies. Lesnikowski et al. (2019, p. 451), based on Howlett and Cashore (2009), and Howlett and Rayner (2007), define policy mixes as ‘combinations of policy goals and policy instruments that emerge over time around a specific policy issue’ (in this case, agricultural development). The multiplicity of goals and instruments across policy sectors and levels represents a challenge for policy implementation (Lesnikowski et al., 2019). We employ the policy mix concept to define the data collection and analysis scope. Additional key concepts drawn from anthropology were mobilized to analyze policy implementation and development practices.

Traveling models and translations

The diffusion or circulation processes from external sources of public policy solutions to development issues have been studied under development anthropology via the traveling models, blueprints, or translations (Behrends et al., 2014; Lewis & Mosse, 2009; Mosse, 2005). The models are translated and shaped by mediators to become transferable, embedded, and connected in specific contexts, epistemic communities, or networks (Bierschenk, 2014). Behrends et al. (2014) employ the concept of translation to address precisely how this transformation occurs. Olivier de Sardan et al. (2017) explain that traveling models, when implemented in a local context, always face selective adoption by actors that bypass or diverted them.

Mosse’s (2004, 2005) policy definition is useful and connected with the traveling model definition because it establishes a distinction (and even a gap) between the policy model and practice. He claims the policy model does not drive policy practice, but ‘practices produce policy’ (Mosse, 2004, p. 640). Thus, Mosse (2005, p. 6) goes beyond instrumental (policy as rational problem solving) and critical views (policy as reaffirming dominance) on development policies to focus on the ‘complexity of policy as institutional practice.’ As in traveling models, policy discourse mobilizes loose concepts (e.g. participation and governance) to allow for compromise and participation from actors with different interests; but, it is rarely a good guide for action (Mosse, 2004, 2005). This study considers CC and PA policies as traveling

models for agricultural and rural development that are locally reinterpreted and translated.

Interface

Long (1989, p. 2) defines social interface as a 'critical point of intersection or linkage between different social systems, fields, or levels of social order where structural discontinuities, based upon differences of normative value and social interest, are most likely to be found.' The focus is placed on the actors' interfaces of the delivery State with other actors and the governance modes, as per Blundo and Le Meur (2009) or Olivier de Sardan (2014a), but regarding CC and PA issues.

Governance

Governance emerges from the diversity of actors participating in the policy implementation process; it emerged in the 1980s, promoted by international financial institutions to address State inefficiency and unsustainability (barrier to economic growth) (Anders, 2014; Lewis, 2009). 'Good governance,' is regarded as an ideology that promotes balance and synergy-seeking between the State, market, and non-governmental sectors to foster co-production and delivery of public services and goods. This must be distinguished from non-normative governance definitions.

The non-normative definition in this study considers governance as the political dimension of public action. It focuses on the 'modes of governance'; that is, the coordination between various actors to deliver public services and goods (Blundo & Le Meur, 2009; Olivier de Sardan, 2014a). Reconfiguring local power linked to new policy implementation, such as CC or PA, implies governance-level changes. Blundo and Le Meur (2009, p. 7) defined governance as 'a set of interactions ([e.g.] conflicts, negotiation, alliance, compromise, [and] avoidance [...]), resulting in more or less stabilized regulations, producing order, [or] disorder (the point is subject to diverging interpretations between stakeholders) and defining a social field, the boundaries, and participants of which are not predefined.'

Development dispositive

The object of study is the 'development dispositive' (Bako-Arifari & Le Meur, 2001; Olivier de Sardan,

1995). Olivier de Sardan (1995, p. 125) defines a 'dispositif' as a place where 'multiple logics and strategies confront each other, both on the part of the agents of the system and on the part of the so-called 'target' populations.' According to the author, the development project is an ideal type of development dispositive, although other dispositive, such as technical services of the State, agricultural advisers, the realization of public or private infrastructures, and communication campaigns, exists.

Despite having unique characteristics, development dispositives are commonly interactions among social actors from distinct worlds (developer, developed) (Olivier de Sardan, 1995). Finally, these external dispositives may question, influence, or conflict with popular technical knowledge (Olivier de Sardan, 1995). For this study, the dispositives correspond to elements such as development projects, local policy or plans, private and public agricultural advisers, actor networks, and financial services, corresponding to CC and PA policy implementation. They are presented and characterized via maps and case studies.

Fragmentation and discontinuity

Fragmentation and discontinuity concepts are useful for analyzing policy implementation. **Discontinuity** is mobilized, in this study, to describe temporal gaps within a development dispositive (between different phases of a project) (Long, 1989). Additionally, we use **fragmentation** to highlight discrepancies between actors (individuals or organizations) that carry distinct principles of legitimacy, rules, interests, and/or resources that are applied to implement policies (Bierschenk et al., 2000; Long, 1989; Mosse, 2004). Fragmentation is also mobilized to characterize gaps between policy discourse/strategy and policy implementation (development dispositives) and among development dispositives (geographical imbalance, articulation) (Bierschenk, 1991; Long, 1989; Mosse, 2004). We link coordination issues with the diversity of actors implementing public policies. International aid plays an economic and political role in developing countries (Bierschenk, 1991). Bierschenk et al. (2000) also mentioned the relative autonomy between the local arena and national policy largely re-appropriated by local actors, given the context and actors' interests and the low State capacity to impose norms. Political power is also exercised by intermediary organizations (non-governmental actors) with whom State actors maintain a complex

(antagonistic, complementary, or juxtapositional) relationship (Bierschenk et al., 2000; Blundo & Le Meur, 2009). Ferguson (2006) notes that State agents may pursue bureaucracy inefficiency and corruption for self-interest and benefits, rather than for social and economic development. Furthermore, State bureaucracy and development projects are political mechanisms to coordinate public service and goods provision.

Despite the high fragmentation, Mosse (2004) showed that development stakeholders are constantly creating discursive coherence, order, and unity. Hence, we propose to analyze the fragmentation (among development dispositives and between policies discourse and policy implementation) and discontinuity (temporal gaps within a dispositive) of the implementation of CC and PA policies.

Method

Cauca Department

This study focuses on the Cauca Department, located in southwestern Colombia, which is mainly rural (60% of the population lives in rural areas) and highly diverse in climate (from paramo to Pacific coast) (Gobernación del Cauca, 2020). The Department is populated by more than 1.4 million persons distributed in 42 municipalities (DANE, 2020). The multi-ethnic and multicultural Department is represented in the diverse collective indigenous and Afro-descendant territories and the territorial aspirations of peasants (campesinos) (Duarte, 2018). Indeed, 42% of Cauca inhabitants identify themselves ethnically as Afro-descendants or indigenous (Gobernación del Cauca, 2020). In addition to this social context, economic projects related to mining, forestry, and agro-industrial activity, as well limited access to parts of the Department (mountains, protected areas) all exert land tenure pressure (via land conflicts) (Duarte, 2018). As per predicted climate-change scenarios, the Department should experience an average temperature increase of between 0.5 and 2.1 °C (between 2040 and 2100) as precipitation increases by 18% (Minambiente, 2016). Vulnerability analysis showed that water resources, biodiversity, and, to a lesser extent, the Department infrastructure could be threatened (Minambiente, 2016). Finally, the Cauca Department is among the regions that have been most affected by armed conflicts during the government-FARC negotiations.¹

Data collection

In this study semi-structured interviews were conducted with 56 actors (who gave oral appropriate informed consent) in the Cauca Department, Cali, and Bogota. The interviews covered national and departmental levels, including the Ministry of Environment, Ministry of Agriculture, PA agencies, national army, Disaster Risk Management Unit, Municipal Extension Services Unit, academic institutions, national and international research centers, NGOs, private-sector institutions, indigenous authorities, United Nations agencies, international fund staff, and international consultants (see the Appendix for details). We also drew from information shared during informal exchanges and participant observation during the Local Technical Agro-Climatic Committee (LTAC) reunions (monthly meetings on climate forecasts and agro-climatic recommendations), regional CC events, conferences, and NGO events. These events were relevant for participant observation because they hinged on CC, and gathered local actors for agriculture and CC issues. Each informant was assigned a number transcribed in brackets (for instance [1, 2, 3]).

We used a department map during the interviews to identify and geographically locate dispositives regarding CC and PA. This visual aid facilitated the discussion with interviewees in identifying dispositives and their areas of influence. Each interviewee shared information about the dispositive characteristics related to them between 2018 and 2019. For each dispositive, the interviewee was asked about additional information, such as the funding source, implementer, mode of action, and duration.

Data analysis

Policy mix and study scope

We build on Rogge and Reichardt's (2016) conceptualization of policy mix (as per Milhorance et al., 2021) to frame the study (Figure 1). They identify three building blocks of the policy mix: (i) policy strategy (policy objectives and principal plans), (ii) instrument mix (policy instruments), and (iii) dimensions delimiting the policy mix (policy field, governance level, geography, and time). The global and long-term policy objectives of the policy mix addressed agricultural development. The principal plans to achieve this objective comprise a CC (CC policy, CC agriculture plan, CC departmental plan, and the

Nationally Determined Contribution [NDC]) and PA. We focus on policy implementation (vs. policymaking) for the policy processes.

The dimensions that further frame this study are policy fields, governance level, geography, and time. Policy fields include climate, agriculture or rural development, and post-peace agreements policies. The selected governance level is the horizontal level (which corresponds to the meso interactionist perspective), given that we consider the local implementation of policies by actors and organizations. Finally, we consider the policy mix from a snapshot perspective (2018-2019) to analyze the dynamics and interactions of policy implementation in a given time.

The specific instruments (or local instrument mix) are not presented in detail in this framework, as their identification and characterization comprise the results. According to policy mix vocabulary, 'instruments' correspond here to the 'development dispositives' (see development dispositive section) that we aim to analyze along with their potential fragmentation (among development dispositives and between policies discourse and policy implementation) and discontinuity (temporal gaps within a dispositive). Further, the concepts of 'coherence' and 'credibility' by Rogge and Reichardt (2016) to describe the policy mix are considered problematic. As pointed out by Flanagan et al. (2011), some authors seem to assume that policy implementation comprises selecting instruments by a single and disinterested decision-maker. As credibility and coherence may not be the main objectives of any of the multiple actors involved in policy implementation, we focus on concepts from the anthropology of development.

Thus, the anthropological concepts traveling model, interface, governance, fragmentation, and discontinuity allow us to analytically operationalize the policy mix. Indeed, the anthropological concepts of governance and interface are useful for analyzing the interactions between the policy fields of climate change, agriculture, and post-peace agreements (see Figure 1). The traveling models allow more effective analysis of the discrepancies between policy design (Principal plans) and policy implementation (local instrument mix or development dispositives). The concept of fragmentation is heuristic for analyzing the potential gaps between policy strategies at national level and their interpretation at local level (horizontal governance level). The fragmentation concept is also relevant for understanding any potential gaps between development dispositives and their

geographic distribution. Finally, the discontinuity concept allows identifying gaps in the implementation process of the development dispositives.

Mapping the policy mix

Using collected data and geographic information system tools, we created a database to develop several maps featuring different characteristics of the local policy mix. The ArcMap software of the ArcGIS integral solution was used to elaborate the maps. It required a methodological process comprising information gathering, database creation, layer generation, and designing thematic reference maps of the Cauca Department. For information collection, local policy data via semi-structured interviews and spatial information of the Department's administrative division at the municipal level were consolidated with sources in the National Geostatistical Framework created by the National Department of Statistics (DANE).

Developing case studies linked to the maps

The case study method (or extended case method) comprises reflexive (vs. positive) science (Burawoy, 2009). Gluckman (1961) describes it as an apt illustration. Mitchell (1983, p. 26) notes that it is 'the basic descriptive material an observer has assembled by whatever means available about some particular phenomenon or set of events' to draw theoretical conclusions. A case study's focus (a person or group of actors vs. diachronic or synchronic) and type varies. This study employs a case study for each main dispositive characteristic (each analysis dimension): (1) geographical distribution, (2) diversity of implementing actors, and (3) modes of actions.

Regarding modes of action, we identified nine categories: (1) information production, (2) practice training and promotion, (3) sensitization, (4) inputs, money, and material distribution, (5) work or infrastructure construction, (6) plan or policy elaboration, (7) actor articulation, (8) financial services, and (9) integrated project funding. One dispositive can include several modes of action.

Mitchell (1983) shows the validity of generalization from a case study when the case is considered typical of the social order using a theoretical explanation. Thus, Burawoy (2009) states that the method objective is to 'extract the general from the unique, to move from the 'micro' to the 'macro.' It corresponds to the causal and logical (vs. statistical) inference regarding drawing conclusions 'about the essential

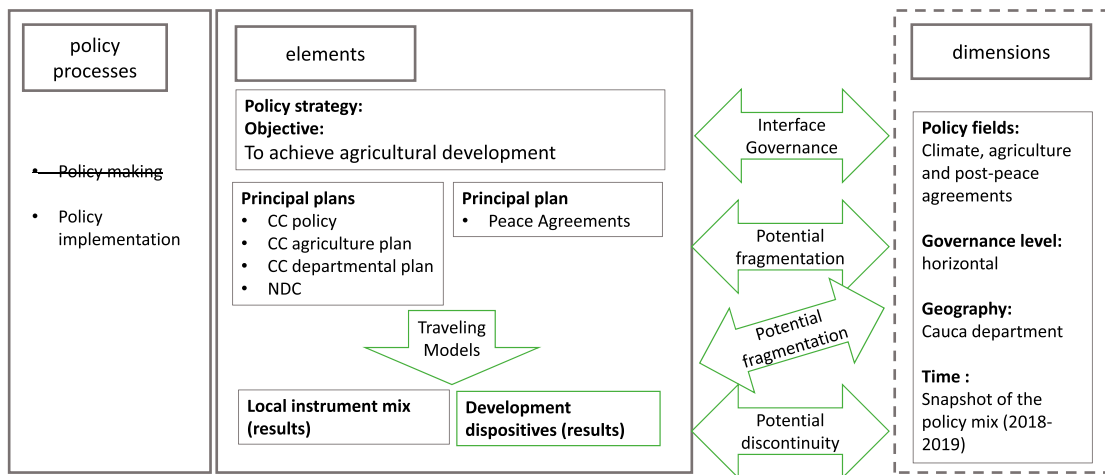


Figure 1. Study policy mix. Adapted from Rogge and Reichardt (2016).

linkage between two or more characteristics [concerning] some systematic explanatory schema – some set of theoretical propositions’ (Mitchell, 1983, p. 33). The inclusion of the context is relevant for a deeper understanding of social processes (except for generalization) and how general principles emerge in distinct forms (Mitchell, 1983). This study employed case studies as a typical illustration of observations pertaining to each map that allowed drawing theoretical conclusions regarding the research questions and hypothesis. Each case study corresponds to a dispositive presented in the maps that is described in more detail. Indeed, we prioritized the case studies within each analysis dimension for their quality to illustrate in detail the general message conveyed by each map.

Results and discussion

The results are divided into three sections, each including a map and illustrative case studies. The first section focuses on the geographic distribution of the policy mix; the second, the implementers and duration of development dispositives; and the third, the modes of action of the policy mix.

Geographic distribution of the policy mix – closer to the road, closer to development

Figure 2 shows the implementation of development dispositives related to CC and PA in the agricultural sector in the Cauca Department. We identified 72 dispositives implemented in 42 municipalities. The

dispositives combined several approaches, 16 of which are explicitly labeled PA but include objectives of increasing productivity or exports. Meanwhile, 19 dispositives labeled adaptation to CC are also considered environmental protection and conservation objectives, including organic agriculture, agroecology, and food sovereignty approaches.

Dispositives are concentrated along the main road axis of the Department (in red) that connects the country (and America) from north to south on the Pan-American highway (Figure 2). An interviewee [32] confirmed that public goods and services are mainly delivered along that road: ‘Here in the Cauca Department, if you are 20 kilometers away from the Pan-American road, you are 20 kilometers away from [...] development.’ Indeed, municipalities on the Pacific coast (Guapi, Timbiquí, Lopez de Micay) or south of the Department (Piamonte, Santa Rosa) have fewer dispositives implemented.

Interviewees [17, 31, 38] noted that the lack of good-quality roads is a serious problem in the Department. Beyond the road problems and geographic distribution of dispositives in Figure 2, interviewees [38, 39] noted the lack of public service access (energy, water, Internet) in remote municipalities and the lack of government support.

The results accord with prior findings on gaps in implementing development policies (i.e. the public delivery of goods and services) in the Department, where the road infrastructure in Cauca remains based on colonial extractivist logic and, thus, inadequate and poorly maintained (Beltran Ch & De David, 2015). From the National Roads Institute

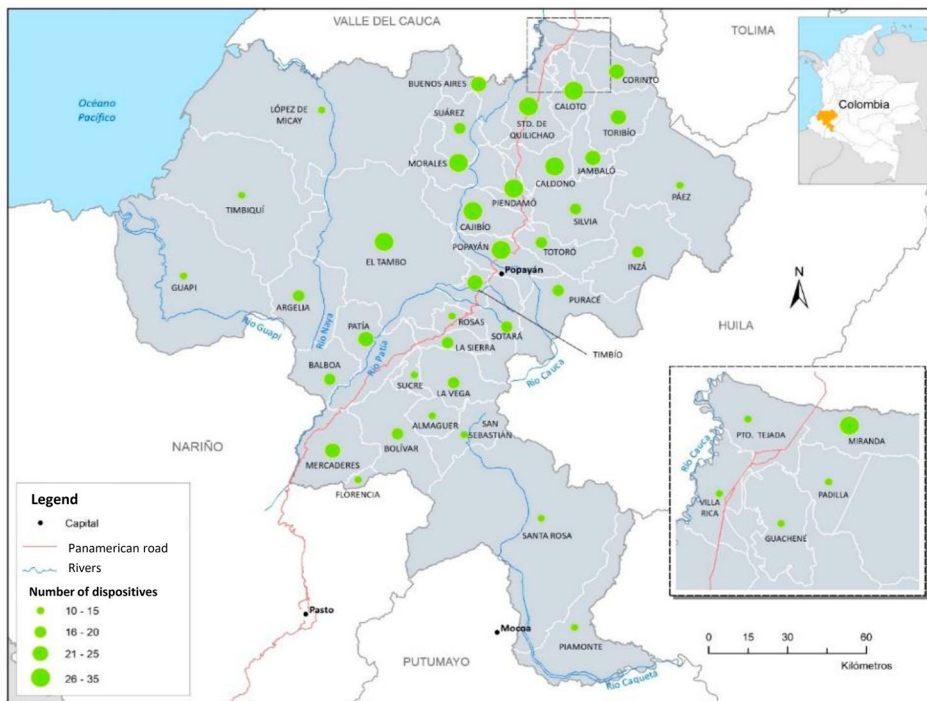


Figure 2. Number of dispositives on climate change, environment, and peace agreements in the Cauca agricultural sector.

(Instituto Nacional de Vías, 2019), half of the road length in the Department (1276 km) remains unpaved. Per the national census, 65% of households in the Department can access aqueducts (86% at the national level); 44% can access sewers (national level, 76%); 27%, gas (national level, 67%); and 15%, the Internet (national level, 43%) (DANE, 2020).

Prior studies (Andrade Becerra et al., 2019; Beltran Ch & De David, 2015; Duarte, 2015) show the differentiated effects of the Pan-American road on development and well-being indicators (e.g. access to services and economic activities). Municipalities closest to the Pan-American road benefit from economic, political, and social dynamism from governmental and non-governmental interventions (Beltran Ch & De David, 2015). Similarly, Duarte (2015, p. 148) shows that multidimensional poverty is characterized by 'deficient road connectivity' and includes areas such as the (1) Pacific coast, (2) Cauca boot (south), (3) Northwestern and portions of the Eastern areas. Arguably, there is also a significant coincidence between armed conflict victims of municipalities and the road infrastructure (Andrade Becerra et al., 2019).

The 'Faith in Colombia' program, initiated in 2007 and implemented by the national army, illustrates

the development gap between the central and peripheral Cauca Department. It supports vulnerable persons in remote, underdeveloped municipalities via goods and service delivery by the army. This dispositive includes CC considerations since the military shares agro-climatic information produced within the 'Local Technical Agro-Climatic Committees' to the program's beneficiaries.

From the military perspective [3], underdevelopment is mainly because of armed conflict: 'in these areas, nobody enters.' Thus, soldiers become the only government representatives, assuming such roles through program implementation. An ex-military person [1] explained: 'If you really look at it, the supports that they give are supports that should be given by the State. For example, they built roads. However, the roads should be made by the State.' This narrative justifies the lack of public services, given the armed groups, enforced by the Colombian Massif policy document (DNP, 2018).

Other interviewees disagreed with the military narratives, such as ex-military and International Organization for Migration (IOM) staff [1, 38], who consider that the abandonment of these areas by the State allows for the development of armed groups.

Andrade Becerra et al. (2019) note that social conflicts since the '60s and the settlement of insurgent groups in remote areas fostered armed group concentration in the northern and eastern Departments. The army realized that, in many cases, rural populations 'chose' the guerilla side against the army because they were the only actor supporting them (parallel State) or members of the guerilla came from the same villages. One army member of staff [3] explained that 'in Cauca, there is [much] resistance to working with the institution.' Regaining the lost trust of rural populations and the military is the program's underlying strategic objective (beyond the provision of goods and services). An army member of staff [3] admits that the program 'generates confidence in the institutions,' weakening the support from the population to armed groups, thereby making the program's name 'Faith in Colombia' all the more meaningful.

According to military staff [3], the program was implemented in the northern part of the Department in the Caloto, Corinto, and Miranda municipalities, located in Northern Cauca. These municipalities have been conflict hotspots in the Department, linked to (1) sugarcane production and land reclamation by indigenous communities and (2) their strategic location in the mountains that constitute a corridor for armed groups (connecting the Pacific area with the center of the country) (Andrade Becerra et al., 2019; Duarte, 2018). Similarly, others (Andrade Becerra et al., 2019; Findji, 1993) show that the army first allowed the Department's armed groups such that they did not settle and expand to areas of greater economic and commercial interest, as in the nearby Valle del Cauca Department, but to the detriment of the populations living there.

The geographic distribution of CC-PA dispositives is the first factor explaining the fragmentation among dispositives implemented in the same Department. A representative from the international cooperation unit of the departmental government [34] commented: 'there are areas that are over-intervened (where people are tired of participating in training) and others that have almost no cooperation like the Caucan boot'. The State is neither considered functional nor responsible for development in the Department. CC and PA policies appear as traveling models since the concepts are used to foster development change. Besides, the implementation of these policies reproduces the same dynamics of geographical

distribution as prior development models and policies, and the same patterns of development gaps.

This case highlights the fight for local power between armed groups and the State, reconfigured in the CC-PA policy context. Apparently, remote populations oversee their development; meanwhile, as per Andrade Becerra et al. (2019), armed groups have presented themselves as speakers for or allied with indigenous and rural communities. On the lack of public services and goods delivery, an IOM interviewee [31] concluded: 'The State presence has historically been reduced to a military presence. There is no strong State presence that offers people a chance to [escape] underdevelopment. [Thus], [...] that is the breeding ground for everything else.' The 'Faith in Colombia' case accords with Mosse (2004, 2005) that the policy primarily aims to 'mobilize and maintain political support, that is to legitimize rather than to orientate practice' in remote municipalities.

Interface of implementers – extraversion and fragmentations

Figure 3 shows the actor (governmental or non-governmental), implementation type and duration of dispositives, particularly development projects and programs. Relative to a government program, a project is a shorter-term intervention that runs beyond office turnover or is part of the permanent internal strategy of non-governmental organizations.

The Cauca harbors diverse dispositives and actors in delivering public services and goods within different durations, explaining the policy implementation outcomes. Figure 3 shows that in the same municipality, different types of actor-dispositives are implemented in different durations. For instance, Cajibío implemented 30 dispositives at the same time. The oldest dispositives initiated their implementation during the '70s (e.g. economic-environmental program of indigenous authority and technical assistance policy of the national federation of panela producers) and the latest will finish their implementation between 2018 and 2040 (termination date for the Department's CC plan). Sixteen comprise governmental actors, such as the Ministry of Agriculture, Ministry of Environment, army, National Research Center, and PA agencies. Nine cases mainly employ the private sector with the national federation of producers (panela, coffee, peasant). Finally, six dispositives are implemented by international organizations (food and agriculture organization (FAO),

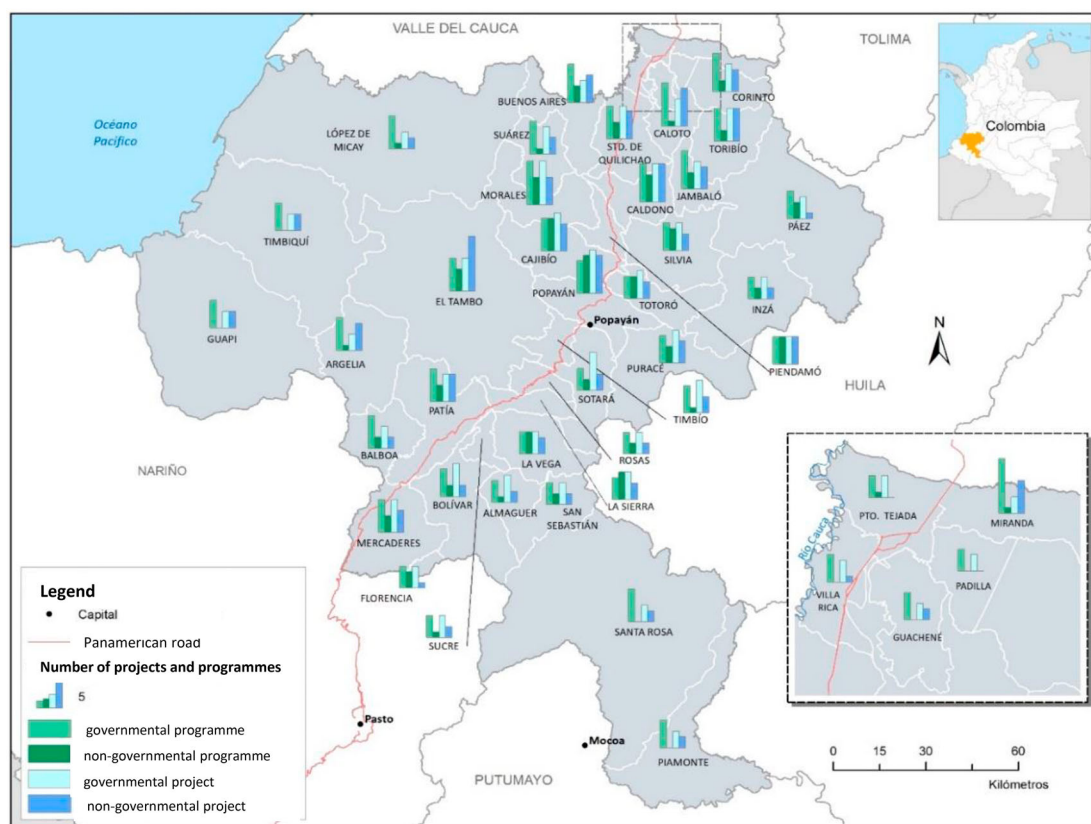


Figure 3. Type of implementing actor and duration of project and program on climate change, environment, and peace agreements in the Caucan agricultural sector.

Inter-American Development Bank (IDB), and international organization for migration (IOM)) and six national-local NGOs (e.g. Fondo Acción and Colombia Nuestra), producer organizations, and indigenous authorities. Some dispositives are implemented by two actor types.

As corroborated by the interviewees, the result is discontinuity in CC-PA policy implementation. Interventions experience breaks in implementation, and staff contracts are interrupted (annual fixed-term contracts in government agencies), resulting in additional gaps. Governmental actors are poorly articulated with international cooperation and NGO actions. National and international NGOs constitute key actors in implementing development policies in the Cauca.

Therefore, Figure 3 illustrates the political power, comprising a complex set of relationships between State and non-State authorities, as per Delpuech (2009) and Rose (1999). Hence, it illustrates an interface for implementing CC and PA policies, as per Long (1989).

Since the structural adjustment programs (economic reform program by the International Monetary Fund and the World Bank to liberalize the economies of indebted countries), development projects are increasingly apart from the State, as per Blundo (2011) and Lewis (2009) in other contexts. NGOs seem to be more effective than governmental organizations in solving poverty problems, hence their emergence addressing the State capacity to progress in development (Lewis, 2009; Rottenburg, 2009).

Development projects are considered by Rottenburg (2009) to be spaces that illustrate the concept of agency (actors' capacity for action) as it involves actors geographically distant from distinct social worlds, with different networks of beliefs and conceptual schemas but must collaborate to achieve something. Indeed, actors gather in socio-technical networks, given a contingent process, to address a specific issue that progressively creates coherency in interrelations but not necessarily in interventions (Lavigne Delville, 2015).

The LTAC is exemplary of actors' agency mobilized around CC and is an emblematic case of discontinuities resulting from short-term project-based modes of intervention. Per Loboguerrero et al. (2018, p. 67), the LTAC is a 'means of creating dialogue between researchers and farmers that would provide farmers with options in the face of both short- and longer-term variations in climate.' In the conceptualization of the CGIAR Research Program on Climate Change, Agriculture, and Food Security (CCAFS), the LTAC comprises several components, including alignment with local actors; local monthly forecasts; crop modeling; dialogue between scientists, experts, and farmers on agro-climatic recommendations; dissemination of recommendations; and capacity building (Loboguerrero et al., 2018).

In Cauca, the LTAC was challenged by inconsistent funding cycles. Despite being an explicit action mentioned in the Colombian NDC (MADS, 2015) and among the nine action lines of the CC policy (MADS, 2017), the LTAC implementation remains dependent on external and non-governmental funding. First, it was implemented by a local NGO and funded by the CCAFS program from 2014 to 2015 (see Loboguerrero et al., 2018). At the end of the funding, the LTAC halted for two years. Later, with FAO funding, the Committee reignited operations from 2017 to December 2019. In 2020, the Committee was inactive, waiting for new funding. The interviewees [2, 14, 48] consider the LTAC conducting donor-agreed activities (no inclusion of information dissemination during the FAO funding) with a 'project logic' where funding is limited, with no impact-oriented vision.

Moreover, the LTAC is a significant example of blurred lines between public and private actors, regarding who oversees public goods and service delivery. Many of the interviewees [2, 17, 19, 14, 4, 51, 52] argued that the lack of priority given to CC by the government explains the discontinuity in LTAC implementation. The Caucan local government is described [20, 2, 15, 19] as under-resourced, lacking ownership, and weak in management and capacities.

The LTAC also displays discontinuity, a characteristic of a local interface involving distinct organizations and actors moved by distinct rules and interests. Discontinuity occurred between the two LTAC phases, leading to distinct funding and implementing actors. Many of the interviewees [17, 16, 10, 19, 48, 14, 4, 2, 20] identify the lack of LTAC continuity as a primary limitation. Between the two phases,

some participant contacts were lost, and no lessons from the first phase were shared with actors overseeing the second phase. Some interviewees [11, 14] lamented the lack of farmer participation in the second phase. The FAO coordinator [8] admitted that the LTAC second phase focused more on organizations than farmers, as per the 'public-private partnership' shift in the vision of who should participate in the committee (individual farmers vs. producer federations). It also reconfigures the interface coalitions from one side of the international research center (CCAFS), the local NGOs funded by CCAFS from one side (first phase) and the FAO, local government authorities, National Agricultural Research Center, the army (second phase), and the other side, each supporting its vision. Beyond the LTAC are also agro-ecological NGOs, universities, the private sector, and IC, which are not aware of or interested in the dispositives, seen as top-down processes whose shared information is too general and not designed for smallholder farmers.

The LTAC case illustrates the crucial role of international funding in structuring local interfaces for CC policy implementation (as per 2011) in another context) and the government and donor tendency to limit actions to short-term projects (as per Bierschenk, 2014).

Hence, the LTAC is a clear illustration of the extraversion process (observed in Africa by Bayart (1999) and Lavigne Delville (2017)), where the national policy is no longer designed or implemented by governmental actors alone. Indeed, Grajales (2019), regarding PAs, posits that IC in Colombia influences public policy. The poor role of the Colombian government induces poor legitimacy and quality of policy implementation (Bierschenk, 2014). Moreover, the multiplicity and heterogeneity of actors increase competition between government and non-government authorities for public services and goods delivery and related power and resource control (Ganti, 2014).

The analysis of implementer type and duration of projects and programs via mapping and the case study of the LTAC provides insights into understanding implementation gaps between policy objectives and their field outcomes. Although the overseer of CC in the Ministry of Agriculture (at the national level) claims the LTAC is a priority for the ministry, they remain disconnected projects not funded by government. States, at the national level, set general norms without being capable of implementing them at the local level, creating a significant

unpredictability of government interventions (Bierschenk et al., 2000). Grajales (2019) concludes that IC actors have accumulated more knowledge on rural areas than centralist states that maintain complicated relationships in marginal territories.

Beyond illustrating the extraversion of policy implementation, the LTAC case shows coalition creation and reconfiguration at the interface of CC-PA policy implementation. Mosse (2004, p. 647) concludes that 'diversity itself destabilizes and militates against coherence,' referring to the diversity of actors in the same development project. It applies at the Department level among actors involved in implementing policies in the same Department. Despite changes, the LTAC dispositive maintains its name, conserving external coherence (Mosse, 2004, 2005).

Modes of action – high fragmentation and coherence building

Figure 4 presents the modes of actions in dispositives.

The most prevalent modes of action were practice training and promotion (44 dispositives), sensitization (43), inputs, money, and material distribution (32), and actor articulation (28). The least used were integrated project funding (4) and financial services (5). Each municipality had mixed distinct modes. This study focuses in-depth on two specific modes of action: infrastructure and planning, for their qualities to illustrate the role of private actor in policy implementation and coherence building (infrastructure) and the limited role of government actors.

The Cajibío, Caloto, Morales, and El Tambo municipalities employ dispositives aimed at infrastructure construction. These municipalities are considered as most affected by armed conflict within the PAs process (PDET municipalities).² Being affected by armed conflict appears to be highly connected with the lack of governmental presence and governmental delivery of public goods and services.

Most infrastructures are funded and implemented by private-sector actors. Interviewee [37] from the federation of coffee producers recognized the significance of private actors in policy implementation: 'In our countries, it is like that. That is how we work.' Similarly, IC is vital, as per an interviewee [32]:

'It is also a model where [IC] does the public service work that the State does not do. [...] We do a lot more development than they do. [...] the private sector [...] finances it. You asked me earlier about public policies ... It is far away ... in Bogota ... here it does not make sense.'

Regarding a PA agricultural project, an IOM staff [38] explained:

'There are many shortcomings in areas. [A] project can not only focus on the productive aspect but also address other needs ... health, education ... that are [...] State responsibility. Families that did not have electrification agreed with the electric company. The electric company came with all the wiring, but the people had to get the internal connection out of their own resources.'

A project coordinator [32] working on reforestation likewise commented:

'We come into a community, we talk to them about establishing tree nurseries, to plant trees, to plant coffee ... that is great ... But the populations tell you: we do not have electricity or drinking water ... and your answer is what? Well, yes, but I work on trees. And it is terrible!'

Including infrastructure components within CC and PA agricultural projects has shown that the private sector and IC can implement CC and PA policies and adapt and build coherence at the local level (Mosse, 2004, 2005). The traveling models (Behrends et al., 2014) of CC and PA dispositives are translated and adapted to fit the local context, characterized by a lack of basic development.

Another mode of action is the production (design or adjustment) of plans, strategies, and policies driven by government actors. An interviewee [44] confirmed that at first (in the 2010s), regarding CC, governmental efforts focused on elaborating policy documents.

However, local authorities are not interested in plans, which are not prioritized given their expense (vs. other issues) [5, 6, 41]. The elaboration process of the departmental CC plan (PIGCC, being the Spanish acronym for departmental climate change plan) has been considered by external and qualified consultants as not participatory, too general, disconnected from local specificities, and too expensive to implement [14, 27, 29, 14]. Moreover, no progress thus far articulates the CC departmental plan within the sectoral (agriculture) plan [43].

The expectation that plan elaboration generates (international) resources for implementation, as in the case of the Nationally Appropriate Mitigation Action (NAMA) (panela, coffee, livestock) or the Colombian Massif policy documents (DNP, 2018), have not been met [29,41,45]. Several interviewees [23,29] agreed that there is an issue of plans not being implemented in Colombia from a lack of resources.

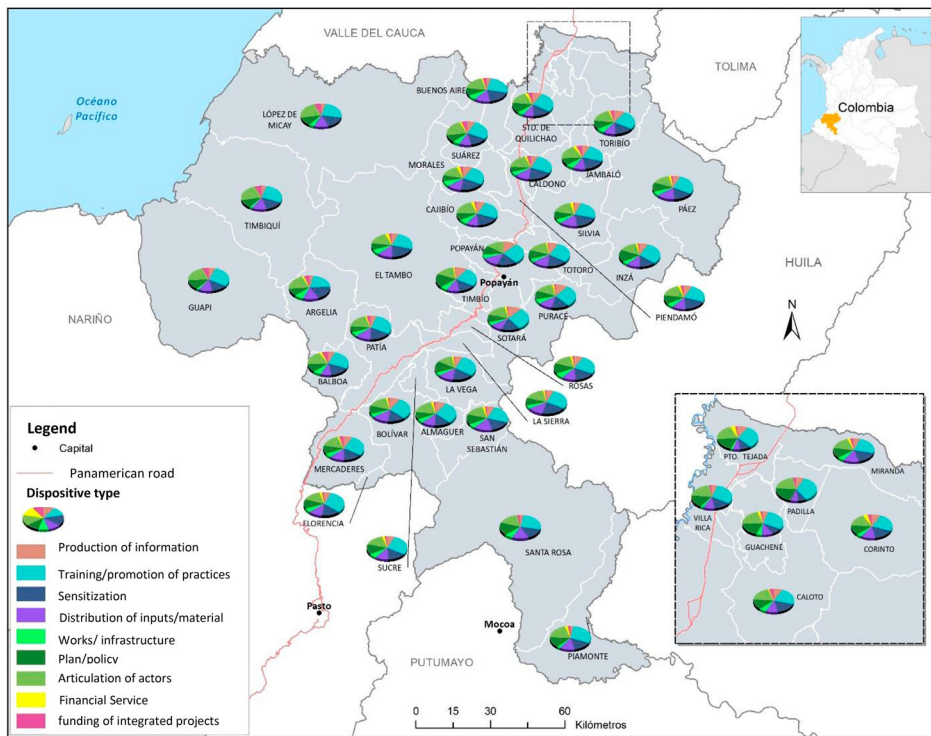


Figure 4. Mode of action of interventions on climate change, environment, and peace agreements in the Caucan agricultural sector.

At the agricultural level, the multiplicity of plans is noteworthy because we identified 10 distinct plans within the policy mix. These plans hold distinct approaches (CC mitigation, PA, extension, regional-local development) and respond to specific government bodies with little coordination therein. The plans address different time frames, such as municipal and departmental elections (development and extension plan), the new national policy (PIGCC), creating new agencies in the PA framework (PDET and the National Integral Program for the Substitution of Illicit Crops (PNIS)), and specific IC funding (NAMAs), among others.

In line with our findings, authors showed that CC plans are based on broad international recommendations set by international organizations and are, thus, decontextualized (Mariño, 2011; Ulloa, 2011). Moreover, the lack of implementation observed in the Department is consistent with Mosse's (2004, 2005) claim that policy implementation is disconnected from policy discourse. Indeed, policy discourse without resource, policy, will, or interest does not allow for policy implementation.

The multiplicity of plans was observed and analyzed in development anthropology. Lewis (2009) refers to the 'perpetual present' or the historical logic of development agencies that do not consider the historical contexts and origins of development ideas and practices but are guided by a succession of buzzwords (in this case, CC/NAMA, PA). Multiple plans result in sedimentation phenomena (historical process of overlapping policy documents related to the same field) (Bierschenk, 2014; Blundo, 2011).

The PDET (Development programme with territorial approach) is part of the 'Integral Rural Reform' of the PAs to renew and transform rural areas and bridge the rural-urban area gaps [54]. A vast participatory process was implemented in the 170 PDET municipalities, ending in February 2019 with 16 subregional plans and 32,808 initiatives (needs and projects) identified [54]. Thus, the PDET is a plan or a 'special 15-year planning and management tool'.³

In the Cauca, for the 17 of 42 municipalities considered PDET,⁴ more than 4,000 initiatives were identified according to the local Territorial Renewal Agency (ART)⁵ coordinator [25]. Civil servants reported

security (access to territories) and 'ethnic' issues to lead this process [25, 54]. The ethnic issue regards, according to the ART staff, power struggle between governmental and indigenous authorities: 'they [indigenous authorities] [do not] have [...] the control of the territory but have control of what is going to be incorporated in the document' [54]. The fight for power and territory control is not new but is newly expressed in the post-PA context. The government is willing to give discursive power to indigenous authorities (in the policy document) but not territorial power.

Other interviewees [3, 14, 26, 54, 33] note that the post-conflict achievement depends on implementing the PAs PDET Program. All efforts to identify people's needs (the PDET participatory phase) are not reflected in the implementation. Governmental dispositives mainly focus on information and production plans and less so on implementation. The gap is clear between discourse and practices at the policy level, in this case between program stages (i.e. discontinuity between the planning and implementation stages).

The study of the mode of action reveals the effect of development aid in the creation of 'two-speed bureaucracies,' where the State bureaucracy lacks resources (and interests) for action and project bureaucracy (or 'parastatal agencies') benefits from better conditions (Bierschenk, 2014; Blundo, 2011). The State appears to elaborate unimplemented plans, while non-governmental actors adapt CC and PA policies to deliver goods and services by building local coherence. Thus, an 'island of efficiency' or 'pocket of effectiveness' (PoE) (corresponding to non-governmental actions) in the policy implementation and an 'island of inefficiency' (corresponding to governmental action) can be observed (Bierschenk, 2014; Roll, 2014). Roll (2014) defined PoE as a public organization that effectively provides public services in a context where the rest of organizations are mostly ineffective. The PDET program also showed an attempt to reconfigure local power, creating tensions between State and indigenous authorities, reformulated in the context of the post-PA context.

Conclusion

Following the theoretical framework of the anthropology of development and politics and the political science concept of policy mix, we studied the governance characteristics of CC and PA policies in the agricultural sector in Cauca-Colombia via mapping and

case studies. The theoretical and conceptual framework (formulated by 1983)), although drawn from contexts far from Colombia (Africa, Asia), is highly relevant and heuristic, allowing for an interactionist and actor-oriented focus while defining the scope of the study to identify (at several levels) and analyze implementation gaps in policy.

The conceptual framework based on development and political anthropology mobilizing exploratory concepts and methods and in articulation with the notion of policy mix from political science was useful and relevant. It allows us to keep an interactionist and actor-oriented focus while defining the scope of the study using a policy mix concept to identify (at several levels) and analyse implementation gaps in policy.

We confirmed our initial hypothesis of the gap between policy design and implementation. Despite national-level CC-PA policy documents, we observed poor implementation by governmental actors and reinterpretation by other actors through distinct concepts of how the policy should be implemented using different modes of action. The local governance of CC and PA policy implementation in Cauca comprised diverse actors (among and beyond governmental ones), inducing fragmentation, discontinuities, power tensions, and coherence building. Coherence is built through local actors, in a context of fragmented dispositives, insufficient basic development (infrastructure) and fragmentation with national-level policy discourse.

Fragmentation exists between national-level policy discourse on CC and PA (design), at the national scale, and policy implementation, at the departmental scale. Policy is guided by a series of traveling models for rural and agricultural development but via distinct approaches, vision, interests, and actors that sediment over time. Lack of funding and interest limit policy implementation by government actors (LTAC and PDET). Fragmentation is also geographic, with the concentration of dispositives along the Pan-American highway, leaving and reproducing development gaps between the center and periphery. Indeed, as per Bierschenk (1991), fragmentation induces a geographical imbalance in project distribution and coordination issues. The modes of action show significant fragmentation, warranting CC-PA dispositive adaptation to compensate for the lack of basic services and goods in remote municipalities.

CC and PA policies are reinterpreted by many actors to connect with the local context or address

specific interests and visions. Actors at the interface use dispositives to fight for local power, as in 'Faith in Colombia' (army vs. armed groups) or PDET (State vs. indigenous authorities). IC is crucial in policy design (model building), funding, and implementation, promoting traveling models. While some actors meet and debate at the interface, as in the case of the LTACC, others do not, creating further fragmentation in policy implementation. Governmental actors appear mainly as planners. The IC policy influence is reflected in the lack of coordination and implementation gaps given short-term financing projects.

Thus, understanding the different levels involved is key to understanding the policy implementation level. Mosse (2004, p. 655) concludes that 'policy may not generate events, but it helps stabilize the interpretation of events.' Development dispositives are labeled CC or PA to respond to donors, national policies, or interests at different levels. However, they diverge in terms of geographic distribution, modes of action, duration, approaches, implementor vision, and interests, more than guiding implementation.

Le Meur (2008, p. 3) defines development as constructivism or 'bricolage' that 'generate and convey concepts, theories, representations, categories, which become emic through their uses, beyond their often hybrid and generally forgotten origin.' The analysis helps improve the processes. Future studies can consider the climate perception of small farmers and how they receive and appropriate dispositives within their strategies (see Shapiro-Garza et al., 2020).

Notes

1. <http://especiales.presidencia.gov.co/Documents/20170718-pdet/que-son-pdet.html>
2. PDET municipalities are named after the PDET program which is the Spanish name for the Development program with a territorial approach.
3. https://www.renovacionterritorio.gov.co/UAECT/librerias/media/pdf/ABC_PDET_2019.pdf
4. Argelia, Balboa, Buenos Aires, Cajibío, Caldon, Caloto, Corinto, El Tambo, Jambalo, Mercaderes, Miranda, Morales, Patía, Piendamó, Santander de Quilichao, Suarez, and Toribio
5. PA agency in charge of PDET implementation

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Appendix

Table A1. Table of interviewed organizations.

ID	Type of Organization Function	Name of Organization	level of action
1	Ex-military	Army	National
2	Government body	Secretary of agriculture	departmental
3	Government body	Army	departmental
4	Government body	Disaster Risk Management Unit	departmental
5	Government body	Ministry of environment	departmental
6	Government body	Ministry of environment	departmental
7	Government body	Ministry of environment	departmental
8	United Nation agencies	FAO	National
9	Private sector	National federation of potato producers	departmental
10	Academy	Cauca University	departmental
11	NGO	Rio-Piedras	departmental
12	Academy	Cauca University	departmental
13	International research center	CIAT	National
14	NGO	Ecohabitat	departmental
15	Municipal extension services unit	UMATA	departmental
16	Private sector	National federation of panela	departmental
17	National research center	Agrosavia	departmental
18	Government body	Ministry of environment	departmental
19	Academy	SENA	departmental
20	International research center	CIAT	National
21	Private sector	Insurance company	departmental
22	Government body	secretary of agriculture	departmental
23	Academy	Cauca University	departmental
24	NGO	CORPOPALO	departmental
25	Peace Agreements agencies	ART	departmental
26	Peace Agreements agencies	ADR	departmental
27	Government body	CC departmental platform	departmental

Table A1. Continued.

ID	Type of Organization Function	Name of Organization	level of action
28	International consultants	NA	departmental
29	Academy	Cauca University	departmental
30	NGO	CREPIC	departmental
31	United Nation agencies	IOM	departmental
32	Private sector	International company	departmental
33	International fund staff	Colombia Sostenible funds	National
34	Government body	Departmental authorities	departmental
35	NGO	Fondo Acción	departmental
36	United Nation agencies	UNDP	departmental
37	Private sector	National federation of coffee producers	departmental
38	United Nation agencies	IOM	departmental
39	Private sector	Peasant federation of Cauca	departmental
40	Indigenous authorities	CRIC	departmental
41	Government body	Ministry of agriculture	National
42	Government body	Ministry of environment	National
43	Government body	Ministry of environment	National
44	NGO	Fondo Acción	National
45	International consultants	NA	National
46	NGO	Fundo Acción	National
47	NGO	Colombia Nuestra	departmental
48	United Nation agencies	FAO	National
49	NGO	Rio-Piedras	departmental
50	Meteorological services	IDEAM	National
51	Government body	Ministry of agriculture	National
52	International consultants	CAF	National
53	National planning Department	DNP	National
54	Peace Agreements agencies	ART	National
55	Academy	Popayan university foundation	departmental
56	National planning Department	DNP	National

(Continued)