Instruments and policy strategies for reducing deforestation in the Colombian Amazon region

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Forests in Colombia occupy nearly 53% of Colombian national coverage. Particularly, Amazonian forests occupy almost 37% of the territory and those are the ones that currently face the highest rates of deforestation. By 2012, Colombia had an annual deforestation rate of about 148.000 ha, mainly located in the Departments of Caqueta (28,761 ha), Meta (22,810 ha) and Guaviare (16.159 ha), which are the active spots of the current deforestation (IDEAM, 2014).

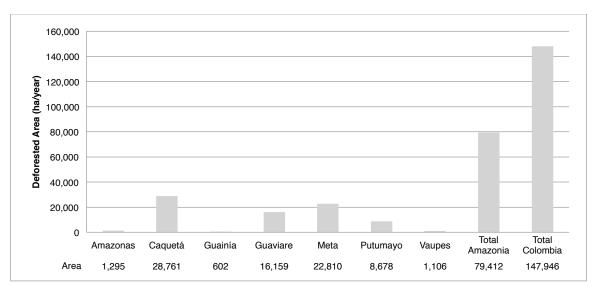


Figure 1. Distribution of deforestation in Amazonian Departments in 2012

(Source: Data IDEAM 2013)

Colombia has a broad framework of policies related to environmental management, but none of these policies specifically promote reduction of deforestation. A few norms can have a negative or positive impact on reducing deforestation (such as the Forestry Incentive Certificate, Law No. 2 of 1959 and Law No. 1454 of 2011) in as much as they offer incentives, determine measures for land use planning (Law No. 2 of 1959 and Law No. 1454 of 2011), promote crop substitution processes (e.g., Plan Colombia, Forest-Warden Families Programme) or have impact on sectors that are deforestation driving forces (e.g., Mining Code, or sectorial plans).

The United Nations Framework Convention on Climate Change (UNFCCC) is the legal framework for current efforts in Colombia to reduce deforestation. In this context, Colombia established the National Climate Change System (through the CONPES¹ document 3700 of 2011) which proposes a coordination framework involving different sectors, territories and communities. This System is based con four instruments: 1) the Colombian Low-carbon Development Strategy, 2) the National Strategy for Reducing Emissions from Deforestation (REDD+), 3) the Financial Protection Strategy against Climate-related Disasters and 4) the national climate change adaptation plan. The strategy for reducing emissions from deforestation is the instrument that directly addresses the issue of deforestation.

The framework of the National Development Plan for 2014-2018 strengthens the above instruments and includes a strategy for green growth that promotes mechanisms for sustainable,

¹ CONPES (Consejo Nacional de Política Económica y Social) = national council on economic and social policy

low-carbon development; achieving resilient growth and reducing vulnerability in the face of disaster and climate change risks; and protecting and guaranteeing sustainable use of the natural capital and improving environmental quality.

The Plan's goal is to reduce deforestation (from 120,000 has in 2013 to 90,000 in 2018) and contemplates formulating a national policy against deforestation led by the Ministry of the Environment and Sustainable Development and involving those sectors that act as driving forces of deforestation, including production chains that use the forest and its by-products. This policy could serve as the overall framework providing guidelines for other sectorial policies and establishing responsibilities for implementing, reporting and monitoring strategies.

1. Policies with greater impact in deforestation

Even though Colombia does not have a specific regulatory framework for addressing the issue of deforestation, several policies are in place related to natural resource management, climate change, land use planning and other sectorial policies that directly affect decisions on land use and thus the conservation of natural ecosystems and deforestation.

Laws and instruments having to do with land use planning have probably had the greatest impact on the dynamics of land use. This is reflected in the multiplicity of land use and conservation regulations that overlap each other (e.g., protected areas, indigenous people's reserves, and special management areas). As far as the Amazon region, Law No. 2 of 1959, whereby the Amazon forest reserve was established, has become an important framework for decision-making around land use planning in the region and forest conservation. Even though this law is based on conservation of natural patrimony, colonization processes and socioeconomic dynamics in the Amazon region have generated land use conflicts that entail land degradation problems and greater demand for new areas for establishing production systems.

Protected areas regulations are especially relevant in decisions related to management of this region. Decree No. 2372 of 2010 mandates that protected areas have land use plans for management purposes in order to meet conservation objectives. Currently, the national protected areas system (*Sistema Nacional de Áreas Protegidas*, SINAP) has approximately 8 million hectares in the Amazon region.

In a complimentary manner, policies related to substitution of illicit crops have also had great influence in the production matrix of the Amazon region. Such is the case of the national alternative development plan (*Plan Nacional de Desarrollo Alternativo*, PLANTE), the Plan Colombia (1999)², the Forest-Warden Families Program, and others that have promoted production projects for generating income, guaranteeing food security and strengthening production chains as a strategy for eradicating coca cropping.

1.1. Weakness in addressing deforestation drivers

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² The Plan Colombia was a cooperation program supported by the Government of the United States, implemented to eradicate illicit crops, combat drug traffic and break up the financial sources of illegal armed groups.

As mentioned before, in general, Colombia has no specific regulatory frameworks that address deforestation caused by productive sectors, which are the main drivers of deforestation at the moment. Policies such as the Mining Code or incentives for agricultural production can have a direct impact in deforestation. Strategic plans in the private sector can also have an impact, taking into account a expansive productive vision and the demand for productive areas that this imply.

Given the impact of forest management on deforestation, current guidelines are evidently insufficient in guaranteeing sustainable management of natural forests or offering alternatives to reduce pressure on these resources. Weaknesses in forest policies and lack of capacity of authorities and organizations in charge of regional forest and environment governance have facilitated illegal extraction of natural forest products. This has generated degradation of natural forests and threatened forest species.

1.2. Lack of effective instruments for enhancing conservation and reducing deforestation

The Ministry of Agriculture and Rural Development (MADR, from its name in Spanish) promotes a diversity of financial incentives and provides technical support at the national level to foster productive approaches in the context of rural development processes in the country, disregarding key environmental considerations. Even though these incentives have been designed and are implemented at the national level, the set of existing instruments does not take into account territory-specific approaches for implementation. The consequence has been that the poorest or more vulnerable populations do not have access to the institutional offer provided by the State. Also evident is the fact that incentives for conserving forests and other ecosystems are not operational.

Among financial incentives, the main instrument is providing economic resources for rural development. The fund for financing the agricultural sector (*Fondo para el Financiamiento del Sector Agropecuario*, Finagro) is the main entity for channelling resources to the agricultural sector. Finagro operates as a second floor bank and is linked to the MADR. It offers funding and instruments for rural development through:

- Development services (credit and relief programmes) and access to financial resources (agricultural guarantee fund—Fondo Agropecuario de Garantías, FAG—and microcredits)
- Instruments for managing agricultural risk (agricultural insurance and currency hedges)
- Fomenting rural investment (incentives for rural capitalisation—*Incentivo a la Capitalización Rural*, ICR—, certificate of forest incentives—*Certificado de Incentivo Forestal*, CIF—, special credit lines—*Líneas Especiales de Crédito*, LEC—and investment projects)
- Production and social capacity building.

The MADR has promoted a diversity of programmes as technical support instruments: Rural Opportunities, Rural Women, Rural Youth, among other. These programmes offer incentives for capacity building in the field. Worth highlighting is the project for supporting production alliances (*Proyecto de Apoyo a Alianzas Productivas*, PAAP) which is designed to link rural small-farmer organizations with specialized markets, represented by a formal commercial partner. This scheme could be scaled up and have impact on the productive transformation of the Amazon, by including producers in the region in production chains. Though their impact in the Amazon region is still

low³, existing instruments have the potential of including or increasing specific actions to promote participation of rural producers and leading production transformation processes in the Amazon region, following sustainability and deforestation reduction criteria.

1.3. Disconnection between market and commercialization mechanisms from incentives and deforestation reduction processes

The bias of regulations towards aspects such as production and inputs generates an imbalance in commercialization issues. As discussed in MADR's Progress Report 2013: "fomenting commercialization of agricultural products is one of the most forgotten issues in agricultural policies during the last 20 years, yet this is one of the most critical aspects for generating income for rural producers in the country". This statement highlights the need for agricultural and livestock production to become socially and economically sustainable.

Competitiveness should be based on approaches that focus on quality and market positioning, and are territorial-based, and not just on the product. It is therefore important that support provided to agricultural and livestock processes be focused on strengthening the complete production chain, by linking actors in a fair way to generate income and guarantee the appropriate conditions for all steps in the chain.

Designing the institutional offer for these parts of the country must be based on a progressive strategy to overcome structural limitations, create an environment that is appropriate for development without deforestation and promoting tools that cover a broader proportion of the population and encourage appropriate land management, especially conservation practices.

1.4. Poor coordination among land use planning instruments

Land use planning instruments are developed independently by each of the municipalities or territorial entities, without analysing the broader picture that affects not only their locality, but the region as a whole, which would result in better results for the region's sustainability. Therefore, the different land use planning instruments need to be integrated, working towards the same vision and taking into consideration the specific characteristics of each region, including the different cultures of its inhabitants and the different production systems.

On the other hand, in terms of land use planning issues, settlers (a culture which is very representative in the region) have the firm belief that slash and burn is the way to open land for agriculture and livestock. In addition, land tenure parameters are not straightforward, generating many uncertainties among those using the land in terms of continuity of processes and limited access to State credits and benefits awarded only to land owners. The current peace process in Colombia is discussing issues related to land tenure, distribution of fallow land and land titling; nevertheless, the discussion needs to be prioritized also in other instances in order to foster development models that reduce deforestation while enabling communities inhabiting the territory to develop new, economically viable, land use practices.

³ Placement of agricultural credits (rediscounting transactions, replacement portfolio and agricultural portfolio) in the Colombian Amazon region is low. To date, the record figure was in 2010 when it reached 2.55% (US\$ 55 million) of the national total; participation has diminished since then.

Finally, several needs are evident: strengthening development and reformulating public policies, and efficient planning and implementation instruments; strengthening public and private institutions, structures and organizations in the productive sector; and generating options for using forest resources to erase the image that the forest is "a waste of space" and can be seen as a resource than can generate sustainable economic benefits when used correctly. This would reduce conflicts related—and become a barrier—to growing deforestation trends, improve the capacity of productive systems, generate a sustainable level of income for producers, and improve territorial governance.

2. Recommendations

Progress in developing a policy to control deforestation requires (a) overcoming challenges having to do with harmonizing land use policies, (b) promoting alignment of existing incentives with these policies, (c) identifying new incentives that directly address the issue of deforestation, and (d) promoting comprehensive policies and regulatory frameworks in sectors having direct impact on deforestation. Following are some specific recommendations on this issue:

2.1. Strengthening the elaboration of a policy and actions for a rural development with zero deforestation: In the context of the green growth strategy of the PND (2014-2018) and the target to reduce deforestation, it is priority to create a general framework to fight deforestation, that can guide other sectorial policies and establish responsibilities in the implementation of strategies, reports and follow up procedures. This framework must address drivers of deforestation and other habilitating conditions such as land ownership processes.

This can also be an opportunity to include integral rural development plans with a territorial approach (promoted by the MADR and the DNP), taking into account issues such as deforestation reduction and low emission rural development oriented to incentivize productive supply chains with this same conditions. It is also essential to promote actions in the private sector that can prioritize including deforestation and integration of low emissions' existing plans.

- **2.2. Strengthening analysis and impact of policies:** It is important that governmental programs promote the analysis of the impact of policies related to the use of natural resources, the development of infrastructure and the definition of policy instruments that are coherent with territorial conditions. In the case of the Amazon region, it is necessary to guarantee that the implementation of these policies are in line with commitments to reduce deforestation. This region faces particular challenges regarding land property rights, productive development to reduce poverty, infrastructure, and financing; which can be used as an opportunity to promote policies with a local approach and with sustainable practices (such as low carbon emission activities).
- **2.3. Strengthening forest management and regulation:** Constructing a vision requires awareness of the importance of forests in the Amazon region and of the need to reduce pressure on this

resource. Forest regulation needs to be strengthened, particularly in these three areas: 1) sustainable management of natural forests, 2) clear description, including definitions, of the competencies of authorities intervening in control processes, and 3) common procedures for managing, transporting and commercializing natural forest products. Sustainable forest management in the Amazon region could be one of the main alternatives to stop and prevent deforestation once these governance gaps have been resolved.

- **2.4.** Harmonizing Law No. 2—Declaration of forest reserves in the country: According to the environment authority, this law establishes forest reserves zones as the main unifying element of the nation's ecologic patrimony as well as of environmental, territorial and forest land use planning. Even though Law No. 2 of 1959 establishes soil, water, and wildlife conservation, it is not clear how this fits in with previous and subsequent norms, such as the regulations for protected areas, collective territories or indigenous communities. It is not clear which is the overruling norm, how they complement each other or how they can be abrogated. Thus progress is needed in conducting technical and legal studies, identifying the normative relationship in the face of other planning instruments, and regulating land use planning.
- **2.5.** Reviewing and redefining Territorial Land Use Plans (*Planes de Ordenamiento Territorial*, **POT**): Territorial planning is a key instrument for development; its objective is to clarify relations between territory and natural resources. A qualification process of territorial land use planning needs to be carried out; in turn, this work needs to be linked to the rural development plans with a territorial focus being promoted by Colombia's National Planning Department (*Departamento Nacional de Planeación*, DNP) and the MADR.
- **2.6. Design and implementation of instruments that contribute to reducing deforestation:** One option is adapting the productive alliances model to the Amazon region, to promote sustainable agribusinesses that enhance environmental management and deforestation reduction commitments. Also, establishing alternative financial mechanisms to facilitate access to credit as an opportunity to promote sustainable production processes through new lines of credit that build on the experience of the rural capitalization incentive (*Incentivo a la Capitalización Rural*, ICR) and the CIF and explore new associative credit mechanisms.
- 2.7. Achieve progress in the land registration system and possibly design the Rural Environmental Registry (in Caquetá and Guaviare) with on-farm monitoring systems: An on-line system needs to be put in place for registering land titles. This system needs to be uniform throughout the departments; in other words, a municipal land registry system that feeds the department system. This registration system would be linked to a system for monitoring deforestation at the municipal level in order to measure results of activities and also define payment to owners of land involved in deforestation reduction programmes. The experience in Brazil needs to be studied, and possible implementation of the Rural Environmental Registry in Colombia. The purpose would be to integrate environmental information on the status of permanent protected areas, legal reserve areas, forests and remnants of native vegetation, consolidated areas and zones of restricted use of rural properties, and other possessions in the

country. In Brazil, this initiative is the basis for strategic data for control, vigilance and actions against forest deforestation, and environmental and economic planning of rural properties.

Annex - Relevant policies and their influence on deforestation

Instrument	Implementation	Opportunities	Threats
Sustainable fore			
Decree- Law No. 2811 of 1974	Involves regulations on issues related to natural resources administration, management, conservation, use and industrialization	Establishes the overall framework for environmental management	Insufficient control and vigilance for implementation: lawlessness in managing natural resources. Lack of incentives for sustainable management to combat illegality.
Law No. 139 of 1994	Establishes the Forest Incentive Certificate (Certificado de Incentivo Forestal, CIF) and its Ruling Decrees No. 1824 of 1994 and No. 900 of 1997, with the objective of fomenting forest plantations	The incentive can be focused to reduce deforestation	Access requirements limit participation of small producers. Promotion of exotic species. Lack of technological packages for native species.
Decree No. 1791 of 1996	Forest use regime, Ruling No. 1367 of 2000 on exports and imports, Decree No. 309 of 2000 on forest research. Art. 2:2 of the Decree of the regime on forest use establishes the objective of regulating the activities of public and private administration in terms of use, management, exploitation and conservation of forests and wild flora in order to achieve sustainable development.	Tools for promoting sustainable management and reducing deforestation	No incentives in place for implementation. Weaknesses in control processes and procedures.
Land use plannir	ng		
Law No. 2a. 1959	Law No. 2 of 1959 and Decree No. 111 of 1959 established the reserve area of the Amazon region as a "Forest Protection Zone" and an "Overall Interest Forest" for the development of forest economy and protection of soils, water and wildlife. The Code of Renewable Natural Resources (Decree	Offers a framework for protecting areas of the reserve	Difficulties in control and vigilance. Colonization processes consolidated in reserve areas generate conflict in terms of soil use. Titling of the land limits incentives to producers. In the case of Law No. 2, it is important to highlight that in spite of having established protected zones

Instrument	Implementation	Opportunities	Threats
Instrument	Law No. 2811 of 1974) stipulates that specific areas of the forest reserve can be used for public or social interest, as well as those properties whose owners demonstrate that their soils can be used in production systems different from forest exploitation, as long as these activities are not detrimental to protection of the reserve. Law No. 2 established the Forest Reserve of the Amazon with an initial area of 43,959,737 hectares, including the departments of Amazonas, Putumayo, Nariño, Caquetá, Guainía, Guaviare, Huila, Meta and Vaupés. Currently, the Reserve has 37,844,524 hectares, since the rest of the area was reassigned to settlers in areas being	Opportunities	in the forest, these are not in accordance with current use patterns. Areas inside the reserve are frequently included in development processes that are not in line with appropriate land use practices for these areas (for example, for conservation or sustainable management). This is the origin of conflicts in land use. This situation is important because one of the limitations to agricultural production and formalization is access to property titles by local populations that have settled parts of the reserve.
Law No. 1454 of 2011, Organic Law of Territorial Land Use Planning	colonized. Promotes decentralization of authority in the planning, management and administration processes (from the hands of the central government to the jurisdictional units). The Law stipulates that the overall policy in terms of territorial land use planning is a competence of the central national authority (National Natural Parks and Protected Areas, macro infrastructure projects, urban growth, areas of cultural and historic significance, and—even more important—deforestation reduction strategies).	Overall regulatory framework to link deforestation strategies to territorial land use planning. This law stipulates that the Nation is empowered to establish the overall policy territorial land use planning in aspects of national interest, and specifically in national parks and protected areas; positioning large infrastructure projects; providing guidelines for the urbanization process and city systems; conserving and protecting historic and cultural influence areas; and other relevant regulations for implementing	Diversity of instruments. Lack of cooperation. Insufficient local capacities to lead land use planning processes.

Instrument	Implementation	Opportunities	Threats	
		deforestation reduction strategies.		
Law No. 1448 of 2011	This Law has to do with victims and land restitution processes that include granting property rights over State-owned fallow land. This measure of legal and material land restitution targets displaced persons or persons that have lost the land where they carried out their economic activities.	In the context of the Amazon region, this Law is important for those affected by the armed conflict in colonization and deforestation processes in the region.		
Climate change				
CONPES 3700 - 2011. National Climate Change System	Coordination framework among sectors, territories and communities for understanding climate change as an issue of social and economic development, and integrating this theme in investment and planning processes. Define as elements of the system the national low-carbon development strategy, the national adaptation strategy, and the financial protection strategy against climatic disasters.	Policy framework for deforestation and low-emissions rural development. Inter institutional coordination scheme.	Strategies being defined without coordination amongst them. Sectoral approaches. Deforestation issues dealt with not including low-carbon, rural development issues.	
Alternative development policies				
CONPES 3218 – Alternative Development Programme 2003 – 2006 (2003)	Programme implemented to eradicate illicit crops and prevent expansion, provide economic and employment alternatives, promote institutional development processes and strengthen	Even though no longer in force, this programme generated important productive transformations. Experience of policies focused on particular needs. The Forest-Warden Families	Programme that did not operate in coordination with markets and the private sector. Production alternatives without alliances in the market generate less impact.	

Instrument	Implementation	Opportunities	Threats
	Promote income generating production projects, guarantee food security, and encourage long-term production projects by strengthening supply chains.	Programme is an incentive that can be used in conservation efforts.	
Sectoral policies			T
Law No. 685, 2001, Code of Mines	The Code of Mines promotes exploration and exploitation of minerals.		Promoting mining activities that are not part of a territorial development strategy can hinder low-carbon rural development or deforestation reduction strategies.
Colombian Livestock Strategic Plan	Define sectoral goals for 2019	Possibility of promoting sustainable livestock production. Improving productivity without expanding the agricultural frontier.	Improving market conditions can have impact on expanding the agricultural frontier unless adequate measures are put in place at the sectoral and territorial level.
National and de	partment plans		
National Development Plan 2014 – 2018	Proposal for a development plan. Promotes green growth strategies that include deforestation reduction goals. Stipulates conservation and sustainable use goals for the Amazon region.	framework that contemplates territorial management concepts and promotes policies for reducing deforestation.	Dos not address specific instruments beyond policies.
Development Plan for the Department of Caquetá and Guaviare (2012 - 2015)	Define department goals for 2015.		Local governments lack the capacities to implement territorial strategies. Dependant on resources from royalties or cooperation for production transformation processes.