



# ADDRESSING AGRICULTURAL DRIVERS OF DEFORESTATION IN COLOMBIA:

*Increasing Land-Based Production  
While Reducing Deforestation,  
Forest Degradation, Greenhouse  
Gas Emissions and Rural Poverty*

## EXECUTIVE SUMMARY



*Report to the United Kingdom, Foreign and Commonwealth Office and Department of Energy Climate Change, Forests and Climate Change Programme. Additional financial support provided by the Norwegian Agency for Development Cooperation (NORAD), through the Forests, Farms and Finance Initiative*

JULY 2013

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In a world facing the triple challenges of land scarcity, climate change, and the loss of tropical forests, there is an urgent need to increase agricultural production while reducing greenhouse gas emissions and slowing tropical deforestation. Colombia is well positioned to become a global leader in meeting these challenges. Its palm oil and sugarcane sectors have begun the transition to sustainability as they expand biofuel production and exports, supported by free-trade agreements and effective finance programs. The beef and dairy sector, which occupies most of Colombia's cleared land, has a goal of reducing the area of pasture from 38 to 28 million hectares by 2019 as it increases production. If successful, this reduction of pastureland area could open up land for crop expansion, sparing forests on a national scale. A peace agreement under negotiation between FARC<sup>1</sup> guerrillas and the national government could soon end the half-century war that has paralyzed much of Colombia's rural zone and strengthened the illicit drug economies. An ambitious restitution program is beginning to compensate or resettle some of the five to six million smallholder farmers and villagers who have moved to urban centres, displaced from their land by guerrilla activity or land grabs. Tree plantations are expanding onto degraded lands. These trends and programs are reinforced by the national government's commitment to end deforestation by 2020, by the law n. 2 of 1959 prohibiting deforestation in the Amazon and six other main forest regions<sup>2</sup>, by the national REDD+<sup>3</sup> framework, and by the "Heart of the Amazon" programme designed to consolidate protected areas and indigenous territories in the Amazon region while arresting further frontier expansion into the region.

A Colombian strategy for addressing the agricultural drivers of deforestation is best framed at the national level. There is an opportunity to link the increasingly export-oriented, "legal" agricultural regions (outside of the Amazon biome) with the unconsolidated agricultural and livestock

regions of the Amazon and Piedmont regions, where illicit crops and low governance capacity impede the transition to a low-emission, low-deforestation, productive economy. Palm oil and sugarcane sectors are poised to build upon their informal "zero-deforestation" supply chain commitments to endorse a zero-deforestation, low-emission national agenda. The cattle sector has made important advances towards more sustainable production systems, and is poised to extend this progress into the Amazon region, where forest clearing for livestock is an important driver of deforestation.

A second overarching theme of a national land-use strategy is the urgent need for robust economic opportunities for small-scale producers. Colombia is moving beyond its legacy of land concentration—which has been an important motive of the guerrilla war—into a new chapter of its rural economic history, in which a diversity of small-scale producers are expecting improved livelihoods. To meet the critical demand for better economic opportunities in rural Colombia, effective models of farm settlements with innovative land tenure arrangements, technical support, marketing/commercialization systems, and financial instruments are needed. Many options for achieving this goal are on the table.

A national land-use strategy for increasing agricultural production and improving rural livelihoods while slowing and eventually ending deforestation, could potentially reduce greenhouse gas emissions associated with deforestation while enhancing CO<sub>2</sub> removals from the atmosphere by regrowing forests at a scale of approximately 0.7 billion tons CO<sub>2</sub> equivalent by 2020. These emissions reductions would be accompanied by substantial co-benefits in the form of improved smallholder farmer livelihoods, better air quality, biodiversity conservation and regulation of water flow (i.e., less flooding) in watersheds. To realize this potential, we recommend a "theory of change" that seeks to support and strategically link five opportunities: (a) the nation's progress in developing a jurisdictional REDD+ programme; (b) the progress of palm oil and sugarcane sectors towards sustainability; (c) the cattle sector's 2019 goal of reducing pasture area while increasing production; (d) restitution and farm settlement programs; and (e) the planted forest program.

1 FARC is the acronym for the "Fuerzas Armadas Revolucionarias de Colombia", (Revolutionary Armed Forces of Colombia), the principal guerrilla group operating in rural Colombia since 1964.

2 Six additional forest areas: Pacific, Central, Magdalena River, Sierra Nevada de Santa Marta, Serranía de los Motilones, and Cocuy.

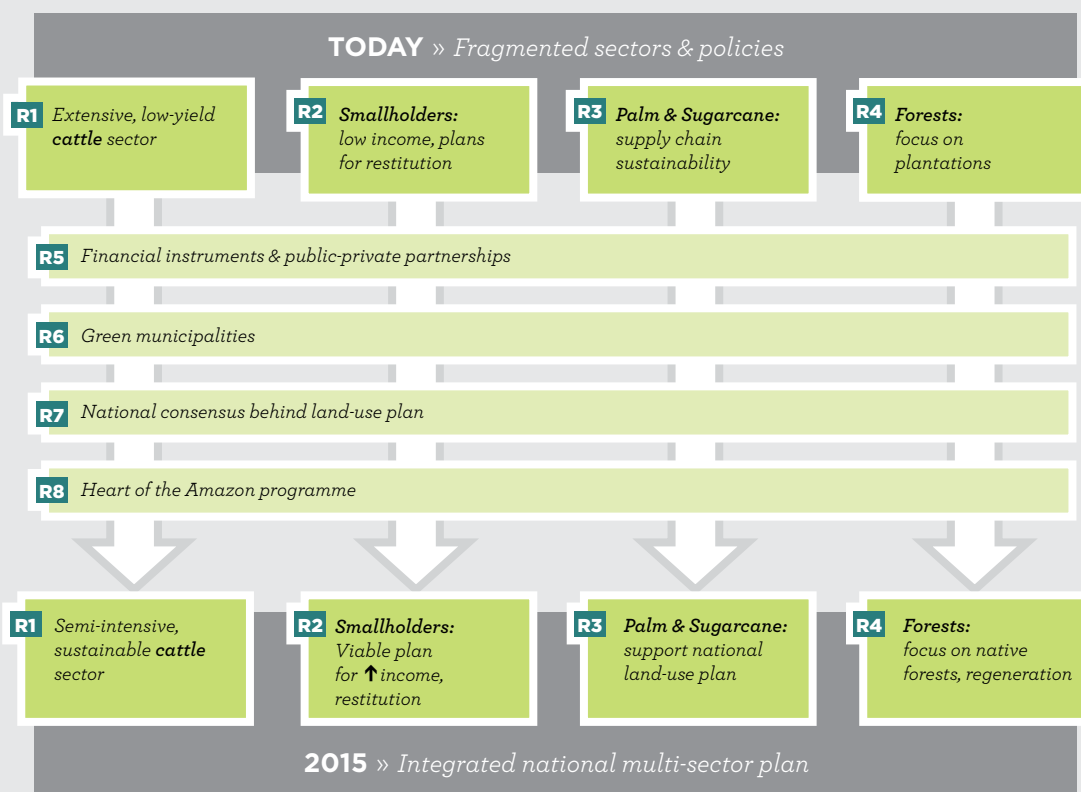
3 REDD+ is the acronym for "Reduced Emissions from Deforestation and Forest Degradation", which is a mechanism for compensating nations that lower their emissions from deforestation and forest degradation under development within the United Nations Framework Convention on Climate Change and through other bilateral and voluntary market processes.

# SUMMARY OF RECOMMENDATIONS

Colombia has an excellent opportunity to develop a national land-use strategy over the next two or three years that is supported by government, the private sector, and civil society. The likelihood of success of this strategy will be enhanced through a sustained, orchestrated commitment from donor nations that helps to maintain momentum across political election cycles and that provides a long-term prospect for funding at scale that is tied to realistic performance milestones. The recommendations presented in this report are focused on this opportunity. They are presented assuming an initial design and early implementation phase (2013 through 2015) of a programme that will take ten years (or more) to bring to full fruition. They are intended to provide a broad conceptual framework for linking together the many opportunities and initiatives underway in Colombia into an integrated synergistic programme, with some detail on potential examples of specific interventions. (A full description of the recommendations is found in the main text of the report.) These recommendations should be developed more fully with the benefit of deeper analyses that provide more detail on the scale of finance that will be necessary to achieve stated goals and to investigate more thoroughly the business case for each proposed intervention. We recommend a six- to eight-month period of further analysis and investigation to provide this deeper level of analysis.

This strategy must be “owned” by several rural sectors with little track record of collaboration and it must be sufficiently flexible to respond to changing circumstances, including the possible failure of the Havana peace talks (which should by no means be viewed as a game-stopper).

The recommendations fall into three categories of intervention: sector-specific, systemic, and multi-stakeholder processes. They are integrated within a Theory of Change that focuses, initially, on achieving broad support for a national land-use strategy by the end of 2015, as illustrated in **Figure ES-1**.



**Figure ES-1** | Theory of Change for interventions through which the UK and other donors could support the national transition to a “low-emission” rural development model in which deforestation declines and eventually ends as agricultural and livestock production and rural incomes increase, with a special focus on the Amazon region. This diagram features the initial 2.5-year intervention, ending in 2015, that would develop the integrated national multi-sector land-use plan and enabling conditions. Subsequent funding over an additional period would support completion of the transition to the “low-emission” rural development model.

# Sector-Specific Recommendations

**RECOMMENDATION 1.** *Support the transition to a zero-deforestation, more productive cattle sector.*

**OVERVIEW** | Cattle grazing lands (both planted and natural grasslands) occupy 38 million hectares in Colombia (40% of total land cover)<sup>4</sup>. These largely inefficient livestock systems are the necessary centrepiece of any strategy for expanding agricultural production while slowing and eventually ending deforestation in Colombia. Through a programme of intensification, grazing land can be made available for crop expansion while beef and milk production increase on a



smaller fraction of the current area. This intensification can be achieved sustainably through improved cattle breeds, pasture management, technical support, finance and commercialization systems, and is supported by Colombia's beef sector. The transition to higher yields is proceeding successfully in many Latin American nations.

<sup>4</sup> Ministerio de Agricultura y Desarrollo Rural. Min. Juan Camilo Restrepo Salaza, Bogotá, 2010. Available at [http://www.minagricultura.gov.co/archivos/ministro\\_jc\\_restrepo\\_tierras\\_2.pdf](http://www.minagricultura.gov.co/archivos/ministro_jc_restrepo_tierras_2.pdf)

## DESIRED OUTCOMES BY 2015

- Enabling conditions for national cattle sector transition established and integrated within the national land-use plan (Rec. 7).
- National zero deforestation cattle plan expanded to include deforestation hotspots in the Amazon region.
- Finance and technical support approaches for small- and medium-scale beef and milk producers in deforestation hotspots designed and beginning implementation.

## STRATEGY

**Goal 1** | FEDEGAN and other cattle producer organizations participate in and support both national and Amazon land-use strategies (see Recs. 7 and 8).

**Goal 2** | System of technical and financial support for cattle sectors in deforestation hotspots to shift to low-deforestation, high-yield production, building on silvo-pastoral systems designed and tested.

**Goal 3** | Public-private partnership developed with FINAGRO, beginning to deliver loans to cattle producers in deforestation hotspots.

**Goal 4** | Cattle production system developed and beginning implementation within 3 to 5 restitution settlements.

## RECOMMENDATION 2.

*Support for a nation-wide program of sustainable farm settlements.*

**Overview** | The concentration of land in the hands of a small minority is at the core of Colombia's rural conflict. With the prospect of peace on the horizon, it is crucial that an effective programme for resettling a significant fraction of the five to six million farmers displaced by rural conflict be designed and implemented. Those small-scale producers who are still on the land are also in need of economic alternatives, clear land titles, and basic services. Both groups of farmers are vulnerable to the illicit crop trade, to the

flooding of the market with cheap farm products from the US and other nations (through free trade agreements), and to the expansion of agribusiness. Both groups of smallholders could also turn to forests for their livelihoods, clearing forests for the production of subsistence crops and for the establishment of cattle pastures. Alternatively, smallholders could be supported to develop agricultural and forest-based enterprises, increasing food security both regionally and nationally while reducing pressure on remaining forests. If sustainable settlements are achieved at scale, they could provide a powerful alternative to illicit crop production systems. Colombia is developing programmes to address these challenges through its restitution programme and through programmes in support of existing smallholder settlements.

Colombia's incipient programme of land restitution, its silvo-pastoral livestock production pilot project, and its community forest management initiatives represent important opportunities to foster integrated smallholder production systems that increase the production and incomes of smallholders and groups of farmers. One important innovation in this regard could be the establishment of regional smallholder production "clusters", each supported by a centre for technical and business outreach to build the capacity of smallholders to engage in commercial enterprise. This intervention links directly to the public-private partnership and finance components (*Rec. 5*).

## DESIRED OUTCOMES BY THE END OF 2015

- Incorporate smallholders settlements into national spatial plan for land use (*Rec. 7*).
- Design effective strategies for (a) resettling farmers displaced by guerrillas (supporting the government's restitution program) and (b) increasing productivity and incomes of existing settlements.
- Support development of sustainable, community enterprises based on forest products, tree crops, and agricultural products.

- Design and begin implementation of ten pilot restitution settlements.
- Design and begin implementation of interventions in ten existing smallholder settlements.

## STRATEGY

**Goal 1** | Ministry of Agriculture restitution programme leaders and representatives of displaced farmers participate in national land-use planning process to secure favorable locations and to design supporting policies for new smallholder settlements.

**Goal 2** | Effective approaches for the design and implementation of successful smallholder settlements representing a range of modalities developed and vetted by relevant stakeholders.

**Goal 3** | Ten pilot restitution settlements designed with effective technical/business support and finance mechanism (*see Rec. 5*).

**Goal 4** | Ten existing smallholder settlements (with half in Amazon deforestation hotspots) beginning transition to sustainable, productive, economically viable systems.



### **RECOMMENDATION 3.** *Consolidate the transition to sustainable palm and sugarcane sectors.*

**Overview** | Palm oil and sugarcane sectors figure prominently in Colombia's ambitious renewable fuel agenda. Both sectors have also initiated a transition towards sustainability. Production centres currently are located largely outside of forest frontier regions; palm oil could become a direct driver of deforestation in the near future<sup>5</sup> however, and industries from both commodities are exploring greater investment near the forest frontier. These sectors could become important elements in the strategy to slow deforestation while increasing agricultural production if they throw their

sustainability, since mills that depend on large numbers of small-scale producers are more costly to certify under Bonsucro or RSPO standards. The exclusion of smallholders from palm oil and sugar supply chains could potentially undermine the peace process, which is focused on peasant access to land and economic opportunities.

For palm oil and sugarcane sectors to realize their potential as proponents of a national land-use strategy, a few interventions could help consolidate and expand their commitment to sustainability while providing direct support for increasing the participation of smallholder growers as suppliers. They are already positioned to formally take on zero deforestation commitments that could be reinforced through both roundtable certification and through the requirements of the European Union's Renewable Energy Directive. Palm oil and sugarcane sectors currently view deforestation as a supply chain issue however, instead of a regional or national issue that could affect their ability to sell into some markets.

#### **DESIRED OUTCOMES BY THE END OF 2015**

- Palm oil and sugarcane sectors support and participate in the national land-use planning process, moving beyond supply chain focus to embrace national sustainability goal.
- Palm oil and sugarcane sectors achieve high level (25% of production) of certification under RSPO and Bonsucro that includes smallholder growers.
- Substantial number of smallholder growers of palm oil and sugarcane receiving higher incomes.

#### **STRATEGY**

**Goal 1** | Colombian producers' associations engaged in a national land use dialogue that finalizes maps for go/no-go zones for each commodity and that supports national zero deforestation goal.

**Goal 2** | Autonomous smallholder groups and mills with large numbers of smallholder growers receive financial assistance to cover the costs of certification for a 2-3 year period.



political and economic weight behind both the design and implementation of a national land-use plan (see Rec. 7). They can also provide a large number of jobs within their supply chains, potentially providing economically viable alternatives to slash-and-burn agriculture and illicit crops. Such alternatives will be extremely important in rural Colombia with or without a peace agreement. Both sectors run the risk, however, of excluding large numbers of small-scale growers from their supply chain transitions to

5 Inter-American Development Bank (IDB), and Colombian Ministry of Mining and Energy. 2012. Assessment of biofuels chain production life cycle in Colombia - Executive Summary. Prepared by Consortium CUE. Bogota, Colombia. Available at <http://www.fedebiocombustibles.com/files/Executive%20Summary.pdf>

**Goal 3** | Processors and commercial buyers (both local & international) agree to purchase a percentage of sustainable palm and sugar from Colombian producers (including a commitment to buy from small- and medium-scale producers) by 2015.

**Goal 4** | Credit union providing loans with differentiated interest rate structures tailored to promote sustainable palm, sugar, and biofuel production.

**RECOMMENDATION 4.** *Expand sustainable forest management, forest regeneration, and tree plantations.*

**Overview** | One half of the Colombian territory is covered by forests, making it one of the world's great tropical forest nations. As is the case with palm oil, sugarcane and biofuels, the nation is seeking to organize and modernize its forest sector. This is no small task. The Colombian economy consumes four million cubic meters of wood each year. Three fourths of this demand is supplied by logging natural forests and nearly half of this logging is illegal. A major piece of the plan to gain greater control over the forest sector is the establishment of tree plantations. By the end of 2014, Colombia hopes to establish one million hectares of planted forests (60% commercial plantations with exotic species; 40% with native species) to reduce exploitation pressure on natural forests and to restore degraded lands. To support this ambitious goal, USD 184 million will be made available to cover some of the costs of plantation establishment (up to 50% of costs for commercial exotics and 75% of the costs of native species plantations) through the CIF ("Forest Incentive Certificate") of MADR (Ministry of Agriculture and Rural Development). So far, this programme has supported the establishment of approximately 200,000 ha of forests. CIF funds can also be used to cover the costs of natural forest management.

Colombia has an excellent opportunity to build upon its impressive planted forest agenda to develop a more comprehensive approach to forests, weaving them more deliberately into the zero deforestation cattle agenda (*Rec. 1*), the farm settlement/restitution agenda

(*Rec. 2*), the national land-use strategy process (*Rec. 7*) and the Heart of Amazon proposal (*Rec. 8*). Three opportunities are particularly ripe in this context. First, if the *area* of cattle pasture declines at the pace that is envisioned by the cattle sector (i.e. from 38 million hectares today to 28 million hectares in 2019), large areas of marginal land will become available for natural forest regeneration, which can be surprisingly cheap<sup>6,7</sup>. Even if only 20% of the 10 M ha of pastures that are taken out of grazing are allowed to naturally regenerate, 10 to 15 million tons of CO<sub>2</sub> could be pulled out of the atmosphere each year by regenerating forests.

Second, Colombia's "competitive regional consortium" initiative, designed to support tree planting and tree-based enterprise among clusters of smallholders, could be expanded/adapted as an important element of restitution settlements. The role of UK finance could be similar to that described under Recommendation 5, in collaboration with FINAGRO.

Third, National and Amazon land-use planning processes (*Recs. 7 and 8*) could develop regional analyses and seek multiple-sector consensus on a spatial and economic/business plan for fostering sustainable forest management and associated enterprises (for timber and non-timber products), forest regeneration, and tree plantations. The spatial land-use plans of the national and Amazon forest strategies could recognize and, where appropriate, address the major constraints to forest-based enterprise, while seizing the major opportunities. The finance and technical outreach mechanisms for implementing the strategy on the ground could be similar to those described under *Recommendation 5*.

**DESIRED OUTCOMES BY THE END OF 2015**

- A national forest sector plan that is supported by the major rural sectors, with viable, spatially-differentiated business models for unlocking the potential of natural forest management,

6 Nepstad, D. C., G. O. Carvalho, A. C. Barros, A. Alencar, J. P. Capobianco, J. Bishop, P. Moutinho, P. A. Lefebvre, U. L. Silva, and E. Prins. 2001. Road paving, fire regime feedbacks, and the future of Amazon forests. *Forest Ecology and Management* 154:395-407.

7 Bowman, M. S., G. S. Amacher, and F. D. Merry. 2008. Fire use and prevention by traditional households in the Brazilian Amazon. *Ecological Economics* 67:117-130.



forest regeneration on marginal lands, and tree plantations, successfully incorporating tree-based enterprise into restitution settlements, smallholder settlements, and small-scale cattle producers.

## STRATEGY

**Goal 1** | Forest sector representatives and experts participate in national land-use strategy process (*Rec. 7*), advocating larger role for forest- and tree-based enterprise and mechanisms for compensating the maintenance or restoration of forest-based ecosystem services.

**Goal 2** | Forest management/tree plantation pilots (12 to 20) designed and beginning implementation for three modalities, documenting costs and multiple benefits and testing finance/compensation models.

**Goal 3** | CIF expanded to support broader range of forest- and tree-based enterprise.

# Systemic Interventions

**RECOMMENDATION 5.** *Public-private partnerships for innovative finance.*

**Overview** | The transition to low-emission rural development in Colombia is technically viable and could become financially self-sustaining. Investments in better cattle breeds, fertilizer, improved land management, tree crops, silvopastoral systems, higher yielding palm oil, sugar and other plantations, and other interventions can provide higher yields and higher profits per hectares—a key component of the transition to low-emission rural development. However, the capital necessary to make these investments is not available to most micro-, small-, and medium-sized producers. The problem cannot be simply described as a lack of public finance. Colombia directs USD 8.6 billion per year to its agricultural sectors through public loans, grants, and investments. Rather, the problem is often that the people and regions that are most in need of finance can't access it. Many landholders in the Amazon and smallholders nationally do not have clear title to their land and therefore have difficulty guaranteeing their loans. Infrastructure, technical support and commercialization systems are also lacking in the Amazon region, elevating risks for loan-makers. In this recommendation, we also present possible financial instruments that could incentivize municipal-level declines in deforestation, drawing lessons from Brazil's "green municipalities" program.

This recommendation is for a "cross-cutting" intervention in the Colombian public finance systems to improve their effectiveness in stimulating the transition to higher yields, lower deforestation, better soil and water management, and better labour practices on private farms. We have identified several potential interventions to mobilize finance where it is most needed, and FINAGRO (with the supervision of MADR) has expressed interest in working with the UK in developing these instruments.





## DESIRED OUTCOMES BY THE END OF 2015

- Finance mechanisms designed and beginning implementation through public-private partnerships in support of sustainable cattle production, responsible beef and milk processing (see Rec. 1), smallholder settlements (see Rec. 2), certification of mills and their smallholder growers (see Rec. 3), and to reward “green”, low-deforestation municipalities (see Rec. 6).

## STRATEGY

**Goal 1 |** Matching Fund Agreement with Colombia. New “LED-R” financial products with better terms (lower interest rates) and conditions (longer repayment periods) than ordinary loans, are developed together with FINAGRO.

**Goal 2 |** Public-Private Partnerships designed and beginning implementation. The matching fund agreement would be implemented through public-private partnerships (PPPs) with a commercial bank, microcredit institution, and/or credit union to offer LED-R finance products.

**Goal 3 |** Performance-based allocation of royalties to municipalities in support of a “Green Municipalities” initiative (Rec. 6). Negotiate agreement with National Royalty Program for a pilot system for allocation of funds to municipalities that are lowering their deforestation rates (and possibly other criteria). UK or other donors provide a part of the finance and fund the design process.

**RECOMMENDATION 6.** *Design and implement a “green municipalities” program.*

**Overview |** One of the most effective governmental interventions in deforestation in the Brazilian Amazon was the municipal black list, created in 2008<sup>8</sup>. The farms located in the region’s 36 top-deforesting (i.e., “black”) municipalities were cut off from government agricultural loan programmes and markets until deforestation declined. Several municipalities responded rapidly, with farmers, ranchers, and local governments

organizing themselves to lower deforestation. By defining performance at the scale of the entire jurisdiction (the municipality) with a simple metric (annual deforestation compared to the historical average) and direct consequences (access to credit), the programme fostered collaboration, dialogue, and innovation that achieved declines in deforestation at a very large scale. This programme has since been adopted and modified by the state government of Pará, which has begun to allocate state-to-municipal governmental transfers to favour declines in deforestation through a programme it calls “Municípios Verdes” (Green Municipalities)<sup>9</sup>. Many stakeholders in Colombia believe that such an approach holds potential to slow deforestation in the Amazon region of Colombia and perhaps elsewhere in the country; work has already begun on the development of a programme of this type.

Colombia has an opportunity to design, test and implement its own version of a Green Municipalities programme that leapfrogs some of the weaknesses of the Brazilian system.

The main problem in Brazil has been the lack of positive incentives at the farm level in successful municipalities and the dependence upon the support of elected mayors that can disappear through election cycles. (Brazil’s 76% decline in deforestation is vulnerable to a reversal precisely because it has been achieved with virtually no positive incentives to farmers and settlements that are opting for sustainable, zero-deforestation production systems.) Colombia could consider designing a programme that punishes high deforestation municipalities



<sup>8</sup> Decree n. 6.321/2007, Brazil. More information available at <http://www.mma.gov.br/florestas/controle-e-prevencao-do-desmatamento/plano-de-acao-para-amazonia-ppcdam/lista-de-munic%C3%ADpios-priorit%C3%A1rios-da-amaz%C3%B4nia>

<sup>9</sup> Decree n. 31.884/2011, Pará, Brazil (officially created the program). More information available at [http://municipiosverdes.com.br/arquivos/decreto\\_de\\_criacao\\_do\\_pmv.pdf](http://municipiosverdes.com.br/arquivos/decreto_de_criacao_do_pmv.pdf)

and rewards farmers, settlements, and governments in municipalities that are lowering deforestation. This programme could initially focus on the Amazon region as part of the “Heart of Amazon” initiative (Rec. 8) as it expands to the Llanos/Orinoco and other regions.

### DESIRED OUTCOMES BY THE END OF 2015

- Pilot Municipalities (4 to 8) in each of two target regions (Amazon deforestation hotspots; Llanos) reducing deforestation through performance-based positive and negative incentives.
- Political support across several sectors for expanding the programme to the entire Amazon and, perhaps, nationally.

**Goal 3** | IDEAM’s forest monitoring programme operationalized as authoritative source of deforestation information across all levels of government in support of green municipalities and to increase awareness of deforestation nationally.

**Goal 4** | Request for proposals from municipalities within target departments to support their efforts to organize their stakeholders and plan for the reduction of deforestation.

## Multi-Sector Consensus, Governance, and Spatial Planning

**RECOMMENDATION 7.** *A national land-use strategy with deep cross-sector support.*

**Overview** | Colombia’s rural sector policies and dialogues are highly fragmented. Strategies for increasing the production of crops, livestock, and biofuel are operating outside of strategies for ending deforestation or resettling hundreds of thousands of displaced farmers onto the land. The national strategy for mining is even further removed from the forests and farms agenda. As a result of this fragmentation, many programmes and policies have the potential to undermine each other. For example, even if a multi-sector agreement is reached to make the Amazon region off limits to further agricultural expansion, mining and hydrocarbon policies that open up remote regions of

the Amazon to mineral exploitation could usher in waves of colonization and forest clearing. To achieve better harmonization across divergent objectives, multi-sector dialogues at different scales that develop evidence-based, spatial land-use zoning plans, infrastructure plans, and strategies for increasing frontier governance capacity are needed. This agenda is consistent with Colombia’s decentralized spatial planning policy and holds great potential for diminishing conflict among rural development agendas.



### STRATEGY

**Goal 1** | Amazon and Llanos target municipalities selected on the basis of: (a) capacity and engagement of the municipal government; (b) location; (c) agricultural sectors and their level of organization; (d) remaining forests and savannas; (e) historical rate of deforestation.

**Goal 2** | “Green Municipalities” programme designed.

Important precedents exist for achieving integrated regional development plans through multi-stakeholder processes. The “MAP” (Madre de Dios, Acre and Pando) planning process along the interoceanic highway from Brazil through Peru to the Pacific has fostered integration of policies and programmes across sectors in Acre (Brazil), Madre de Dios (Peru) and Pando (Bolivia).<sup>10</sup> The BR163 “soy highway” regional planning process, in the eastern Amazon of Brazil, culminating in 2005, resulted in one of history’s greatest pulses of tropical forest protected area and extractive reserve creation, with 24 million hectares set aside between 2004 and 2006<sup>11,12</sup>. This process was driven by civil society and assimilated by the federal government. Comments from a broad range of Colombian stakeholders suggest that an agreement is within reach to fully implement Law 2 of 1959 that prohibits forest clearing in the Amazon and to identify viable pathways for increasing agricultural and mineral production with a minimum of negative impact.

## DESIRED OUTCOMES BY THE END OF 2015

- National land strategy designed, with support across several sectors, to reconcile Colombia’s goals of ending deforestation, increasing agricultural and mineral production, and resettling displaced farmers.

## STRATEGY

**Goal 1** | Design and implement a regionalized, multi-sector, participatory process that would culminate in a national land strategy.

**Goal 2** | Develop plausible 2020 scenarios for reconciling Colombia’s forest, agriculture, resettlement, mining, and hydrocarbon goals that highlight the potential of current and proposed public policies and governance instruments to achieve each scenario.

**Goal 3** | Develop a single, broadly shared land-use map for Colombia that reinforces the legal status of the Amazon and other regions as forest reserves that are off-limits to agricultural expansion.



**RECOMMENDATION 8.** *Complete and implement an Amazon land strategy (Heart of the Amazon proposal).*

**Overview** | Colombia’s greatest challenge in reconciling its deforestation, mining, and hydrocarbon goals is the Amazon region. Governance capacity is low in the Amazon, and even with a successful peace process, the illicit crop economy will continue to undermine efforts to govern this vast region. Mining and hydrocarbon interests are anxious to achieve permits to do prospecting and exploit resources in areas that are legally off limits to such activities. And, yet, there is a great deal of convergence across many national rural sectors around the notion that the Amazon region should be off-limits to further agricultural and livestock expansion. The cattle, palm oil, sugarcane and biofuel sectors all support the removal of deforestation from their supply chains. There is strong support for the indigenous peoples’ formally recognized territories within the Amazon Biome, for management of protected areas, and for the HA programme to inter-connect these territories and reserves across an eleven million hectare area.

Colombia’s HA proposal/programme is an appropriate centrepiece of the

<sup>10</sup> Mendoza, E. R. H., S. G. Perz, S. Souza da Silva, I. F. Brown, and P. S. Pinheiro. 2013. Revisiting the knowledge exchange train: scaling up dialogue and partnering for participatory regional planning. *Journal of Environmental Planning and Management*:1-19.

<sup>11</sup> Campos, M. T. and D. C. Nepstad. 2006. Smallholders, the Amazon’s new conservationists. *Conservation Biology* 20:1553-1556

<sup>12</sup> Nepstad, D. C., D. McGrath, A. Alencar, C. Barros, G. O. Carvalho, M. Santilli, and M. d. C. Vera Diaz. 2002. Frontier governance in Amazonia. *Science* 295:629-631.



UK investment strategy in Colombia. It lays out an agenda of spatial planning, investments in governance capacity within subnational governments, the development of economic alternatives to forest conversion to livestock and crops, the development of programmes for improving the livelihoods of the indigenous groups whose territories lie within the Amazon biome, protected area management, among other elements. We recommend the expansion of this proposal to encompass the entire Amazon biome, given the large potential for an orchestrated set of investments from the UK, Germany and Norway. Most of the elements of the HA programme are addressed in *Recommendations 1-5*. The “Green Municipality” recommendation could further strengthen the HA programme, as could the National Land-Use Strategy (*Rec. 7*). In this recommendation, we highlight those elements of the HA proposal that are not already addressed in other recommendations.

**ACKNOWLEDGMENTS** | We would like to thank the contributions whether through participation in meetings, bilateral interviews or written consultations and/or comments to previous versions of this report: Alberto Galán Sarmiento, Alejandro Sarastasi Montoya, Amparo Mondragón Beltrán, Andrea Guerrero, Andres Castro Forero, Andres Etter Rothlisberger, Andres Felipe Zuluaga, Aura Robayo Castañeda, Carlos Alberto Mateus, Carlos Augusto Del Valle, Christopher Abrams, Edersson Cabrera, Elizabeth Valenzuela Camacho, Enrique Murgueitio Restrepo, George Furagaro, Guido Mauricio Lopez Ochoa, Iván Darío Valencia, John Alexander Vergel Hernandez, Jorge Arturo Isaacs

## DESIRED OUTCOMES BY THE END OF 2015

- Heart of the Amazon programme expanded to the entire Amazon Biome, with robust business models developed to address agricultural drivers of deforestation (increasing the value of timber- and non-timber-based enterprises), effective participatory planning achieving consensus on a spatial plan and land-use strategy, a programme of support and economic alternatives for indigenous communities developed with meaningful engagement of these groups.

## STRATEGY

**Goal 1** | Indigenous groups of the Amazon region, together with relevant government agencies and with adequate support from partner organizations, develop programmes for improving livelihoods and managing territories, supported by analysis of current circumstances, needs assessment, and current systems for supplying basic services (health, education, water).

**Goal 2** | Governance deficiencies in the Amazon region understood and strategy for overcoming these deficiencies developed with cross-sector support.

**Goal 3** | Heart of the Amazon programme expanded to the Amazon Biome, developed and ready for implementation, with deep support from key sectors and developed on a foundation of economic, governance, and sociological analyses.

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