

NATIONAL STRATEGY FOR SUSTAINABLE MANAGEMENT OF NATURAL FORESTS IN THE FRAMEWORK OF NATIONAL POLICY FOR SUSTAINABLE FOREST DEVELOPMENT

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ABSTRACT

Will be presented at the II Congress in environmental sustainability, the advances in regard to the National Strategy for sustainable management of natural forests in the National Policy framework for sustainable forest development, for it is necessary to make an actual count of the background in the management of natural forests, of the problems presented through the time as a result of the impact that has been generated with the drivers of change of the natural forest, which has been working on a conceptual schema for the sustainable management, taking as its main objectives the protection, the sustainable use and restoration of the natural forest, in this regard have been proposed various lines Strategic with the accompaniment of institutions, universities, specialists in the topic and the community in general, in order to ensure environmental sustainability in natural forest, all in relation to the matters raised in the goals of the NDP 2010-2014.

Keywords: Ecosystem Services, natural forests, sustainable use, protection, restoration.

1. INTRODUCCIÓN

This is the opportunity to raise the policy proposals for the integral management, sustainable and effective, natural forests, whose bases has been establishing and agreeing on the direction of ecosystems of the Ministry of Environment, Housing and Territorial Development together with all stakeholders, including especially the representatives of ethnic and peasant communities, in whose territories are found the largest tracts of forested ecosystems of our country.

In this presentation is not intended to expose and analyze all the elements of a topic that as is, it encloses a great complexity in the multiplicity and interrelationship of various factors that affect it. Given the brevity of the time, we are looking for more good highlight and summarize some key aspects of four major thematic components: i) the problems affecting the natural forests; (ii) the conceptual schema for a sustainable management of forests; (iii) the lines of action for a National Strategy for Sustainable Management of Natural Forests in the National Policy framework for sustainable forest development, and iv) goals of the National Development Plan "Prosperity for All 2010-2014 ".

In the first place, it should be noted that it is clear that it is vital and becomes a prerequisite, achieve greater articulation of the various policies, environmental programs and strategies with the needs and characteristics of a forest management, and in turn, it is required that the new Forest Policy incorporate and integrate more explicitly the guidelines and actions set out in the current environmental policies. For this purpose, the Ministry of Environment has clearly defined the project for "National Policy for Integrated Management of biodiversity and their ecosystem services", such as the "umbrella policy", in harmony with which they will be structured and updated other environmental policies, including, of course, the National Strategy for Sustainable Management of Natural Forests in the National Policy framework for sustainable forest development.¹

4. Problems affecting natural forests

The forests are essential for the economic development and the maintenance of all forms of life. This postulate was embodied in the Declaration of Principles for the management, conservation and the sustainable development of all types of forests adopted at the 1992 Rio Summit on Environment and Development, cobra today for our country more valid than ever before in its entire history.

Colombia faces today the paradox of being considered at the global level as one of the countries with the highest biodiversity, but at the same time, to be catalogd as one of the that has one of the highest rates of deforestation (Duke, 2011). In effect, with a land area that represents only 0.7 % of the surface of the planet, our country is home to approximately 10% of the different forms of life that are known at present, which makes it a country "mega"; but, on the other hand, this great wealth that constitutes our biodiversity, in large part contained in natural forests of the country is being affected by the phenomenon of deforestation, at an estimated rate by the IDEAM in 336,581 hectares per year, (IDEAM, 2010), during the period 2000-2007, has been used for these studies of a preliminary nature a scale resolution of 1:500 .

Fortunately, unlike posed by other sources, new studies by the IDEAM scale with a higher resolution, in this case 1:100,000, indicate that the average annual rate of loss of forest cover was 273,334 hectares per year

¹ The "ecosystem services" are those benefits that people derive from ecosystems. The basic difference between them: (i) provisioning services (production of supplies - water, food, timber, etc.); (ii) regulating services (of cycles such as the floods); (iii) support services, which are related to the functioning of ecosystem processes (such as the process of photosynthesis); and, (iv) cultural services (aesthetic and spiritual values, cultural, recreation). (Adapted from http://www.cifor.org/pes/_ref/sp/sobre/ecosystem_services.htm)

(IDEAM, 2011) for the period 2000-2005. This figure, however, remains supremely high and worrisome and should induce a more in-depth analysis on both the underlying causes of this phenomenon and about the multiple effects that generates, as on the measures that need to be implemented at all levels to decrease quickly and take it, if possible, to the half for the year 2020 and thus fulfill the goals of Nagoya - Aichi²

The already mentioned study of *quantification of the rate of deforestation to Colombia by IDEAM*, reveals that the areas where it is concentrated the largest loss of forest in the period 2000-2005 were Cauca, Nariño (surroundings of Tumaco), the piedemonte Amazon, the flanks of the hills of San Lucas and the northwestern department of Caqueta. On the other hand, in relative terms, the Caribbean region was the one that lost a greater proportion of forest area in the analyzed periods, of 181,998 has equivalent to 9.3 per cent of forest lost, in the Andean region, the deforested area in this same period was 367,493 has equivalent to 3.2 %.

These findings are manifested in a dramatic way in the projections made by the Ministry of the Environment on the basis of this information, which allow us to predict that, even taking into account activities such as reforestation and restoration, the estimated time to disappear in its entirety the scarce remaining forest areas in the Caribbean region, as in the jurisdictions of CARDIQUE, is only 10 years old; CARSUCRE and CRA, 15 years; CORPOGUAJIRA, 20 years, and CORPOMOJANA, less than 35 years.³

Table 1. Estimate of the total loss of natural forest by jurisdiction of regional environmental authorities⁷

CAR	Area (ha)			Time (years) estimated total loss of forest **
	Corporation	Forest * Year 2005	Deforested *	
DE Aburriç:½	112,886	27,764	1,706	141
CAM	1,859,456	644,041	20,650	252
CAR	1,869,726	162,571	14,150	63
- CARDER	357,818	115,618	7,938	139
CARDIQUE	11,201	44,834	33,756	10
CARSUCRE	518,142	19,789	18,775	16
CAS	2,599,854	689,760	73,638	82
CDA	8,215,648	16,024,394	226,900	459
CDMB	68,244	107,066	10,700	106
Codechoco	4,810,645	2,477,807	317,200	182
CORALINA	17,889,427	-		0

² Established in the COP 10 the Conference of the parties to the Convention on Biological Diversity 2010

³ Estimates made by the Ministry of Environment, Housing and Territorial Development, Direction of ecosystems, based on the average top of deforestation - (IDEAM, 2011).

CAR	Area (ha)			Time (years) estimated total loss of forest **
	Corporation	Forest * Year 2005	Deforested *	
Corantioquia	3,477,589	1,074,099	131,550	37
CORMACARENA	8,589,317	3,063,892	384,250	66
CORNARE	817,727	250,784	15,275	145
CORPAMAG	2,306,416	264,208	77,588	36
CORPOAMAZONÍA	22,624,886	18,215,970	545,731	430
CORPOBOYACÁ,	1,628,485	243,492	22,256	88
CORPOCALDAS	742,514	135,258	13,831	55
CORPOCESAR	2,272,782	134,718	60,606	65
CORPOCHIVOR	309,428	67,830	9,119	251
CORPOGUAJIRA	2,074,484	107,423	37,338	20
LOCALITIES	364,900	78,679	16,038	94
CORPOMOJANA	557,838	16,218	6,056	34
CORPONARIÑO	3,113,720	1,667,138	315,450	83
CORPONOR	2,191,191	733,773	77,313	88
CORPORINOQUÍA WAS NAMED	17,550,586	5,036,517	369,825	170
CORPOURABA	1,897,647	500,480	85,025	457
CORTOLIMA	2,415,326	444,162	42,369	737
CRA	323,308	6,694	3,738	15
CRC	3,073,695	1,341,845	172,156	601
CRQ	193,402	43,424	4,900	-305 [[1]]
CSB	1,958,433	447,375	44,488	109
CVC	2,058,501	665,434	88,894	442

CAR	Area (ha)			Time (years) estimated total loss of forest **
	Corporation	Forest * Year 2005	Deforested *	
CVS	2,489,908	285,891	75,500	900

* Approximate ** considering the reports of reforestation and regeneration

Source: Table prepared by the Directorate of Ecosystems

In the Andean region, such projections indicate the probable disappearance of the forests of the jurisdiction of CORPOCALDAS, in 54 years, and the CAR, in 63 years; in the CAS, CORNARE, CORPOBOYACÁ, localities and CORPONOR, the forests will have disappeared in its entirety before 100 years.

However, not have to wait until that elapse the estimated time of disappearance of the forest cover, if it is that we do nothing to prevent that to happen, because in many regions is feeling the impact of the transformation of these ecosystems and their bad management. The devastating social, economic and environmental effects generated by the winter wave that hit the country in general during the last months of the year 2010, have revealed the need to carry out a review of the environmental management at the same time, they have alerted the population and authorities about the impact that can reach the climate variability and climate change.⁴

It is clear that, while in the origin of the tragedy caused by the winter combines a mixture of quite heterogeneous triggering factors, there is no doubt that between all of them the deforestation and poor management of natural ecosystems, occupies pride of place.

However, the deforestation, rather than a cause, is a cumulative effect, among others, the incidence of multiple factors that affect the forest heritage. The main driving factors of forest loss and degradation are the overexploitation, ecosystemic transformation by land use change and climate change.

In turn, among the direct causes more important drivers of such factors include the expansion of the agricultural frontier (IDEAM, 2011), the unsustainable extractive systems, illegal logging, the illicit crops, forest fires⁵⁶⁷ and the burning, the infrastructure works and mining.

As can be seen, this is a very diverse and wide range of factors and underlying causes of the loss and degradation of forest ecosystems, which requires both a comprehensive view of the issue as to differentiate the type and nature of the measures that must be implemented. It should also take into consideration that many of the solutions required to tackle some of these aspects are beyond the scope of the environmental management actions and demand close articulation and intersectoral and inter-institutional coordination, both public and private, under the principle of shared responsibility.

⁴ The impacts of winter during 2010 and so far in 2011, have meant a cost estimated at 26 billion pesos, equivalent to 2.5 % of GDP, Direction of Risk Management. Ministry of the Interior

⁵ The 42 per cent of the timber traded in Colombia is illegal origin, cited in strengthening governance and forest law enforcement by confronting a systemic obstacle to sustainable development. World Bank, 2006.

⁶ 222,639 Hectares of natural forest with coca crops, of which 3,675 hectares are located in 19 national parks, (UNODC, 2011)

⁷ According to the statistics of the IDEAM-DGR-2010, the area affected by forest fires in the period 2002-2010 was 377,403 ha.

The only factor of illegal logging, which by the way, is not exclusive occurrence in our territory, but a global phenomenon, acquires however in our case special characteristics in some regions of the country, in which the illegal exploitation of timber is associated with the performance of criminal gangs, in a manner similar to what happens with the illegal mining.

In the degradation of the natural forest, without a doubt the greater factor is the affectation of selective logging, underutilization and the great waste generated throughout the extraction process, determined by the high commercial value that get the finest timber species, pressure that has led to a population of the 50 forest species most commonly used (Cardenas & Salinas, 2007), 8 species are critically endangered, 16 are endangered, 10 are considered to be vulnerable and 16 are classified as near threatened.

Despite the high rates of forest loss, the reforestation annual average does not exceed the 45 hectares (25 thousand established for purposes protectors and 17 thousand for commercial purposes), which is totally inadequate and increases the level of vulnerability, social, economic and ecological to climatic variability, as lived in the recent wave winter.

The aspects which have been limited to a greater extent the activity of the reforestation correspond to: Availability of land; guarantee of permanence of the areas in food & beverage; lack of synchronisation between administrative processes and the normal pace of development of the restoration; insufficient resources and lack of incentives for the protective reforestation and restoration; lack of information on propagation and management of native species.

To the long list of factors and direct causes of forest loss mentioned above, there are other aspects that equally a significant influence and limit the possibilities of a sustainable forest management. These include the obstacles and the limitations of the following central problems: (i) deficient and disarticulated institutions; (ii) weak financial capacity; (iii) under development in science, technology and innovation; (iv) a low level of productivity and competitiveness of the forestry sector.

There are also many and varied the causes of the central problems, and between the main must be mentioned: a legal framework with empty, dispersed and with normative conflicts; weak management (planning, administration, implementation and monitoring) forest and low technical capacity of the public entities for the management, management and sustainable use of forests; low levels of coordination; low participation and dialog of the social actors; low level of development and articulation of the forestry chain of natural forest; lack of supply of productive native species; weak economic and financial instruments for the management and sustainable use of natural forest, among others.

All of the above can be synthesized in the existence of a problem characterized by inadequate management and the low recognition and valuation by society and the State of the social, economic and environmental benefits of forests and their strategic potential to contribute to the sustainable development of the country, through the provision of ecosystem services.

Against this background, the question arises: why have served the forest policies and programs adopted in the past? In the light of the above-mentioned issues, it seems clear that, in general, the set of measures of policy, planning and statutory rate that in the vast field of forest management have been taken in the last few decades does not shed to date satisfactory results.⁸

⁸ Guidelines and strategies of the Policy for Sustainable Forest Development - 1994; National Strategy for the Conservation and Sustainable Use of Biodiversity in Colombia - 1994; CONPES 2834: Policy of Forests - 1994,

Some of the central problems, including mainly the degradation and loss of the forest heritage, far from being resolved or decreased, appear to be worsening. The institutions that must meet the challenges of managing accuses significant structural deficiencies and lacks the technical and operational capabilities that allow you to be the extent of the challenges that represents the conservation and sustainable use of forests and ecosystems such as generators of multiple goods and services, indispensable as a support to the economic and social development of the country.

Recent assessments undertaken by the Directorate for Ecosystems of the Ministry of Environment, Housing and Territorial Development on the National Plan for Forest Development, running since 2000, with court in July of 2011, it is estimated a compliance of 47% of the 76 goals established in the 3 programs of the Plan, considering that was designed for a period of 25 years until 2025.

However, one has to wonder at the achievements of other environmental policies and programs that affect or should have been a factor in the improvement of forest management, because in one way or another its guidelines, strategies and actions relate and are directed toward the various ecosystem services of natural forests, namely, provisioning, regulating, and cultural support.

A recent review prepared by the address of the ecosystems of the Ministry of Environment, Housing and Territorial Development, identifies at least the following environmental policies that relate to, with one or more of the various ecosystem services of natural forests:

National Biodiversity Policy; National Policy for Integrated Water Resources Management; Policy Guidelines for Climate Change; National Policy for interior wetlands of Colombia; National Policy on Sustainable Production and Consumption; National Environmental Policy for the Sustainable Development of ocean space and coastal and island areas of Colombia; Environmental Management Policy for wildlife in Colombia; policy for the Development of Ecotourism; National Policy on Environmental Education; Policy National Environmental Research, and Policy of Urban Environmental Management.

There are also numerous plans, programs and environmental strategies that relate to the ecosystem services of natural forests; only by way of example can be mentioning some of them: proposal for the preparation for Strategy REDD; Guidelines for the consolidation of the National System of Protected Areas; National Plan of restoration, ecological restoration, rehabilitation and recovery of disturbed areas; National Plan for the Prevention, Control of Forest Fires and Restoration of Impacted Areas; National Strategy for the Prevention and Control the illegal trade in wild species; National Strategy of prevention, monitoring, control and monitoring of forests; policy for the commercial development of biotechnology from the Sustainable Use of Biodiversity; National Plan of Action to Combat the Desertification and Drought in Colombia.

It is not mentioned here, for reasons of space, the broad set of current sectoral policies and that impact, many in a negative way and other in a positive way, in the natural forests of the country, and in the ecosystem services that they generate. Suffice it to mention some of the sectors and fields of greater relevance: agriculture; livestock; mining and energy; road infrastructure; commercial reforestation sector; snapper; biofuels; alternative development; water and basic sanitation; tourism; competitiveness and productivity; science, technology and innovation, and education, among others.

5. Conceptual Schema for a sustainable management of natural forests

National Forestry Development Plan - 2000 and CONPES 3125: Strategy for the consolidation of the National Forestry Development Plan - 2001.

The brief context above clearly indicates the need to "rethink", as suggested by the slogan of this Forum, the conceptual schema on which support the design of a strategy that will make possible the sustainable management of natural forests, in the framework of the National Policy for Sustainable Forest Development.

This policy is based on a conceptual schema that part of the clear definition of objectives for protection, sustainable use or meals for the forests and forest areas of the national territory, objectives that are associated with the provision of different types of ecosystem services.

For the set of existing natural forests in the country and that, under various categories that in some cases overlap, such as areas of forest reserve law 2nd of 1959, territories of indigenous and Afro-descendant communities, campesino reserves and areas of the National System of Protected Areas, include a total of approximately 61 million hectares, define the objectives of protection or sustainable use.

It should be borne in mind that among the specific objectives of the guidelines for the Consolidation of the National System of Protected Areas - SINAP (CONPES, 2010), is set to increase the representativeness of the ecological system, from the declaratory or expansion of protected areas that are located in high priority sites.

Both in the areas of sustainable use and meals, shall establish the links and joints that corresponds with the programs of productive forest chains and biotrade.

The definition of objectives of meals, will be for all those areas corresponding to ecosystems and processed under considerations that environmental, social and economic, are capable of the development of this type of activity, in accordance with the guidelines referred to in the "National Plan for restoration, recovery and rehabilitation of ecosystems".

The schema of the management looks for the general purpose of achieving that, through a clear identification of the engines of loss and degradation as well as through a proper characterization of the problems that they originate, are prioritized conflict and to define the corresponding lines of action that contribute to environmental sustainability, poverty reduction and to achieve the human welfare. To these ends, the ecosystem services provided by forests and the forest areas, clearly can contribute in a meaningful way, it should be borne in mind the search of the human welfare under the approach of rights enshrined in the Millennium Goals.

6. Lines of action for a National Policy for Sustainable Management of Natural Forests.

The National Strategy for Sustainable Management of Natural Forests in the National Policy framework for sustainable forest development, structure on the basis of the following objectives:

a. Knowledge, research and innovation for the conservation, sustainable management and restoration of forests and their ecosystem services. Includes the development of various strategic lines of action, including highlight: elaboration of the national forest inventory; implementation of the monitoring of forests; valuation of ecosystem services of forests; generation and appropriation of technological packages; research, innovation and technology transfer

b. Conservation and sustainable management of forest ecosystems and their ecosystem services. Includes the development of various strategic lines of action, including highlight: planning and management of forest ecosystems, which include actions to the incorporation of forest ecosystems in the ecological structure of the nation; protection of forest ecosystems and their ecosystem services, including, SINAP, Protective Forest Reserves, Forest Reserves of the 2nd Law of 1959; management and sustainable use of

forest ecosystems and their ecosystem services (wood, biotrade, water); urban forestry; demand management forest.

c. Restoration of forest ecosystems and their ecosystem services. Includes the development of various strategic lines of action, which include: targeting of priority areas for the restoration; formal division of responsibilities for the achievement of the goals of restoration; management for sustainability of the investments of restoration in public and private lands.

d. Commercial reforestation as a strategy to reduce the pressure of natural forest ecosystems. Includes the development of various strategic lines of action, which include: action plan for the commercial reforestation; Zoning to define the areas suitable for commercial reforestation.

e. Managing the risks associated with the degradation and deforestation. Includes the development of various strategic lines of action, which include: inter-agency strategy against the illegal logging of natural forest; implementation of alternative development projects in areas of illicit crops; elimination of incentives to the change of land use in wooded areas and expansion of the agricultural frontier; Rural Development Act (stressing that in this draft standard, is looking for among other important purposes, expand the forest reserves to protect the entire forest coverage: 60 million hectares; take advantage of the potential for the development of forest plantations: 14 million hectares; establish the UAF environmental, as a mechanism for the subtraction of intervened areas of the forest reserves, which combines productive objectives with activities Restoration and environmental services.

Other lines of action of this strategy, include: Implementation of a strategy of social responsibility in the fight against forest fires; innovation and implementation of new developments for the effective use of biomass; implementation of measures for mitigation and adaptation to climate variability and change.

f. Governance for forest management. Includes the development of various strategic lines of action, including: public-private alliances of joint responsibility for forest management, such as cutting the Covenant for legal wood; Implementation of the strategy of prevention, monitoring, control, and monitoring forest; formalization of spaces for participation, such as the National Forestry Bureau; training, training and updating in forest management; forest conflict management, and dissemination, and socialization.

g. Institutional Strengthening. Includes the development of various strategic lines of action, including: creation and implementation of the National Forest System; creation of the National Advisory Committee for the coordination of forest management (Interministerial); strengthening of the entities implementers of the policy of forests; development, update and articulation forest law; update and deploy the National System of forest information; Management for the financial sustainability (economic instruments, compensation, payment for environmental services, REDD, tax incentives, funding sources, international cooperation).

It also includes all the strategic actions related to you overall responsibility, but differentiated, compared to the international management for the conservation of forest ecosystems and their ecosystem services.

7. Goals of the National Development Plan "prosperity for all 2010-2014"

The Ministry of Environment, Housing and Territorial Development is clear that, as discussed in the chapter on environmental sustainability and Risk Management of the databases of the PND, "conservation strategies are aimed at the protection of biological diversity and the provision of ecosystem services that underpin and contribute to human welfare and therefore to the processes of development and economic growth. Today, it is clear the relationship between the conservation of natural heritage, the growth of the different sectors of the economy, competitiveness and social equity. It requires a strong and systematic attention to this

interdependence to change the trend of environmental degradation, to cope with the inadequate processes of occupation and the use of the territory and adapt to climate variability resulting from the global processes of climate change."

The National Development Plan "prosperity for all -2010-2014", in support of the implementation of the National Strategy for Sustainable Management of Natural Forests, already defines and establishes key actions and specific goals in this area, within which can be highlighted the following:

- o 27 Million hectares of forest reserves of the 2nd Law of 1959, will be ordered territorially and shaded;
- o 3 Million new acres will be incorporated into the National System of Protected Areas;
- o It will prevent the deforestation of 200,000 hectares as part of the mechanism REDD (Reducing Emissions from Deforestation and degradation),
- o New 70,000 hectares will be restored and 20,000 hectares will be reforested with purposes of protection and conservation of biodiversity, a goal that was increased to 280,000 hectares, through announcement own President of the Republic during the act of cutting of the Covenant relaunch by Legal Wood;
- o 15 Million hectares of forest will be ordered and will begin the implementation of the Covenant by cutting the Legal Wood.

The Ministry of Environment, Housing and Territorial Development hopes that the analyzes, contributions and proposals that emerge from this important event will contribute to enrich the proposal of the National Strategy for Sustainable Management of Natural Forests in the National Policy framework for sustainable forest development, whose overall objective must be to ensure that the social, economic and environmental benefits and the strategic potential of the forests, effectively contributing to the sustainable development of the country from its recognition and valuation by society and the State.

8. CONCLUSIONS

Stimulate the understanding, management, conservation, management and sustainable use of natural forests and their ecosystem services.

Institutional strengthening through the formation of the National Forest System, the National Advisory Commission Forest and strengthening of the National Forestry Bureau

Strengthen the coordination with the Ministry of Agriculture and Rural Development to close the expansion of the agricultural frontier (land law - Rural Development)

Emphasize the restoration, recovery and rehabilitation of the areas of the rounds and other water that are prioritized, as a measure of risk management.

Encourage the commercial reforestation in order to reduce pressure on natural forests.

Design and implement mechanisms, spaces and instruments that allow effective governance for forest management.

Establish a financial strategy that includes resources national, regional, international technical cooperation as derived from compensation also mandated by law with a view to strengthening the forest management

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