

BRAP

Executive Summary

BIODIVERSITY ACTION PLAN

For the implementation of the National
Policy for the Integral Management of
Biodiversity and its Ecosystem Services

2016-2030

 MINAMBIENTE

 **TODOS POR UN
NUEVO PAÍS**
PAZ EQUIDAD EDUCACIÓN

With the technical support of:



BAP

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Ministry of Environment and Sustainable
Development, Department of Forests,
Biodiversity and Ecosystem Services

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BIODIVERSITY ACTION PLAN FOR THE IMPLEMENTATION OF THE NATIONAL POLICY FOR THE INTEGRAL MANAGEMENT OF BIODIVERSITY AND ITS ECOSYSTEM SERVICES / 2016 - 2030

-Executive Summary-

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Presentation



Senna bacillaris. Diego Mauricio Cabrera Amaya. Banco de Imágenes Ambientales (BIA), Instituto Alexander von Humboldt.

The Ministry of Environment and Sustainable Development (MADS) led the technical component and the preparation of the Biodiversity Action Plan (BAP). With technical support from the Alexander von Humboldt Institute and the United Nations Development Programme (UNDP), formulated the Biodiversity Action Plan (BAP) as a tool for implementing the National Policy for the Integral Management of Biodiversity and its Ecosystem Services, PNGIBSE (MADS *et al.*, 2012).


This plan is in the spirit and serves the conceptual guidelines and techniques of the PNGIBSE; and its long-term vision reflects the desired scenario of biodiversity and ecosystem services management in the country for the coming decades.

The BAP promotes the incorporation of biodiversity and its ecosystem services into sector planning of short, medium and long term actions, so that the productivity and competitiveness of the country are

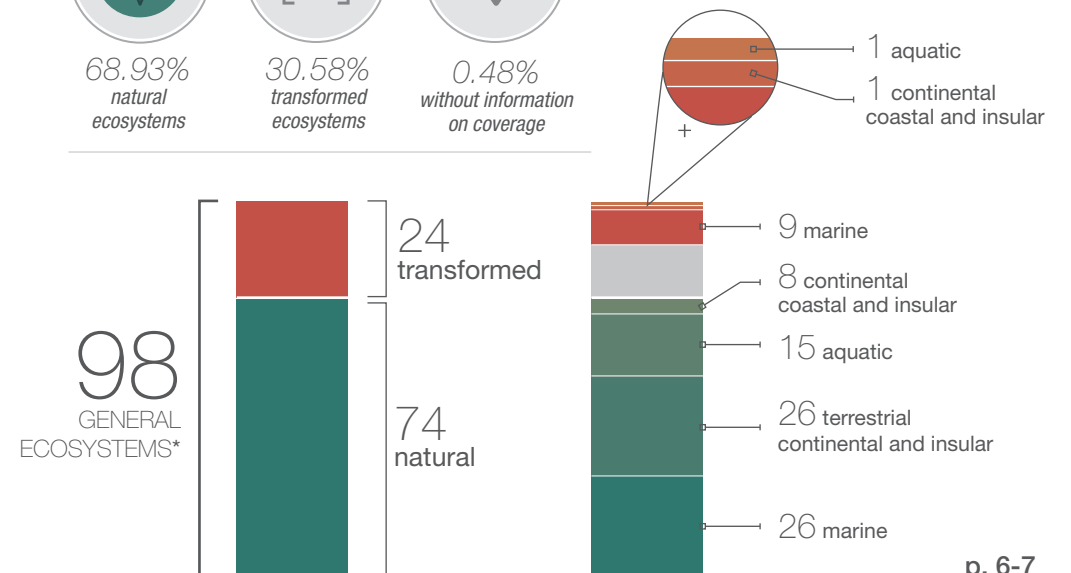
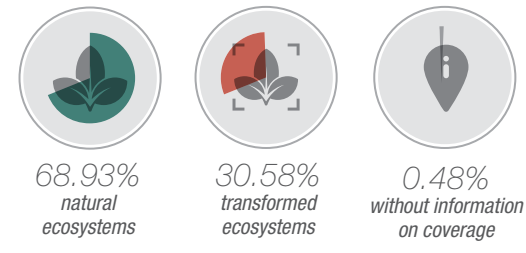
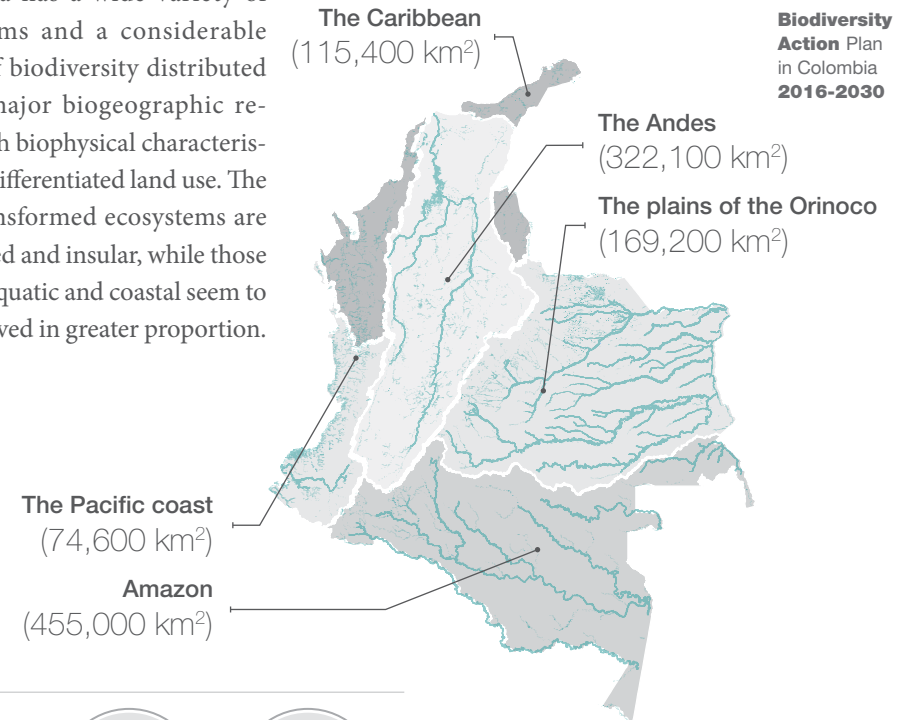
framed taking into account the resilience of socio-ecosystems as the limit to their growth. Likewise, it seeks to make integral management focused, agile and effective reason why a tracking system will be in place to make it a comprehensive, adaptive, flexible and innovative management tool, with indicators that allow measuring progress toward national goals highlighting the change in socio-ecological systems.

Context



 **Insecto. Francisco Nieto Montaño.**
Banco de Imágenes Ambientales (BIA),
Instituto Alexander von Humboldt.

Colombia has a wide variety of ecosystems and a considerable wealth of biodiversity distributed in five major biogeographic regions with biophysical characteristics and differentiated land use. The most transformed ecosystems are land-based and insular, while those that are aquatic and coastal seem to be preserved in greater proportion.



*According to IDEAM (2014 and 2015)

Colombia has
54,871
 species recorded
 in the Global Biodiversity
 Information Facility (GBIF) on
 the various biological groups, a
 figure that does not include the
 huge variety of microorganisms.

34 mammals
367 amphibians
66 birds
115 reptiles
1,500 plants
1,543 orchids
are endemic.




VERTEBRATES

-  Mammals
476
-  Birds
1,889
-  Reptiles
571
-  Amphibian
763
-  Marine fish
2,000
-  Freshwater fish
1,533
-  Migratory birds
197



INVERTEBRATES

-  Butterflies
3,274
-  Ants
900
-  Marine mollusks
2,250
-  Terrestrial mollusks
650
-  Beetles
7,000
-  Arachnids
109
-  Decapods
688
-  Bees
398




PLANTS

-  Flowering plants
22,840
-  Ferns and related
1,643
-  Palms
262
-  Orchids
4,010
-  Flowerless plants
45
-  Mosses and related
1,636



LICHENS

-  Lichens
1,636

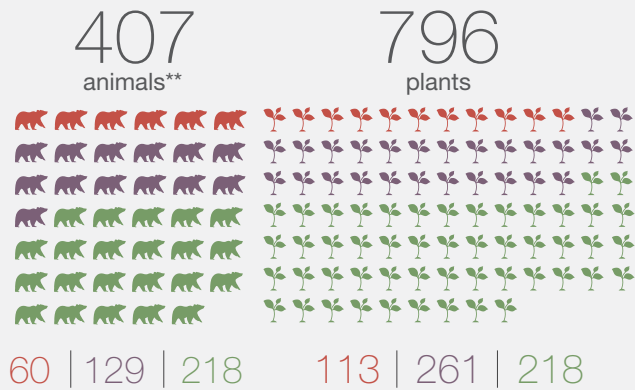
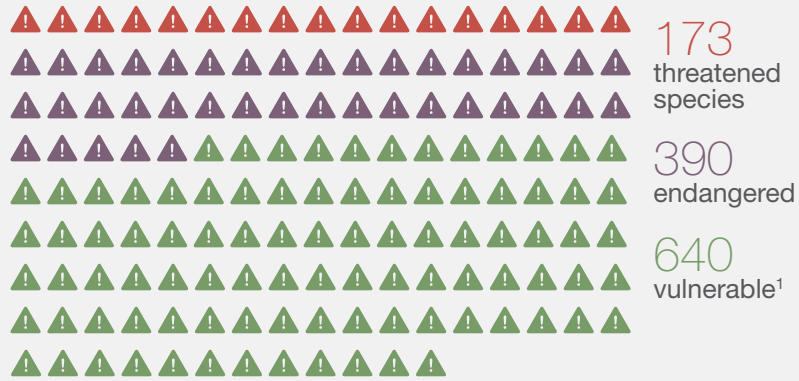


MUSHROOMS

-  Macro fungi
1,239
-  Rusts and smuts
405

1,203

THREATENED SPECIES*



1. <http://www.minambiente.gov.co/index.php/noticias/122-noticias-minambiente/2204-especies-amenazadas-en-colombia>

2. <http://www.parquesnacionales.gov.co/portal/es/sistema-de-parques-nacionales-naturales>

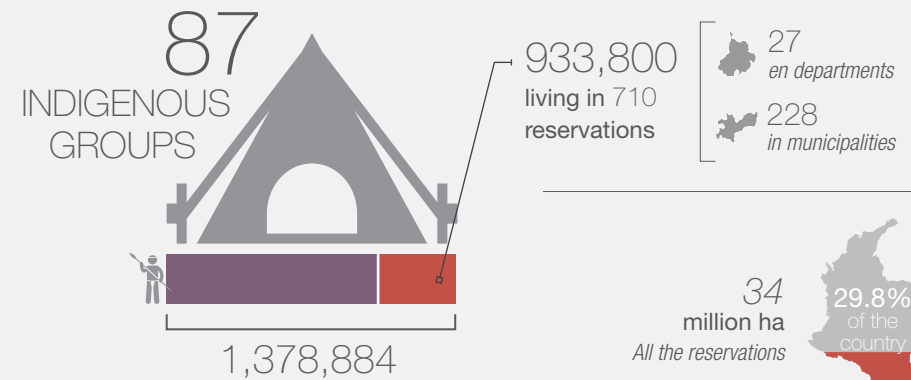
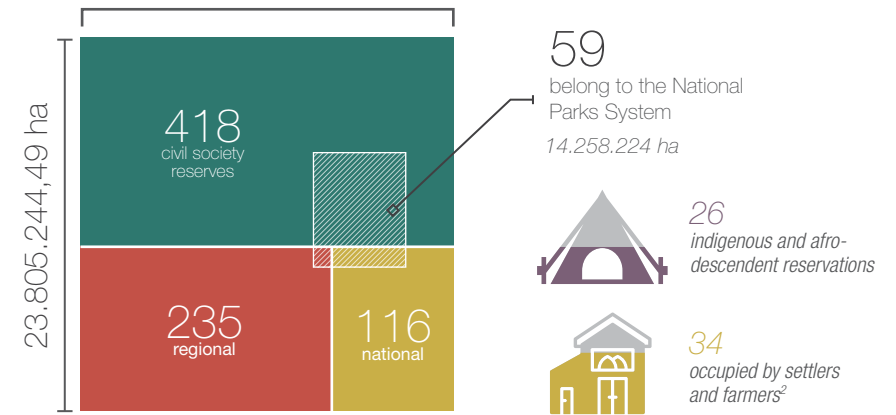
* Taking into account the criteria of International Union for Conservation of Nature (IUCN).

** Of the group of amphibians, reptiles, mammals, birds and invertebrates and bony and cartilaginous fishes

*** According to the Single Registry of Protected Areas (Runap)

769

PROTECTED AREAS***



304
(20,949,694 ha)
indigenous reserves are within forest reserves, representing:



69.8%
of all indigenous territories



40.7%
Total forest reserves established by Law 2^a of 1959

4,261,996 people
Afro-Colombian community, Raizales and Palenqueras

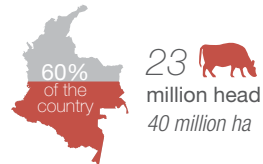
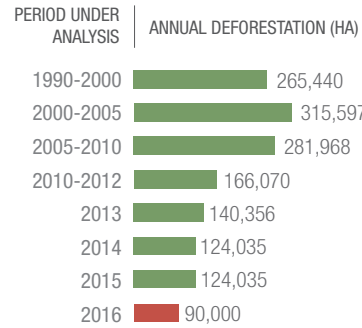


132 collective territories in the Pacific
4,717,269 ha

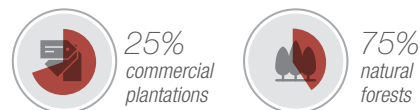
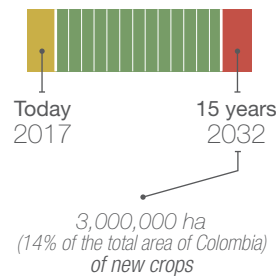
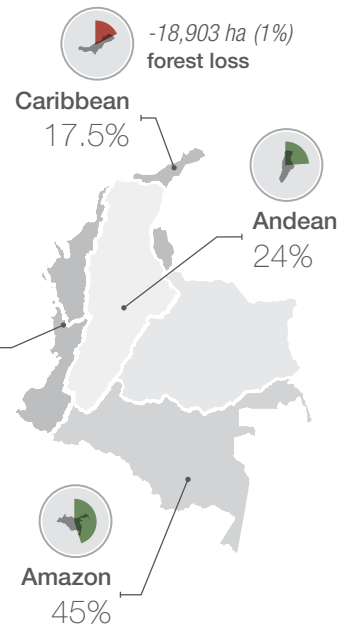
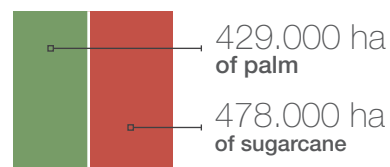


CHANGE AND TRANSFORMATION FACTORS OF BIODIVERSITY AND ECOSYSTEM SERVICES

BEHAVIOR OF DEFORESTATION IN THE LAST 25 YEARS IN THE COUNTRY



AROUND 1.000.000 ha OF INDUSTRIAL BIOFUEL CROPS



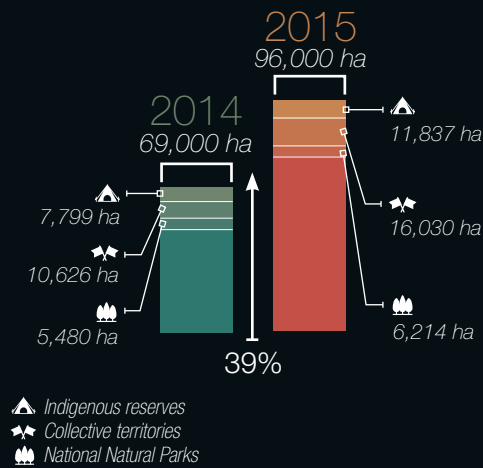
3.4 million cubic meters / ANNUAL TIMBER PRODUCTION

296 INTRODUCED, TRANSPLANTED AND INVASIVE CONTINENTAL SPECIES

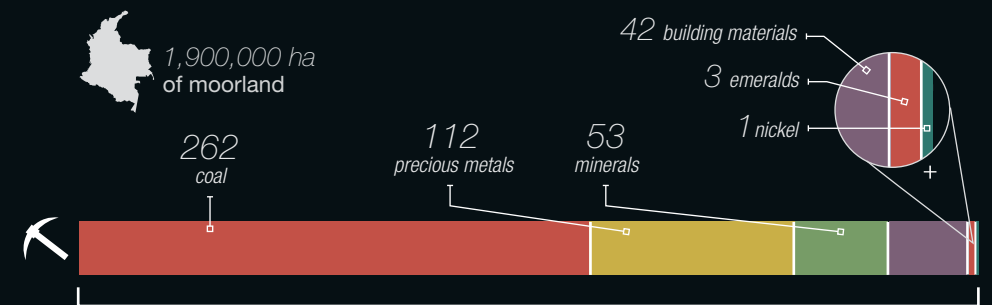
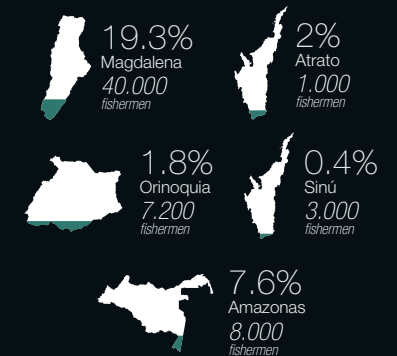


Greatest concentration of species

ILLICIT CROPS (COCA) 2014 - 2015



5 MAJOR BASINS FOR INLAND FISHERIES (fishermen)



473 MINING TITLES IN FORCE IN MOORLAND (125,811 ha)



Serpiente cazadora en bosque de "Banqueta del oso". Francisco Nieto Montaño. Banco de Imágenes Ambientales (BIA), Instituto Alexander von Humboldt.

Conservation

New context for conservation of biodiversity and ecosystem services

Slowly, and following difficult experiences such as flooding caused by El Niño in 2011, the country has begun to visualize and take into account the limits of ecosystems as the basis for the development of productive activities, as was expressed in the Grounds of the National Development Plan 2014-2018.

This new view is timely and necessary in the current political situation in the country: MADS is aware that the Havana Agreements change the context and the management conditions in much of the country and the actions carried out can negatively affect the environment if sustainability criteria are not considered.

The comprehensive rural reform that is put forward as point 1 of the Havana Agreements needs to include sustainability criteria that respond to the vocation of the lands,

with particular emphasis on the areas prioritized for implementation of agreements such as the Forest Reserve Zones (ZRF), among others. This requires that biodiversity and ecosystem services be acknowledged in land-use planning processes in areas prioritized post-conflict and strengthening the environmental authorities politically, technically and financially so they can take on the challenges of building peace.


While armed actors have benefited financially from mining activities (coca, gold, wood, oil, coal), it is also


true that the same conflict has been a favorable barrier to conservation in certain regions. In fact, the Amazon is in relatively good condition thanks not only to indigenous reserves and natural parks, but also that the conflict meant an impediment to the


entry of livestock, mining and other extractive economies. With the signing of the agreements, it is necessary to define strategies so the costs of peace will not be transferred to the natural base of the country.


The Havana Agreements are also an opportunity to the extent that:

- 


Actions are incorporated that promote land use planning as a basis for harmonizing the actions and interests of the various social, government and industry sectors.
- 


They define actions for closure of the agricultural frontier.
- 

They promote the protection of native seeds and control of genetically modified organisms.
- 

They propose sustainable productive options to rural communities involving forest conservation agreements.
- 

They provide for the eradication of illicit crops in National Natural Parks.
- 

They consider strengthening instances of social participation as a mechanism for generating processes of control over the territories.
- 

They call for coordination between sectors, particularly between MADS and the agricultural sector, to reconcile rural development policies with the purposes of conservation of biodiversity and ecosystem services.
- 

Encourage dialogue between the government and the social-productive sector to harmonize territorial interventions with environmental sustainability criteria.



They promote the establishment of conservation agreements in critical areas of deforestation.

¿WHAT DOES THE BAP SUGGEST IN THIS CONTEXT?



Strengthening the regional environmental institutions.



Promoting models of sustainable local development and green growth.



Creating incentives that promote the protection and recovery of strategic ecosystems.



Strengthening environmental information systems so that they guide decision-making.



Agreements and programs between sectors that will address issues regionally and locally, including advancing the development of strategies such as payment for environmental services, agricultural conversion programs, eco-efficient sector programs, sustainable development programs with ecological sustainability criteria, education programs and strengthening of the mechanisms of democratic participation (for example, popular consultations and environmental hearings).



Colibri Eriocnemis vestita hembra.
Federico Pardo. Banco de Imágenes Ambientales (BIA), Instituto Alexander von Humboldt.

Biodiversity as a public value is the responsibility of all citizens and economic, social and institutional actors in the country who benefit directly or indirectly from it. Actions for the conservation of biodiversity and its ecosystem services will, therefore, not only need to be carried out by the environmental sector, but also by national, regional and local productive, social and institutional sectors.

The next page shows the relationship of articulation between the PNGIBSE and territorial management of regional autonomous corporations in municipalities and departments (PNGIBSE, 2012).



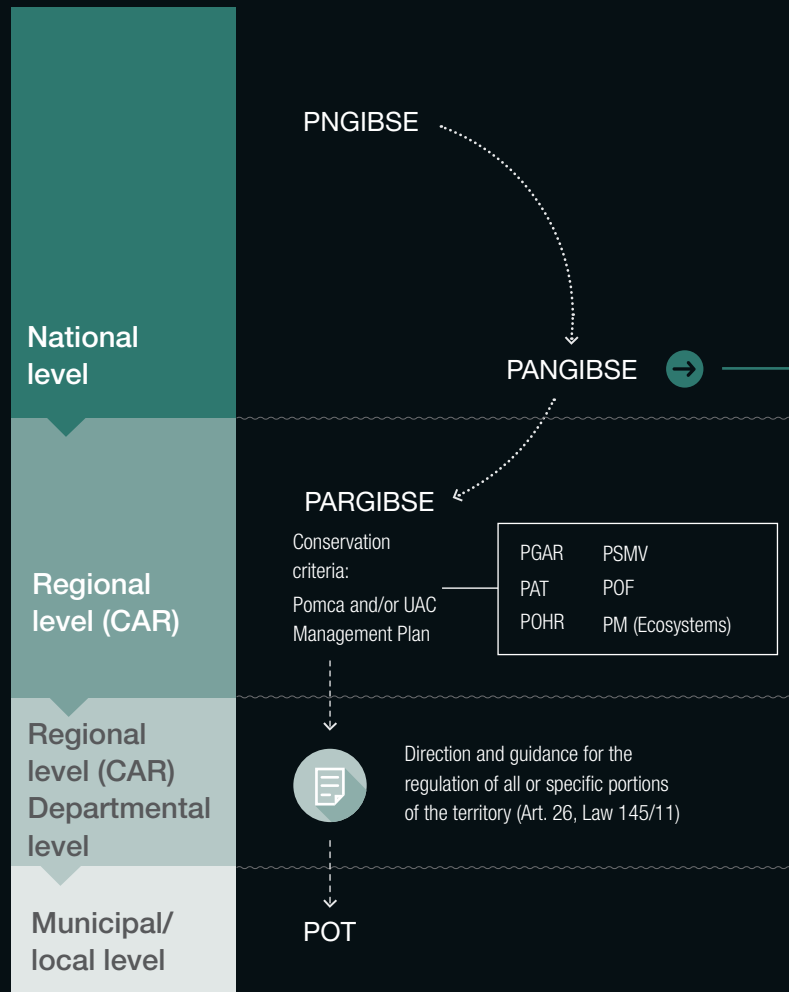
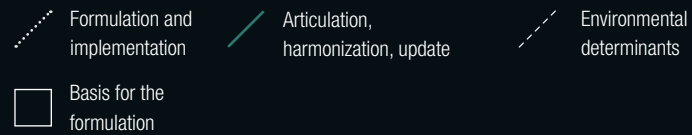
Camaleón Anolis heterodermus.
Federico Pardo. Banco de Imágenes Ambientales (BIA), Instituto Alexander von Humboldt.



Instruments

¿How does the BAP articulate with the regional environmental planning instruments?

 Flora reserva El Santuario. Francisco Nieto Montaña. Banco de Imágenes Ambientales (BIA), Instituto Alexander von Humboldt.



PNGIBSE

PANGIBSE

PARGIBSE

Conservation criteria:
 Pomca and/or UAC Management Plan

PGAR	PSMV
PAT	POF
POHR	PM (Ecosystems)

Direction and guidance for the regulation of all or specific portions of the territory (Art. 26, Law 145/11)

POT

National Environmental Policy for Sustainable Development of Oceanic Spaces and Coastal and Island Zones of Colombia

National Forest Policy

National Inland Wetlands Policy in Colombia

National Policy for the Integral Management of Water Resources

Wild Fauna Policy

National Action Plan to Combat Desertification and Drought in Colombia

National Plan for Forestry Development

CONPES 3125

National Plan for the Collections of the Botanical Gardens of Colombia

National Plan for Migratory Species

National Plan for the Prevention-Control of Forest Fires and Restoration of Affected Area

National Plan for the Protection of Threatened Species

Programs for conservation and management of species (7)

Program for the Sustainable Management and Restoration of the High Mountain Ecosystems of Colombia

National Sustainable BioTrade Programme

Biotechnology CONPES

National Ecosystems Restoration Plan

Man and the Biosphere Program - Unesco

National Program for the Sustainable Use, Management and Conservation of Mangrove Ecosystems

National Strategy for the Prevention and Control of the Illegal Trafficking of Species

Strategic Framework



Frailejón carraco *Espeletopsis guacharaca* (S.Díaz) Cuatrec. Federico Pardo. Banco de Imágenes Ambientales (BIA), Instituto Alexander von Humboldt.

BAP

Biodiversity
Action Plan
in Colombia
2016-2030

VISION

“By 2030 biodiversity and continental and marine ecosystem services in the country will be recognized as goods of high public value that provide tangible benefits to society, are vital for national development, and therefore will be incorporated into decision-making in all sectors of society, as the foundation for the wellbeing of the Colombian people”.

OBJECTIVE

The Biodiversity Action Plan makes the National Policy for the Integral Management of Biodiversity and its Ecosystem Services viable through the implementa-

tion of concrete and coordinated actions, inter-sector and regionally, in order to decrease the direct and indirect pressures on biodiversity and its ecosystem services.



Mariposa macho (*Perisama humboldtii*). Francisco Nieto Montaña. Banco de Imágenes Ambientales (BIA), Instituto Alexander von Humboldt.



2020-2025-2030 GOALS FOR THE BIODIVERSITY ACTION PLAN FOR THE IMPLEMENTATION OF THE PNGIBSE

Axis I. Biodiversity conservation and care of nature.

Refers to the need to advance conservation actions in-situ and ex-situ, both in wilderness areas (protected or not), as well as in transformed continental, marine, coastal and island landscapes, so as to maintain viable populations of flora and fauna, the resilience of social-ecological systems and the provision of ecosystem services is supported at national, regional, local and cross-border scales.

Axis II. Biodiversity, governance and public value creation

Refers to the need to strengthen the relationship between the State and citizens (urban and rural) to comprehensively manage biodiversity and ecosystem services from participation and shared responsibility in conservation actions. Thus, the maintenance of biodiversity in explicit socio-ecosystemic contexts needs to be absorbed and socially perceived as an irreplaceable benefit that maintains and improves the quality of life at the national, regional and local levels.



Henicorhina leucophrys o cucarachero pechigrís. Federico Pardo. Banco de Imágenes Ambientales (BIA), Instituto Alexander von Humboldt.

Axis III. Biodiversity, economic development, competitiveness and quality of life

Refers to the need to incorporate biodiversity and the supply of ecosystem services in sector-based planning and decision-making so as to generate shared responsibility to further conservation and integral valuation actions (economic and non economic), to allow maintaining the sustainability of production, extraction, settlement and consumption actions and quality of life improvement at the national, regional and local levels.

Axis IV. Biodiversity, knowledge management, technology and information

Refers to the need to promote, strengthen and coordinate the generation, recovery, coordination and dissemination of information, knowledge and technological developments from different knowledge systems that can feed and guide decision-making for the Integral Management of Biodiversity and its Ecosystem Services at national, regional, local and transboundary scales.

Axis V. Biodiversity, risk management and supply of ecosystem services

It refers to the need to carry out actions to deal with the threats related to environmental change (loss and transformation of biodiversity and ecosystem services, variability and climate change), to maintain socio-ecosystem resiliency and reduce their vulnerability, following the focus on mitigation and adaptation based on ecosystems, so that the quality of life is not compromised at the national, regional, local and cross-border levels.

Axis VI. Biodiversity, shared responsibility and global commitments

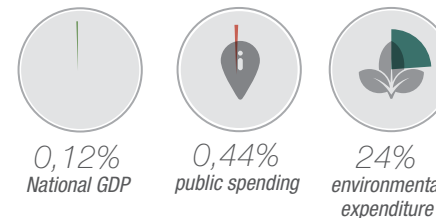
Refers to the actions a country needs to carry out to strengthen its international positioning as a megadiverse country providing ecosystem services of global import while furthering national actions to contribute to the world fight against ecoclimatological challenges (climate change) which threaten planetary stability.



Macho de Zenipthoptera lanei. Francisco Nieto Montaña. Banco de Imágenes Ambientales (BIA), Instituto Alexander von Humboldt.

Financial Strategy

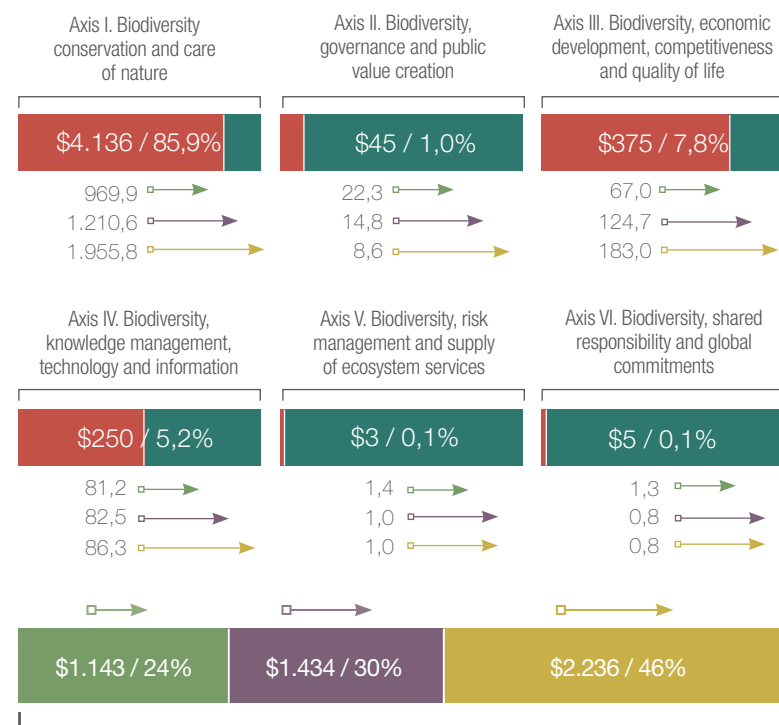
Between **2000-2015** the investment for biodiversity projects was **\$3.453** millions



(US \$ 240 million in annual average)



As for the cost of short, medium and long-term goals of the BAP, initial estimates indicate that to achieve its implementation, the country will need about \$US 4,813 million. This means that moving from an average annual public expenditure (2000-2015) of \$US 240 million to \$US 447 million (2017-2030), requires mobilizing additional resources estimated at \$US 102 million a year.



\$4.813 millions
Total Action Plan 2017-2020



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BAP

-Biodiversity Action Plan-