



# POLICY STRATEGIES FOR CERRADO

**Socioeconomic Responsible Development,  
Sustainable use and Conservation of Biodiversity,  
Reduction of Deforestation and Restoration of Native Vegetation**



DECEMBER, 2018

Recommendations to Policy-Makers  
in Defense of the Cerrado

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**POLICY STRATEGIES FOR THE CERRADO** Responsible Socioeconomic Development, Conservation and Sustainable Use of Biodiversity, Reducing Clearing and Promoting Landscape Restoration  
Recommendations to Policy-Makers in Defense of the Cerrado

**Project:** Cerrado Dialogues - grant of non-refundable financial collaboration signed with the Climate and Land Use Alliance – CLUA

**Organization:** Instituto Centro de Vida (ICV), International Institute of Education in Brazil (IEB), Institute for Environmental Research on the Amazon (IPAM), Institute for Society, Population and Nature (ISPN), Socioenvironmental Institute (ISA), Rede Cerrado and WWF-Brazil

**Collaboration:** ActionAid, Association of Rural Workers' Lawyers (AATR), Solidarity and Sustainable Development Association (ADES – 10 envolvimento), Wyty-Catê Association of the Timbira Peoples of Maranhão and Tocantins, Xingu Indigenous Land Association (ATIX), Center for Territorial Intelligence of the Federal University of Minas Gerais (UFMG), Mato Grosso Pastoral Land Commission (CPT-Mato Grosso), Conservation International (CI), Federation of Indigenous Peoples of Mato Grosso (FEPOIMT), Greenpeace, Green Initiative, Forest Code Observatory (OCF) and Cerrado Research and Conservation (PEQUI).

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# PREFACE

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In addition to the strategic role it plays in Brazil's economy and the world's food supply, the Cerrado biome contributes to globally important ecosystem functions such as carbon storage, biodiversity conservation and water cycles. Recently, large-scale agriculture in the region has also made fundamental contributions to Brazil's economic development and trade balance. The Cerrado now accounts for 60% of national annual agricultural production (mainly soybeans, corn, cotton and sugarcane)<sup>1</sup>.

Because of expansion of agribusiness into the biome, with an increase of 87% in the area cultivated between 2000 and 2015, Brazil became a global leader in agricultural commodity production. On the down side, approximately half of the Cerrado has already been deforested or otherwise cleared. The conversion of savanna land to fields for crops and pastures for livestock has led to loss or degradation of much of the biome's grassland, shrubland and woodland, as well as introduction of invasive species, threatening its vital ecosystem functions.

Widespread clearing is reducing the Cerrado's resilience. In the last ten years, the biome lost 236 thousand km<sup>2</sup> of its original plant cover. The emissions associated with this conversion were 8.16 GtCO<sub>2</sub>, or 3.6 years of the country's gross emissions. The significant contributions of the Cerrado to global climate regulation through carbon fixation and storage, stocking approximately 32 GtCO<sub>2</sub>eq, mostly in its deep roots, are still practically unknown.<sup>2,3</sup>

Understanding the causal relationships between the suppression the biome's native vegetation and climate change, with higher temperatures and reductions in rainfall, is essential for everyone, including the agricultural sector. Unsustainable use of Cerrado land has already reduced the supply of clean freshwater in eight of the twelve hydrographic regions of Brazil (Amazonas, Tocantins-Araguaia, Western Northeast Atlantic, Parnaíba, São Francisco, Eastern Atlantic, Paraná and Paraguay). Reductions in rainfall and river flow are causing shortages of water for human consumption, crops, livestock, industry, hydropower generation, mining, aquaculture, navigation, tourism and leisure. The costs are enormous.<sup>4,5</sup>

At the same time, indigenous peoples, family farmers, agrarian reform settlers and traditional communities, all of whom play a key role in biodiversity conservation and national food sovereignty and security, are in sore need of land regularization of their territories and other policies to support their livelihoods. There are many agrarian conflicts

involving the occupation of and access to their territories, as well as conflicts about the availability and quality of water.

Weak environmental governance in Brazil is one of the main drivers of increased deforestation, damaging the success of the country's reductions in CO2 emissions achieved through control of deforestation in the Amazon. Executive and legislative decisions have reduced environmental licensing requirements, suspended the approval of Indigenous Lands, reduced the size of protected areas and facilitated fraudulent land grabbing of illegally deforested areas.<sup>6</sup>

In this scenario, governments, NGOs, academia and the private sector are now paying more attention to maintaining benefits of the biome's ecosystem services through such measures as strengthening and expanding the system of protected areas for strict conservation and sustainable use, demarcating indigenous lands, agrarian reform and land tenure regularization for traditional peoples and communities. Partnerships and private sector commitments are emerging. There are demands such as constitutional amendments that include the Cerrado and the Caatinga among Brazil's national heritage sites. The National Campaign for the Defense of the Cerrado ("No Cerrado, no water, no life") warns about the negative impacts of the destruction of the biome while seeking to value the biodiversity and cultures of traditional peoples and communities. Another initiative is the Statement of Support for the Cerrado Manifesto (SoS Cerrado) endorsed by 74 global consumer goods companies committed to supporting reduction of deforestation in the Cerrado and adoption of sustainable land management practices, which help mitigate the financial risks associated with deforestation and climate change.<sup>7</sup>

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In an effort to contribute to this effort and strengthen these movements, seizing the opportunity to dialogue with the candidates in the 2018 elections, the civil society organizations Instituto Centro de Vida (ICV), International Institute of Education in Brazil (IEB) Institute for Environmental Research on the Amazon (IPAM), Institute for Society, Population and Nature (ISPN), Socioenvironmental Institute (ISA), Rede Cerrado and WWF-Brazil joined forces to offer the candidates and society in general a document on Policy Strategies for the Cerrado: Responsible Socioeconomic Development, Conservation and Sustainable Use of Biodiversity, Reducing Clearing and Promoting Landscape Restoration.

This document is the result of inter-institutional consultations, including a Seminar in the Chamber of Deputies on June 5 and a workshop involving civil society and academia on June 6.<sup>8</sup> In addition to the organizers, various other organizations collaborated in the workshop: ActionAid, Association of Rural Workers' Lawyers (AATR), Solidarity and Sustainable Development Association (ADES), 10envolvimento, Wyty-Catë Association of the Timbira Peoples of Maranhão and Tocantins, Xingu Indigenous Land Association (ATIX), Center for Territorial Intelligence of the Federal University of Minas Gerais (UFMG), Mato Grosso Pastoral Land Commission (CPT-Mato Grosso), Conservation International (CI), Federation of Indigenous Peoples of Mato Grosso (FEPOIMT), Greenpeace, Green Initiative, Forest Code Observatory (OCF) and Cerrado Research and Conservation (PEQUI).



The analysis of the current situation and future prospects produced by this group followed three thematic axes:

1. Policies for conservation and sustainable use of Cerrado biodiversity, strengthening an integrated vision of territorial management;
2. Policies to reduce deforestation and restore native vegetation, for dialog with responsible agriculture and livestock; and
3. Policies for socio-biodiversity and agro-extractivism, aiming for improved socio-environmental governance.

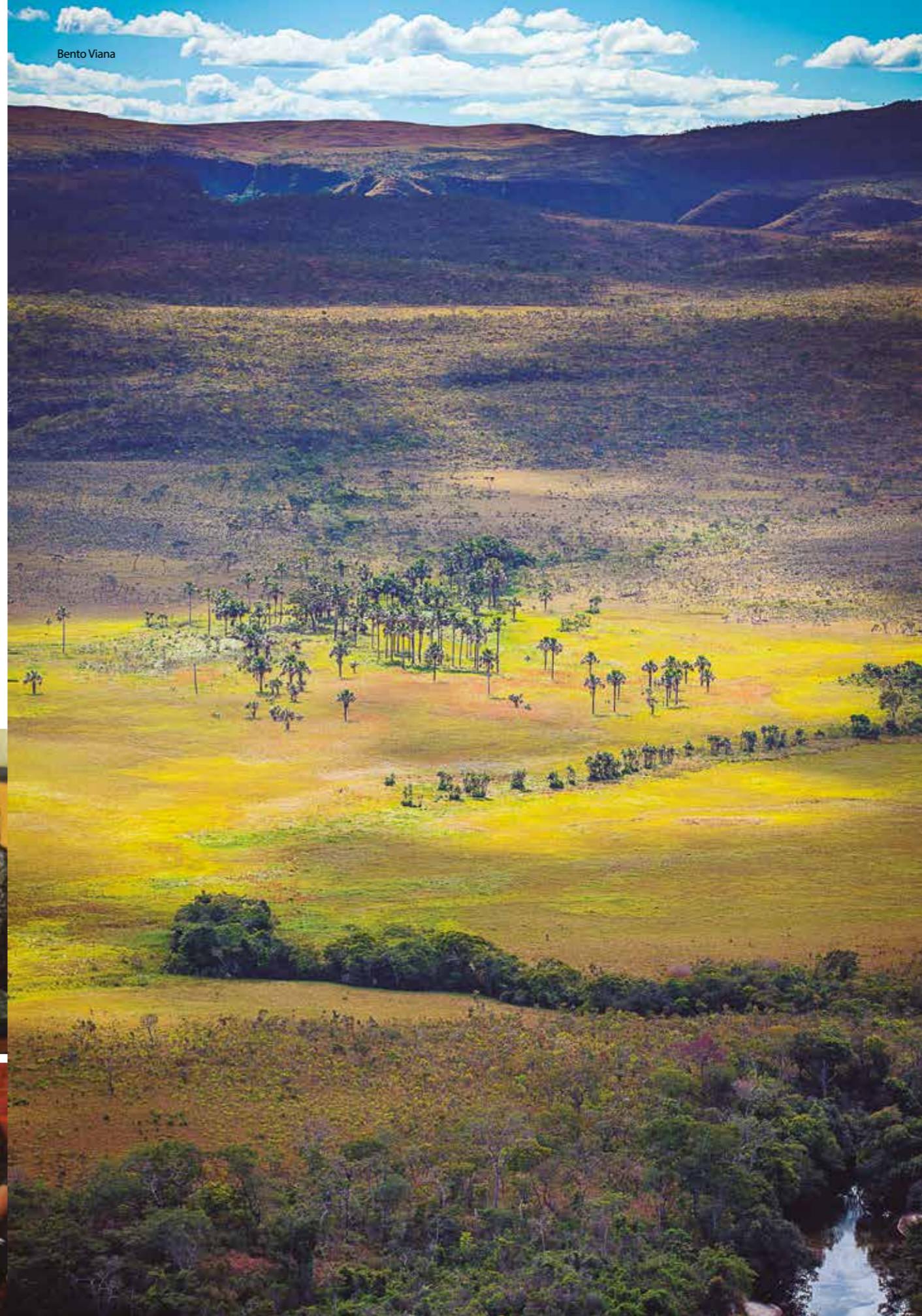
This process resulted in 27 recommendations to inform construction of a propositional agenda for the Cerrado, indicating various policy strategies and priorities for governmental actions.

Social participation in qualified institutional dialogues is essential for appropriate decision-making processes and well-informed, coherent and integrated results. Good governance and monitoring of all the actions proposed in this document are fundamental for establishing and maintaining appropriate legal frameworks. This requires instances of participation and coordination such as the National Council of Traditional Peoples and Communities (CNPCT)<sup>9</sup> and the National Commission of the Sustainable Cerrado Program (CONACER), now inactive. These instances can be forums for dialogue regarding public policies and private interests in different niches of public administration. For this purpose, it is necessary to install and guarantee operating conditions of CNPCT and to restructure CONACER, linking both to the Office of the President's Chief of Staff so that they can play a role in coordinating and implementing public policies relevant to the Cerrado, optimizing investments that generate results based on territorial intelligence.

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# 1

## POLICIES FOR CONSERVATION AND SUSTAINABLE USE OF BIODIVERSITY

### STRENGTHENING AN INTEGRATED VISION ABOUT TERRITORIAL PLANNING

Fernando Tatagiba



With the richest flora and fauna among the world's savannas and the highest levels of endemism, the Cerrado has no specific legislation to guide use and protection of its environment. Nor does it have the constitutional status of national heritage, like other biomes in which land use must be carried out under conditions that ensure environmental conservation and sustainable use of natural resources. Although the Cerrado plays an important role in the conservation of biodiversity and regulation of global climate, 45.4% of the total area had been cleared by 2011 according to data of the Ministry of the Environment.<sup>10</sup> The main causes of loss or degradation of the Cerrado are expansion of pastures and crops, production of charcoal and wildfires.



**5%**  
OF ALL SPECIES  
IN THE WORLD



**30%**  
OF BRAZILIAN  
SPECIES



**837**  
BIRD  
SPECIES



**120**  
REPTILE  
SPECIES



**150**  
AMPHIBIAN  
SPECIES



**1.200**  
FISH  
SPECIES



**90 MIL**  
INSECT  
SPECIES



**199**  
MAMMALS



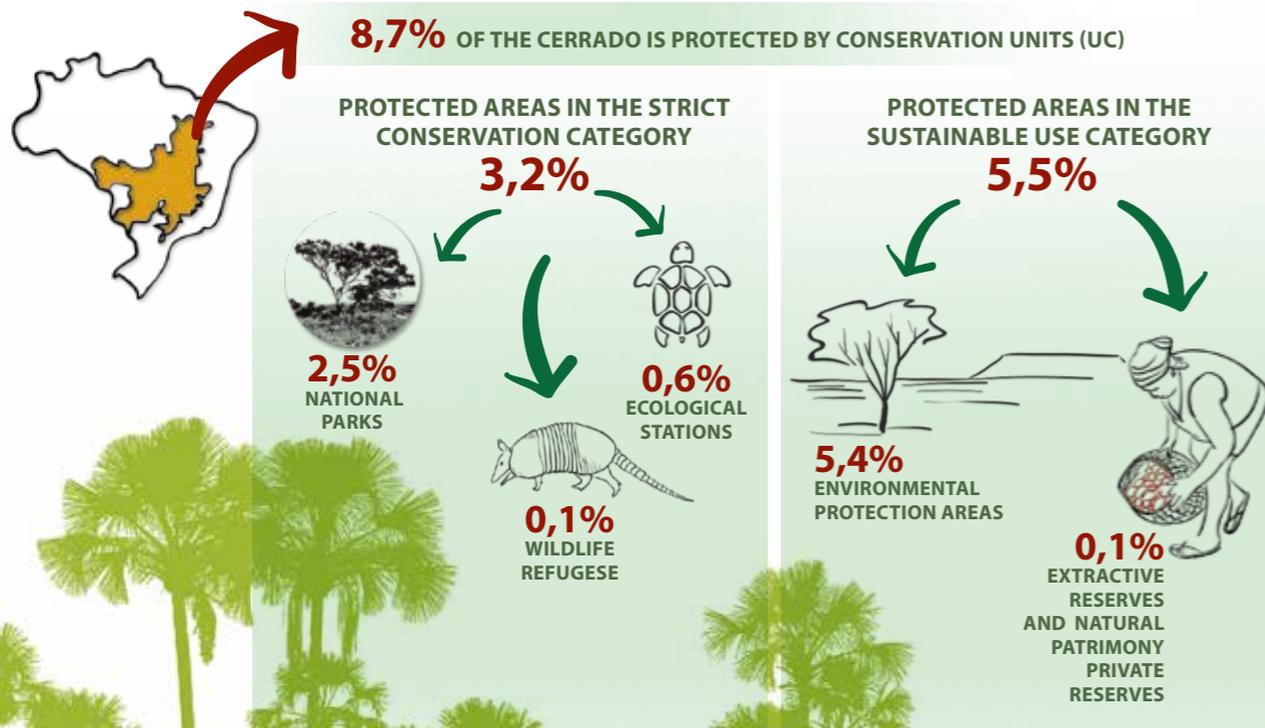
**13 MIL**  
SPECIES  
OF FLORA,  
INCLUDING FERNS,  
ANGIOSPERMS,  
BRYOPHYTES AND  
GYMNOSPERMS

**THE CERRADO IS THE RICHEST SAVANNA IN BIODIVERSITY ON THE PLANET**

Source: Flora do Brasil 2020 em construção 2018<sup>35</sup>

To reduce biodiversity loss, protect the diversity of ecosystems, species and varieties and contribute to climate change mitigation, the Strategic Biodiversity Plan for 2011-2020, established at the 10th Conference of the Parties to the Convention on Biological Diversity (COP-10) in Nagoya, Aichi, Japan, established that at least 17% of terrestrial and inland water areas should be protected by 2020.<sup>11</sup> These ecologically representative areas should be managed effectively and equitably and satisfactorily interconnected and integrated into a wider landscape scale by other conservation measures.

In the Cerrado, the level of official protection is still far below the Aichi Biodiversity Targets. Only 3.2% of the Cerrado is set aside in strict conservation protected areas, while another 5.5% is in sustainable use protected areas, a total of 8.7%.<sup>12</sup> The largest areas of native vegetation not converted into large-scale crop and livestock production in the Cerrado (67%, according to Mapbiomas) are in the region known as MATOPIBA, which covers areas of the states of Maranhão, Tocantins, Piauí and Bahia.<sup>13</sup> Most of the areas still left are in territories of traditional communities, private properties or vacant public lands, although less than in the Amazon, usually without any kind of legal environmental protection.



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Most of the Cerrado is a complex mosaic of different types of land use, including small and large-scale farms and ranches, combined with lands occupied by indigenous peoples, Afro-descendant quilombolas, agro-extractivists and other traditional peoples and communities. Many of these communities do not have title to their lands or other formal recognition, although their rights are foreseen in the Brazilian Constitution and Convention 169 of the International Labor Organization (ILO).<sup>14</sup> This lack of legal clarity is a fertile field for rural real estate speculation, with strong pressure from land grabbing of public lands and from the national and international land market. The result is often expropriation of land, isolation of rural communities surrounded by agribusiness, conflicts, threats, murders, water scarcity and rural poverty, The only alternative is often degrading work on large farms, sometimes analogous to slave labor.<sup>15</sup>

Increased biodiversity protection and land-use management and regularization in areas of relevant ecosystem services require recognition of the various contributions to conservation provided by indigenous and traditional peoples and communities living in the Cerrado. Ensuring effective and equitable management where protected areas overlap traditionally occupied territories requires consideration of traditional practices. For example, fire can either be harmful or beneficial depending on how, where, when

## CONSERVATION UNITS IN THE CERRADO

Source: Cadastro Nacional de Unidades de Conservação do Ministério do Meio Ambiente (CNUC), 2018

and why it is used. Integrated Fire Management, based on local ecological characteristics and traditional knowledge, can support initiatives for fire prevention and firefighting, contributing to the conservation of biodiversity and climate mitigation.

Protection of natural ecosystems in isolated fragments is insufficient to prevent the loss of ecological functions. Integrating traditional territories with Permanent Preservation Areas and Legal Reserves into mosaics and applying conservation strategies at the landscape scale favor gene flows, species conservation and ecosystem services related to water and carbon. In addition, they contribute to the improvement of livelihoods through the sustainable use of biodiversity by indigenous and traditional peoples and

communities. This is essential for maintaining ecosystem functions.

Mosaics at the landscape scale also serve to improve productive activities and their management. They can facilitate access to parks and reserves, supervision, monitoring and evaluation of management plans, scientific field research and strategic use of compensation funds resulting from environmental licensing or fines. At higher levels, territorial planning, land regularization and strengthening of environmental agencies can ensure continued, transparent and participatory management that contributes to the achievement of the Aichi Targets and other international commitments, such as the Nationally Determined Contributions (NDC) in the Paris Agreement of 2015.

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**RECOMMENDATIONS**



**PROTECT** at least 17% of the Cerrado so as to meet Goal 11 of the Aichi Biodiversity Targets, including strict conservation protected areas.

**PRIORITIZE** land regularization and strengthening of both strict conservation and sustainable use protected areas, using funds from conversion of fines and environmental compensation.



**PROMOTE** demarcation and ratification of indigenous lands and titling of family farms and territories of traditional peoples and communities, including the creation of Extractive Reserves (RESEX), Sustainable Development Reserves (RDS) and various types of sustainable agrarian reform settlements, among other land tenure mechanisms, integrating them into broader conservation strategies on a landscape scale and strengthening the mosaics of protected areas and their connectivity.



**EXPAND** the National Policy on Environmental and Territorial Management in Indigenous Lands (PNGATI) and broaden the scope of the policy to include the territories of Afro-descendant quilombolas and other traditional peoples and communities, strengthening monitoring and inspection.



**CONSOLIDATE** a National Policy on Integrated and Adaptive Management, Prevention and Control of Fire in the biome through dialog with community-based initiatives.

**INSTITUTE** buffer zones around protected areas free of pesticides and transgenic crops, especially in priority areas for biodiversity conservation and maintenance of ecosystem services.



**SAFEGUARD** the diversity of protected ecosystems and their uses and interests through Terms of Commitment with indigenous and traditional peoples and communities and family farmers in areas that overlap with strict conservation protected areas.



**STRENGTHEN** the National Council of the Cerrado Biosphere Reserve to promote environmental governance in landscapes connecting the core protected areas.



**APPROVE** the Constitutional Amendment Proposal (PEC) that includes the Cerrado and the Caatinga as national heritage and establish specific federal legislation for their conservation, sustainable use and recovery.

## 2

POLICIES TO REDUCE CLEARING AND  
PROMOTE LANDSCAPE RESTORATION

DIALOGUE WITH RESPONSIBLE AGRICULTURE AND LIVESTOCK

Fernando Tatagiba



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Brazil's tropical agriculture is one of the most dynamic and sophisticated in the world. Agribusiness accounts for 22% of its GDP and much of its trade balance. According to Mapbiomas, the Cerrado was responsible for 38.5% of all the country's agricultural land in 2016, with about 42% of the volume of the soybeans<sup>16</sup>, playing a crucial role in the production of food, the trade balance and the economic development of the interior regions. Nevertheless, it is necessary to reinforce the importance of reconciling large-scale agricultural production with the conservation of the biome's socio-biodiversity.

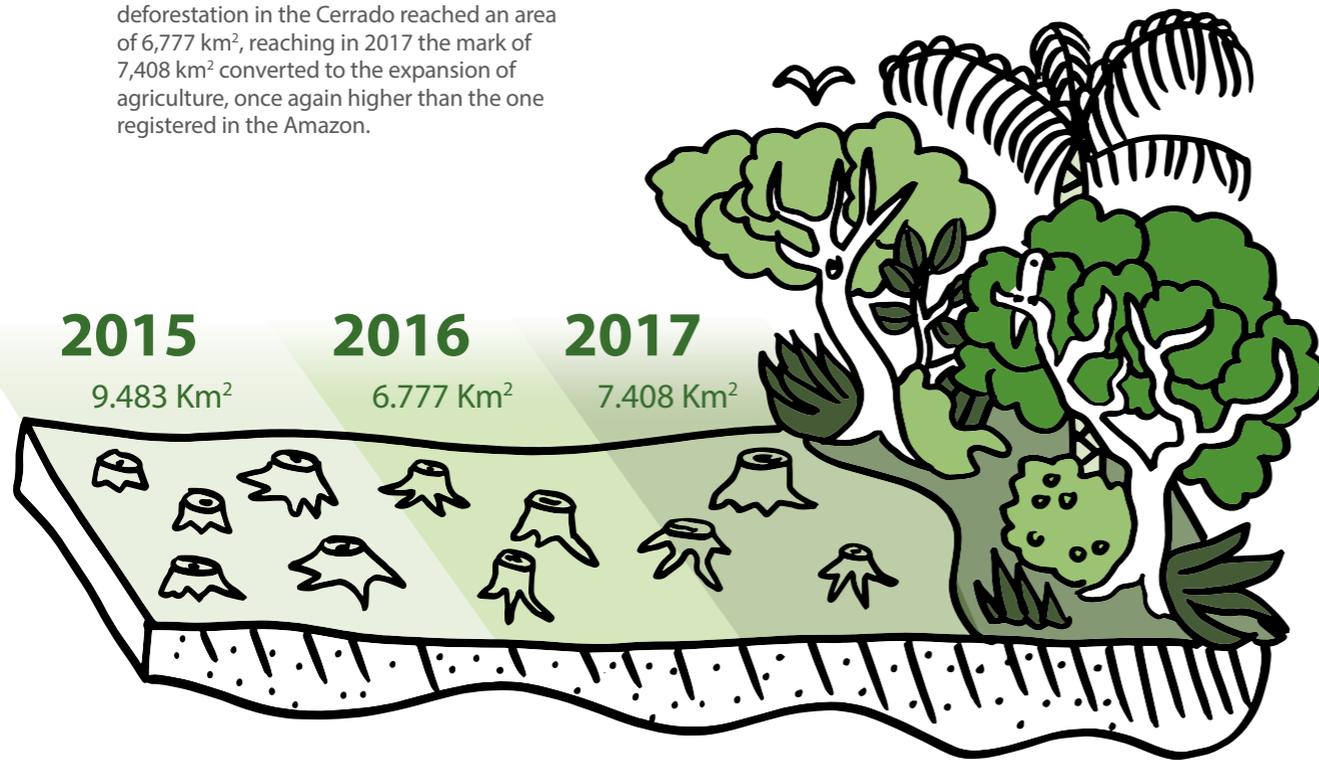
The sustainable practices already being adopted by the agricultural sector, such as low-carbon agriculture, should be broadly disseminated. Some agribusiness sectors now realize that it is possible to increase production without conversion of new areas. The soy sector in the Amazon is an example, since at the same time that the deforestation in the supply chain almost zeroed, production increased by 400% since the beginning of the Soy Moratorium in 2006.<sup>17</sup>

The international market is progressively adhered to zero deforestation commitments to contain global warming and avoid extinction of species, varieties and ecosystems, water scarcity and other environmental disasters. There are numerous agreements regarding production chains free of deforestation, such as the New York Forest Declaration, the Amsterdam Declaration, the business commitment of the Consumer Goods Forum and the Cerrado Manifest Statement of Support (SoS Cerrado), which are initiatives led by national governments as well as major companies and international brands.

As the world is closing its doors to products coming from deforested areas, Brazil needs to act so as not to lose market share. With the Cerrado it cannot be different, since 63% of the soybeans produced in the biome in 2015 were exported, mainly to China (50% of the total) and Europe (8% of the total).<sup>1</sup> These soy exports were responsible for emissions of 1.83 billion tons of CO<sub>2</sub>, equivalent to almost 80% of Brazil's gross emissions in 2016.<sup>1</sup> Thus, a sustainable future for Brazilian agriculture can reduce the socio-environmental impacts of this production. The expansion of agriculture in the biome must be based on intensification of land use, with greater productivity in the areas already cleared, protecting native vegetation, restoring areas crucial for the maintenance of ecosystem functions and valuing socio-biodiversity.

Until now, expansion of the agricultural frontier in the Cerrado has occurred in a disorderly way, with strong advance over pasture areas in the south of the biome and over the native vegetation of MATOPIBA in the north. Large-scale agriculture has often expanded into areas of low aptitude without taking advantage of areas already cleared that would be more suitable for agricultural production.<sup>18</sup> Between 2010 and 2015, the Cerrado's contributions to emissions from the land use and forest sector, which includes deforestation and forest fires, increased by 34%.<sup>19</sup> In the period 2000-2015, annual clearing rates in the Cerrado accumulated a loss of 236,000 km<sup>2</sup> of vegetation, while 208,000 km<sup>2</sup> of forests were cleared in the Amazon.<sup>1</sup> Clearing in the Cerrado was concentrated in MATOPIBA, adding 8,785 km<sup>2</sup> of devastated areas in 2016 and 2017, about 74% of the total clearing for the biome in that period.<sup>20</sup>

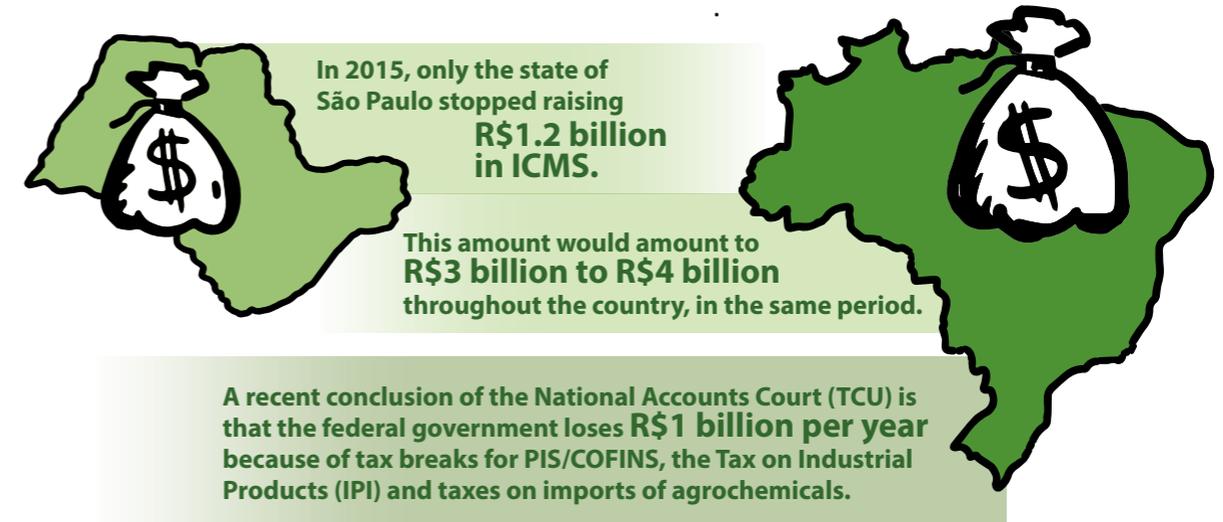
In 2015 the Cerrado lost 9,483 km<sup>2</sup> of native vegetation, surpassing in 52% the devastation in the Amazon in the same year. In 2016, deforestation in the Cerrado reached an area of 6,777 km<sup>2</sup>, reaching in 2017 the mark of 7,408 km<sup>2</sup> converted to the expansion of agriculture, once again higher than the one registered in the Amazon.



Source: Climate challenges and opportunities in the Brazilian Cerrado, 2017

Farming and ranching will probably continue to be the vectors for economic growth in the Cerrado in coming years. The Center-West region concentrates 77% of the areas with high or high-average capacity for expansion of irrigated areas. Investments in this sector result in substantial increases in productivity and total output.<sup>21</sup> These investments, however, need to be reviewed regarding the different uses of water to avoid socio-environmental conflicts and intense use of pesticides and fertilizers that directly impact water resources, affecting their availability and quality, as well as ecosystem functions and people's health.

Due to its development model and agricultural policy, Brazil is one of the world's main consumers of agrochemicals. Tax incentives for agrochemicals include reduction of 60% of the Tax on Circulation of Goods and Services (ICMS), in addition to total exemption from the Tax on Industrialized Products (IPI) of certain types of agrochemicals.<sup>22</sup> Solutions to reduce the use of agrochemicals, such as the proposal of a National Policy for the Reduction of Agrochemicals (PNARA), are under consideration in the Chamber of Deputies. They are based on the National Program for the Reduction of Agrochemicals (PRONARA) of 2014, which has not been officially launched by the Ministry of Agriculture, Livestock and Food Supply (MAPA).



Source: Agência Câmara. Comissão especial pretende reduzir isenção fiscal a agrotóxicos para incentivar a produção de orgânicos, 2018.<sup>26</sup>

The use of areas already cleared and the recovery of degraded pastures for agricultural and/or agroforestry activities is the best way to ensure productivity gains of the agricultural sector and conservation of the remaining Cerrado areas. Brazil can meet the demand for increased farmland up to 2040 without any conversion of natural habitats, reaching zero deforestation.<sup>23</sup> Studies indicate that the impact of zeroing all deforestation in Brazil, whether legal or illegal, would be minimal for the country's economy, and could be offset by intensification of cattle-raising.<sup>24</sup>



Source: Qual o impacto do Desmatamento Zero no Brasil?, 2017

Associating agricultural productivity and responsible socioeconomic development, solving conflicts with indigenous and traditional peoples and communities, encouraging conservation and supporting the restoration of native vegetation are all fundamental for short- and long-term maintenance of the Cerrado's ecosystem services. The losses go beyond social and environmental issues, with impacts on the country's economy in general. They affect the agricultural sector itself, which is already suffering from climate change, especially regarding shortages of rainfall and water for irrigation and scarcity of insects for crop pollination and pest control, as well as nutrient cycling for soil fertility.

The new Forest Code (Law 12.651 of 2012) is the main environmental legislation applicable to the management of what is left of native vegetation in all rural properties. Although it reduced the requirements for restoration and pardoned many rural producers, the new law introduced mechanisms for greater compliance and for compensation of Legal Reserves. Compliance with this law can provide for the restoration of 19 million hectares of cleared land<sup>25</sup> and the mitigation of greenhouse gases on the order of 7 to 11 GtCO<sub>2</sub>eq.<sup>26</sup>

In this sense, it is essential to take advantage of the full range of incentives foreseen in the new Forest Code and find innovative solutions that meet the country's international

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commitments in the Paris Agreement in the land use change and forest sector, to restore and reforest 12 million hectares of vegetation throughout the country, as well as ending illegal deforestation in the Amazon by 2030.<sup>27</sup> It is necessary to strengthen the supply chain of services and products of landscape restoration and to create economic incentives so that the investments are attractive for landowners, enabling the recovery of the Cerrado.<sup>28</sup>

## RECOMMENDATIONS



**ZERO CLEARING** both legal and illegal, by 2020, revising the modest reduction target established in the National Climate Change Policy.



**CREATE** an ambitious goal of reducing carbon emissions from the Cerrado.

**ESTABLISH** a Cerrado Fund for social and environmental investments, articulating national and international sources of funding.



**APPLY** restrictions and socio-environmental sustainability indicators for all the Harvest Plan credit lines, making access to the Low-Carbon Agriculture Plan (Plano ABC) more attractive, and incentives for landowners who invest in areas already cleared that have high or high-average aptitude, especially for those who maintain their Legal Reserves above the minimum required.



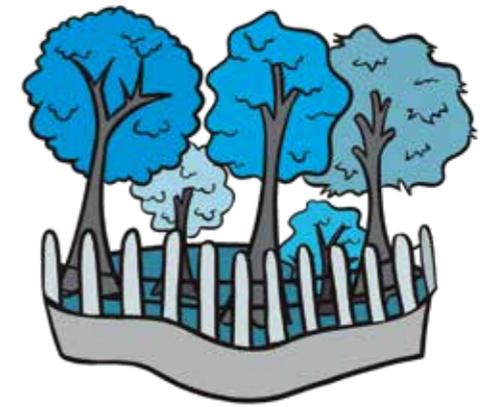
**RESTRICT** agricultural credit in any of its modalities to owners of rural properties already enrolled in the Rural Environmental Registry (CAR), respecting the specificities of indigenous and traditional peoples and communities, without further extensions of deadlines.



**IMPLEMENT** the National Policy for the Recovery of Native Vegetation (PROVEG) and the National Plan for the Recovery of Native Vegetation (PLANAVEG), establishing attractive lines of credit that promote the efficient use of areas already cleared and improve environmental compliance of rural properties.



**INCREASE** regulation, inspection and transparency of information with regard to environmental governance such as the granting of licenses for use of surface and ground water, deforestation permits and the Rural Environmental Registry (CAR).



**STIMULATE** the conservation of native vegetation on private properties, through the regulation of Environmental Reserve Quotas (CRA) as a mechanism to compensate areas of Legal Reserve, as well as payment of incentives for environmental services for the conservation of vegetation surpluses in the Cerrado outside areas that already have legal protection.



**IMPLEMENT** the National Program for the Reduction of Agrochemicals (PRONARA) to support the National Plan for Agro-ecology and Organic Production (PLANAPO), establishing the National Policy for the Reduction of Agrochemicals (PNARA) and eliminating tax benefits for pesticides.

## 3

POLICIES FOR  
SOCIO-BIODIVERSITY AND  
AGRO-EXTRACTIVISMIMPROVED GOVERNANCE OF THE SOCIAL  
AND ENVIRONMENTAL AGENDA

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Conservation through the sustainable use of biodiversity and the maintenance of ecosystem functions are favored by the ways of life of indigenous and traditional peoples and communities in the Cerrado, which are increasingly important because of their continuous presence and economic sustainability of the great diversity of their traditional systems. These traditional cultures and historical communities act as guardians of agrobiodiversity and maintain the ecological integrity of territories in the face of disorderly expansion of large-scale agriculture.

Adequate socio-environmental governance and land management can consolidate responsible planning for the Cerrado, allowing large-scale agriculture to grow in harmony with agro-extractive uses and other visions of economic development, contributing to overcoming poverty and promoting social inclusion in rural areas. Agro-extractivism is an alternative for income generation, always in the context of family agriculture, with economic use of the products of the socio-biodiversity of the Cerrado.

Although official data on population and agro-extractivist production in Brazil are incipient, recent data show that non-timber products such as açaí, mangaba, pequi and babaçu, among many others, reached a total production value of R\$ 1,6 billion in 2016. Food products accounted for 72% of this value, followed by waxes (13.5%), oilseeds (7.4%), fibers (7%) and others (0.4%).<sup>29</sup> These are, in general, native products grown or collected in small-scale agricultural systems, for generations, according to agro-ecological principles and extracted from nature for various purposes: food, housing, medicines, household goods, hunting and fishing.

In this context, institutional markets to stimulate the sustainable production of family farms play a key role with regard to food sovereignty, nutritional security and income generation. Conservation through the use of natural resources by agro-extractivist families is encouraged by institutional programs such as the Food Acquisition Program (PAA), the National School Food Program (PNAE), the Policy of Minimum Prices for Socio-biodiversity Products (PGPM-Bio), the National Agro-ecology and Organic Production Policy (PNAPO) and the Green Grants Program.<sup>30</sup>

Although these Cerrado products embody knowledge and culture and constitute an alternative model of the market, there are still various obstacles to their greater economic

use. These difficulties include the formalization of collective social organizations, cooperatives and agro-extractivist ventures; land tenure issues that limit access to natural resources; difficulties in marketing agro-extractive products for lack of structured distribution chains, specific norms established for this sector and restrictions on access to credit and financing for production, processing and distribution.<sup>31</sup> Brazilian sanitary legislation for food of animal and plant origin is a huge “patchwork quilt” that has kept family and community agriculture marginalized, excluding or limiting certain chains of artisanal products and socio-biodiversity to the benefit of the ultra-processed food industry.<sup>32</sup>

Difficulties in coordination of governance actions, in a political context in which socio-environmental issues are treated by stakeholders and sectors of government with distinct approaches, hinder effective integration among economic and social aspects for the proper management of natural resources. Inefficient, disjointed and poorly integrated

public policies suffer from lack of strategic planning for the treatment of barriers to agro-extractive production. Land tenure issues are at the center of these problems, with implications for biodiversity conservation, mitigation and adaptation to climate change, territorial management, water management and sustainable rural development, among others that are essential to deal with eruptions of rural conflicts.

In 2017, murders in rural areas reached the highest number in the last 14 years, with 71 homicides, a 63% increase in assassination attempts and a 13% increase in death threats. In the same year, 172 water-related conflicts were recorded in Brazil, a number that may be masked by other struggles over land.<sup>33</sup> The conflict in Correntina (Bahia state) is an example of this situation, where the change in land use deprives pastoral communities of access to water they have always used in favor of private irrigation projects that consume enough water per day to supply 6.6 million cisterns in the Semi-Arid region or a city of 30 thousand inhabitants for one month.<sup>34</sup>

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**PROMOTE** Technical Assistance and Rural Extension (ATER) for sustainable rural and agro-extractive development, strengthening social participation of smallholders, indigenous and traditional peoples and communities of the Cerrado, under the leadership of the National Agency for Technical Assistance and Rural Extension (ANATER).



**ENSURE** budget funding for public procurement and food supply programs such as the Food Acquisition Program (PAA) and the National School Food Program (PNAE), with inclusion of new socio-biodiversity products in the Minimum Price Policy (PGPM-Bio) and better prices for agro-extractive products



**REVIEW** excessive regulatory barriers regarding health, fiscal and environmental standards that make it difficult or impossible to produce and market socio-biodiversity products.

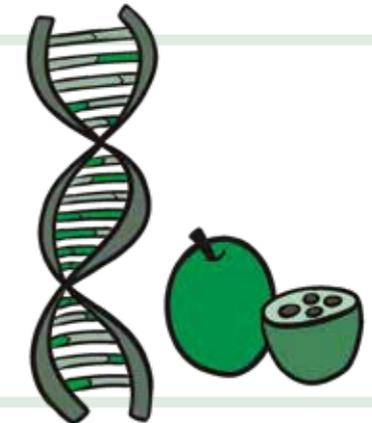


**RECOGNIZE** the autonomous and independent Community Protocols for Free, Prior and Informed Consent (FPIC) by indigenous and traditional peoples and communities as a legitimate instrument for the application and safeguarding of the supra-legal guarantees established by Convention 169 of the International Labor Organization (ILO).



**EXPAND** the protection programs, defense agencies and reception and referral of reports of violence from agrarian conflicts, such as the Reference Centers for Citizenship and the National Program for the Protection of Human Rights Defenders.

**PROMOTE** research and innovation regarding products, community enterprises and sustainable production systems of the Cerrado, ensuring the effective sharing of benefits from economic exploitation based on access to the genetic heritage and associated traditional knowledge.



**RECOGNIZE** the traditional agricultural systems of family farmers, indigenous and traditional peoples and communities as Brazilian intangible cultural heritage.



**INCLUDE** in the official statistics of the Brazilian Institute of Geography and Statistics (IBGE) the specific demographic, economic and social data regarding indigenous and traditional peoples and communities.



**ENSURE** the composition and proper functioning of the committees of the Araguaia-Tocantins, São Francisco and Paranaíba river basins, with broad participation and representation of indigenous and traditional peoples and communities of the Cerrado in revitalization programs.

## REFERÊNCIAS BIBLIOGRÁFICAS

- 1 REIS, T. et. al. Climate challenges and opportunities in the Brazilian Cerrado. IPAM, 2017.
- 2 BUSTAMENTE, M. Política de clima negligencia o Cerrado – mais uma vez. Observatório do Clima, 2015.
- 3 MCTIC. Ministério da Ciência, Tecnologia, Inovações e Comunicação. Terceiro Inventário Brasileiro de Emissões Antrópicas. 2016.
- 4 SPERA, S. A. et al. (2016) Land-use change affects water recycling in Brazil's last agricultural frontier. *Global Change Biology*, p. n/a-n/a. doi: 10.1111/gcb.13298.
- 5 SAWYER, D. & LAHSEN, M. Civil Society and Environmental Change in Brazil's Cerrado. *Environment: Science and Policy for Sustainable Development*. 2016, n. 58. 16-23.
- 6 ROCHEDO, P.R.R. et. al. The threat of political bargaining to climate mitigation in Brazil. *Nature Climate Change*.
- 7 FAIRR. Cerrado Manifesto Statement of Support: Join global FMCG companies to halt deforestation and incentivise sustainable land management.
- 8 ECODEBATE. Especialistas alertam que desmatamento e ocupação desordenada ameaçam conservação do Cerrado. 2018.
- 9 CNPCT. Carta de Monte Alegre. Seminário Nacional de Povos e Comunidades Tradicionais: Protagonistas da sua história. MIQCB: São Luiz Gonzaga/MA, 2018.
- 10 WWF-Brasil. Áreas prioritárias para conservação da biodiversidade no Cerrado e Pantanal. Brasília - DF, 2015.
- 11 CBD. Aichi Biodiversity Targets. Available at <<https://www.cbd.int/sp/targets/>>, accessed 08/06/2018.
- 12 MMA, Ministério do Meio Ambiente. Cadastro Nacional de Unidades de Conservação - Unidades de Conservação por Bioma. 2018.
- 13 OBSERVATORIO DO CLIMA. Devastação do Cerrado emitiu em 2 anos 440 milhões de toneladas de CO2, diz IPAM. 2018.
- 14 DICKIE, A. MAGNO, I. GIAMPIETRO, J. DOLGINOW, A. Desafios e oportunidades para preservação, produção agrícola e inclusão social no Bioma Cerrado. CEA Consulting. 2016.
- 15 REDE SOCIAL de Justiça e Direitos Humanos. Imobiliárias agrícolas transnacionais e a especulação com terras na região do MATOPIBA. 2018.
- 16 TRASE. Bioma: Cerrado in 2015. Stockholm: Stockholm Environmental Institute & Global Canopy.
- 17 Dados do monitoramento do Grupo de Trabalho da Soja – GTS, responsável pela gestão da Moratória da Soja na Amazônia.
- 18 REIS, T. et al. A irracionalidade do desmatamento no Cerrado. IPAM, 2017.
- 19 MCTIC. Ministério da Ciência, Tecnologia, Inovações e Comunicação. Estimativas anuais de emissões de gases de efeito estufa no Brasil. 2017.
- 20 IPAM. Nota sobre o anúncio de desmatamento no Cerrado em 2016 e 2017.
- 21 Agência Nacional de Águas – ANA. Atlas irrigação: uso da água na agricultura irrigada. Brasília: ANA, 2017.
- 22 BITTENCOURT, N. MENDONÇA, T. Entidades questionam isenção de impostos para agrotóxicos no Brasil. *Terra de Direitos*. 2018.
- 23 STRASSBURG, B.B.N. et al. When enough should be enough: improving the use of current agricultural lands could meet production demands and spare natural habitats in Brazil. *Global Environmental Change* 28 (2014): 84-97.
- 24 LEITÃO, S. VACONCELOS, L. Qual o impacto do desmatamento zero no Brasil? Instituto Escolhas, 2017.
- 25 GUIDOTTI, V. et. al. Números Detalhados do Novo Código Florestal e suas Implicações para os PRAs. IMAFLORA, 2017.
- 26 SOARES FILHO, B. et al. Cracking Brazil's Forest Code. *Science* 344 (2014).
- 27 MRE. Ministério das Relações Exteriores. Pretendidas Contribuições Nacionalmente Determinadas. 2015.
- 28 GT DESMATAMENTO. Agenda de Ação para o Combate ao Desmatamento. Carta de Organizações da Sociedade Civil ao Ministério do Meio Ambiente.
- 29 IBGE. Instituto Brasileiro de Geografia e Estatística. Produção da extração vegetal e silvicultura. Rio de Janeiro: IBGE, 2017.
- 30 CALORIO, C.M. ONCALA, A.A. Agroextrativismo e Bolsa Verde na Política Nacional de Agroecologia e Produção Orgânica. In: SAMBUICHI, R.H. et al. (orgs). A política nacional de agroecologia e produção orgânica no Brasil: uma trajetória de luta pelo desenvolvimento rural sustentável. Brasília: Ipea, 2017.
- 31 SIMONI, J. Entraves regulatórios na produção agroextrativista. Instituto Sociedade População e Natureza – ISPN. Brasília, 2012.
- 32 Instituto Sociedade População e Natureza – ISPN. Regularização sanitária de produtos da agroindústria de pequeno porte é debatida no MDS. 2018.
- 33 COMISSÃO PASTORAL DA TERRA. Lançamento do relatório anual da CPT destaca o aumento da violência no campo e dos conflitos pela água. Brasília, 2018.
- 34 CRUZ, F. É preciso lutar para não morrer de sede nas margens dos rios. *Articulação Semiárido Brasileiro – ASA*, 2018.
- 35 Instituto de Pesquisa Jardim Botânico do Rio de Janeiro. Flora do Brasil 2020 em construção. Jardim Botânico do Rio de Janeiro, 2018.
- 36 Agência Câmara. Comissão especial pretende reduzir isenção fiscal a agrotóxicos para incentivar a produção de orgânicos, 2018.



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