

## GOVERNANCE AND ENVIRONMENTAL AGENDA: REDD + Jurisdictional and sustainable development in Tocantins<sup>1</sup>

GOVERNANÇA E AGENDA AMBIENTAL: REDD+ Jurisdicional e desenvolvimento sustentável no Tocantins

GOBERNANZA Y AGENDA AMBIENTAL: REDD + jurisdiccional y Desarrollo sostenible en Tocantins

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### ABSTRACT

The article seeks to reflect on governance in the institutionalization of environmental policies in the government of the state of Tocantins, with a focus on actions to reduce greenhouse gas emissions resulting from deforestation and forest degradation based on the Jurisdictional Program for Reducing Emissions from Deforestation and Degradation (REDD+) in the state of Tocantins. A timeline of governance actions aimed at sustainable development in Tocantins was built from theoretical research with bibliographic and documentary analysis, based on the regulation of the low greenhouse gas emission economy. The study showed that the successful institutionalization of the Tocantins Jurisdictional REDD+ implies expanding social participation and transparency of actions.

**KEYWORDS:** Governance; Sustainable development; Environmental issues; Tocantins.

## Introduction

The Governance and sustainable development, with bigger intensity, since the last decade, they have been at the center of worldwide debates, increasingly mobilizing the public opinion around the need to reverse strategies that mobilize governments and social actors to reverse the acceleration environmental degradation caused by humans, who intimidation of extinction, the species and has resulted in climate more and more changes perceptible in different territories and biomes.

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The attention focused to the referred themes, in others words, is a recognition that human interventions that cause damage to the environment require actions: politic and regulations that could reduce their impacts in short, medium and long term.

The State of Tocantins is the youngest state in the Brazilian federation, because it was created in October 1988 by the Federal Constitution. In spite of its to be the state new, the history has been marked by political instability represented in a way suddenly transition between governments as a result of removals, resignations and impeachments. According to Miranda et al. (2022):

The previous governor Marcelo Miranda was impeached in two different terms (2009 and 2018) and also submitted three resignations: Siqueira Campos (1998 and 2014); Mauro Carlesse (2022). In this way, the political history of Tocantins also recorded the rise of three state deputies to Palácio Araguaia who occupied the position of president of the Legislative Assembly of Tocantins (Aleto), ran in indirect elections for the state government and were victorious, thus gaining the immediate line of succession since the deputy governors, for different reasons, were not able to assume the role. They were: Carlos Gaguim (2009); Sandoval Cardoso (2014) and Mauro Carlesse (2018). Carlos Gaguim was appointed governor of the state from 2009 to 2010, Sandoval Cardoso from May to December 2014 and Mauro Carlesse from 2018 to 2021.

Only two governors elected by direct election got it completed their terms: Moisés Avelino, who governed the state from 1991 to 1995. Siqueira Campos who was the first governor, completed three of the four terms. The first three mandates won in the 1988, 1994 and 1998 elections were fully completed, but the fourth and final mandate won in the 2010 direct elections wasn't fully completed. Siqueira resigned in April 2014 with the intention of to make room for his son, Eduardo Siqueira Campos, to run for government of Tocantins, but this didn't happen.

Based on this contextualization, we propose a study for to reflect about the institutionalization of the environmental agenda by the government of the State of Tocantins as from the actions of governance and sustainable development. The part which was choose are actions for to reduce greenhouse gas emissions resulting from deforestation and forest degradation that began to be boosted after the establishment of the international institutional framework in the United Nations Framework Convention on Warsaw Climate Change (COP 19) 2013, of which Brazil is a signatory.

We expose a dialogue about the concept of governance and sustainable development, then we present a brief timeline of the institutionalization of the environmental agenda in the government of Tocantins, and finally we discuss the actions aimed at reducing greenhouse gas emissions resulting from deforestation and forest degradation and we point out the challenges for the construction of the Jurisdictional Program for Reducing Emissions from Deforestation and Degradation (REDD+) in the state of Tocantins.

## **Governance and sustainable development**

Governance and sustainable development are issues that are on the agenda of discussions and articulations of international organisms, environmental movements, national governments, and other sectors of society. Although with widely visible negotiations these sectors in favor of changes that can affect environmental preservation which emerge in a scenario marked by interests and conflicts that it isn't rare put the environment like a problem for to progress.

In this context, the conceptual review of these issues is a necessary way to understanding the institutionalization of the environmental agenda in the government of the State of Tocantins. According to Thorstensen and Mota (2020), the term governance and sustainability has been present at least since the context of agenda 21 Nations Conference United Nations about the Environment and Development of 1992, and has been emphasized by subsequent international documents, with emphasis the agenda 2030 of 2015.

Sustainable development encompasses the factors economic, social, and environmental. Each one should not be proven in isolation, just as the discussion on sustainability should not be restricted to the discussion on the needs for environmental protection and conservation. There are several relationships between the main environmental and economic challenges, environmental and social challenges and social and economic challenges that need to be addressed in order to achieve sustainable development. In this sense, the need for governance between decision-makers, both public and private, and between policy-makers at all levels of government are laid out as permitted in international documents on sustainable development (Thorstensen & Mota, 2020, p. 4).

Thus, it is possible to say that Governance is the set of processes through the choices are made and decisions are taken in a management dynamic in organizations. Governance isn't restricted to government actions, but includes actions by civil society organizations, among other organizations. When systematizing the academic literature on governance, Milani and Solinís (2002) say that governance in general can be understood as a complex decision-making process that anticipates and goes beyond governments. In this sense, the authors list some characteristics that have itself relation to the concept of governance based on the literature review:

the legitimacy of the public space being constituted; the distribution of power between those who govern and those who are governed; the negotiation processes between social actors (procedures and practices, the management of interactions and interdependencies that may or may not lead to alternative regulatory systems, the establishment of networks and coordination mechanisms); and the decentralization of authority and functions linked to the act of governing (Milani & Solinís, 2002, p. 273).

For this work, we are interested in focusing on the concept of governance linked to environmental issues to understand decision-making by state actors, but recognizing that in this process the presence of social actors is important for the success and social inclusion of the population in this the process. According to Adams, Borges and Moretto (2020), the complexity and character multi-scale of socio-environmental problems put challenges that demand coordinated actions between the State and society, for the construction of development sustainable and socially fair.

This reflects the contemporary discourse on the governance of sustainable development that emphasizes the importance of public-private partnerships and civil society (Stibbe et al., 2019), with the potential to unite multilateral norms and placed action, attracting a diverse number of actors from civil society, government and companies (Bäckstrand, 2006).

According to Barbieri (2020), ideas about sustainable development have been gaining ground since the second half of the century 20th, having contributed for this several events international character and contributing to this. Here, we highlight the most recent ones, such as the United Nations Conference on Environment and Development in Rio de Janeiro in 1992, the creation of the Commission on Sustainable Development (CSD) within the UN (1992), the United Nations Conference on Sustainable

Development Rio + 10 (in 2002) and Rio + 20 (in 2012). Also in 1992, the Conference of the Parties (COP) began, crucial events in the search for solutions to reduce greenhouse gas emissions and mitigate the impacts of climate change on a global scale.

However, in 2015, the United Nations (UN) established the Agenda at 2030 for the achievement of the Sustainable Development Goals (SDGs) on the occasion of the United Nations for the Sustainable Development. Thus, they were established 17 objectives for the nations that ratified the document that would to act in the advancement of sustainable development by the year 2030, aiming to end with the poverty, to protect the environment and the climate and safeguard the quality of life for the people of the world.

Governance for sustainable development involves increasingly diverse groups of interested parts, with the promise of greater legitimacy and effectiveness in decision-making that should be directed towards for improvement of capacities legal-institutional of countries, and here we highlight states with a view to applying effective legislation in the area of environment and development. The politics are the main means for governments to implement the SDGs and to recognize the importance of initiatives and support for local authorities, as the level of governance closest to the people, including encouraging education and the mobilization in favor of sustainable development.

The evolution of environmental governance over the decades has performed a fundamental function in promoting sustainability and advancing the global environmental agenda. A relevant political question is "how to translate global concerns in local action and local concerns in global action. These times in environmental governance has allowed for the creation of policies and initiatives that seek to integrate sustainable principles into economic practices and social practices. Thus, the synergy between governance, the environmental agenda and the SDGs is essential to achieve positive transformation and stability at the global level (Viola, 1992).

In the State of Tocantins, as we will see below, the goals sustainable development (SDGs) have been transversally in the environmental agenda since the beginning of its institutionalization in 1989.

### **The environmental agenda in Tocantins**

Since the creation of the youngest unit Brazilian federative, Tocantins, environmental issues have been present on the government's agenda and have begun to materialize, especially through the structuring of environmental organisms, in which

stand out the "Instituto Natureza do Tocantins" (Naturatins) and the secretariat of state the Environment, which overtime its existence presented mergers in its main areas of activity, was extinguished and since 2015 has been known as the Secretariat of the Environment and Water Resources (Semarh).

Naturatins, considered the first agency focused on environmental issues in the state, was initially created with the name and legal nature of Foundation Nature of Tocantins, so in the first year of the federative unit's existence, at April 21, 1989, through Law 29, with the objectives of promoting the protection, control and use rational of natural resources, in addition to developing studies and field research.

In 1996, it was decreed the state law 858 of July 26, 1996 was modified, which changed the legal personality, which became an autarchy called the Nature Institute of Tocantins, whose responsibilities were: i) implementation of the state's environmental politic; ii) environmental monitoring and control; iii) monitoring compliance with environmental legislation; iv) provision of related services assigned to it as a result of agreements, accords and contracts.

In addition to these responsibilities, Naturatins does manage of units preservation Full Protection and the states's sustainable use and to present Conservation Units and has 15 regionals units distributed throughout its territory, in addition to its head office located in the capital, Palmas.

In 1991, it was created the Law 261 of 20 February 20, which established the environmental politic of the State of Tocantins, whose the objective was to establish the guidelines for its elaboration, implementation and monitoring. We remarked in the same law, it was created the council politic Environmental of the State of Tocantins was created.

About that the state organism of politics environmental with the status of a secretariat for the first time was creater at 1995 by Law 727 of 18 January, and began to conect water issues and being named the State Secretariat for the Environment and Water Resources (Semarh) with a focus on the management of water resources, environment protection and preservation, renewable natural resources, mineral resources, control of the environmental impact of economic activities and basic sanitation.

Also in 1995, the Environmental Politic Council of the State of Tocantins was renamed the State Environmental Council of Tocantins (Coema), in accordance with Law

791 of November 22, 1995, and was governed by the disposition this rule. Reformulated in 2007, it's a corporation/institution consultative, normative and deliberative, linked to Semarh. According to the records of the minutes of regular meetings of the State Environmental Council (Coema), we can realize that there was a discontinuity in the existence and maintenance of the powers of the Secretariat of the Environment and Water Resources (Semarh), which kept this name only a few months after its creation in 1995.

According to Coema records and based on Seplan's institutional historic, between 1995 and 2010, Semarh was dissolved as such and part of its powers were transferred to the Planning and Environment System (Seplan), later changed to the Planning and Environment Secretariat. In 2011, it was more once modified to the Secretariat for Sustainable Development and Water Resources (Semades), returning for corporations the part of its competences and remaining with this name until 2014. Finally, in 2015, the department's name was changed back to the Secretariat for the Environment and Water Resources (Semarh), and it has remained until present days, with the institution undergoing reformulation and modification of its guidelines.

In this context, we can say that Semarh is responsible for to coordinate the process of reviewing the politic state's environmental and its water resource and instruments. Among its competences stands out.

i) encouraging and strengthening municipal environmental management; ii) assessing and valuing the environmental assets of the state of Tocantins; iii) consolidating the state water resources management system; iv) promoting the recovery and conservation of river basins and aquifer systems; v) implementing climate change adaptation projects focused on adapting social and environmental infrastructure; vi) implementing a management and maintenance system for Conservation Units with financial returns; vii) encouraging solid waste management supported by legislation; viii) raising funds, training, stimulating and strengthening Civil Society Environmental Organizations, such as Committees, Councils and Consortiums.

Throughout its existence, the State of Tocantins has followed discussions about carbon's sequestration and credits, concepts created from the Kyoto Protocol in 1997, which aims to reduce greenhouse gases, responsible for several environmental problems associated the climate change.

For about three years, Semarh has been making efforts to make viable the program REED+ Jurisdictional of Tocantins, which intend to encompass several subprograms with the objective of transforming carbon into financial resources capable



of put in practice activities low-impact environmental. According to information available on website Semarh's institutional, Tocantins will be the first state to present a program aimed at reducing emissions coming from deforestation and forest degradation incorporating the Cerrado biome.

For this article, the focus is aimed on actions the aim the reducing greenhouse gas emissions greenhouse effect resulting from deforestation and forest degradation from the 10th legislature of the state government starting in January 2023 until August 2023, what corresponds to a period of eight months. Therefore, are highlighted here governance actions for sustainable development through the construction of the State Jurisdictional Program for Reducing of Emissions coming from of Deforestation and Forest Degradation (REDD+) of Tocantins.

### **Jurisdictional REDD+ In Tocantins**

The actions proposed for regular the economy of low gas emission's greenhouse and promoting environmental services in the state's biomes have been supported by REDD+ (Reducing Emissions from Deforestation and Forest Degradation), according to the Environment's Ministry (2016), is a set of actions developed in the scope of the United Nations Framework Convention about Climate Change (UNFCCC), with the main goals, to reduce the emission of greenhouse gases (GHG), promote forest conservation, to grow up the carbon in the forests and encourage sustainable management.

In this way, we understand that the main goal of this international initiative is to contribute to the reduction of climate change, then the forests have fundamental function in absorbing carbon dioxide in the atmosphere. Anyway, "[...] the forests provide a 'carbon sink' with a liquid absorption of 7.6 billion tons of CO<sub>2</sub> per year (Harris & Gibbs, 2021).

In Brazil, the gas emissions of greenhouse had at 2021 (last data released) their biggest growing up in almost two decades Report from the Climate Observatory's Greenhouse Gas Emission Estimation System shows that the country emitted 2.42 billion gross tons of CO<sub>2</sub> – an increase of 12.2% compared to 2020. The main source of emissions was deforestation, mainly in the Amazon, applied by agriculture (Constantino, 2023).

The Global Carbon Project estimated that there was in 2022 about 40.6 billion tons of CO<sub>2</sub> emissions, being 3.9 billion tons, just the deforestation alone (Brazil, 2022).



Therefore, if REDD+ is implemented effectively, the estimate is that the actions will help reduce emissions about 20%. For Forest Trends, an international organization without profits, REDD+, "allows wich developing countries to be financially rewarded for their achievements in avoiding emissions" (Pacheco & Cárdenas, 2022, p. 02) of GHGs originating mainly from deforestation. It is important to highlight that these incentives can occur through loans, private sector investments or even in the form of donations.

This way, we highlight the creation of the Program Tocantins Jurisdictional REDD+, goal at reducing emissions from deforestation and forest degradation, which is unfolding of the institutionalization of environmental issues in the state governments of Tocantins, in which the topic of carbon sequestration has always received attention.

Actions that preceded the implementation of the program Jurisdictional REDD+ in the state involved the mobilization of financial resources to support forest projects of conservation and the establishment of monitoring strategies to assess the greenhouse's gas emissions, resulting from deforestation. The Concern for the environment begins with the perception that humanity must be able the needs its nowadays, but this same possibility for future generations (Veiga, 2015).

In 1998, near Bananal Island had the start pioneering efforts to develop by Ecological Institute began to develop projects with goals at mitigating greenhouse's gas emissions, covering not only Tocantins, but also several places in Brazil. The institute plays a crucial role in disseminating the methodology known as "Social Carbon", whose originated in the state of Tocantins and which today have operating licenses internationally

In March 2002, Charles Philip Arthur George, who at the time, had position of Prince Charles, for his personal involvement in environmental issues, he made a visit to the state of Tocantins. His goal was to inspect environmental projects that had the support of the British government, as well as to cover key regions of the state and establish contact with locals indigenous communities. This visit, the prince participated of a presentation of carbon sequestration's Project of Ecological Institute as:

[...] the first Project of carbon's sequestration at large-scale in Brazil. The Ecologic conceived and implemented the project, being responsible by management and administration of operations and by supervising environmental monitoring, having partners institutionals the IBAMA, The Nature Institute of Tocantins (Naturatins) and The Gaia (Environmental NGO in Tocantins).

It is important to highlight, that situation and moment, Tocantins already benefiting itself from resources coming from eight of the richest nations in the world, directed for initiatives socio-environmental. One example was the Program of Management Integrated Environmental (PMIE), which operated in the far north of the state, engaged in actions to combat poverty and promote sustainable development. Such projects contributed substantially to solidifying the position of Tocantins as a leader in terms of environmental conservation in the national context, characterizing the state with indexes of environmental preservation which itself highlight in relation to most of other regions of the country.

However, nowadays in the administration, we have noticed, more visibly, that governance and sustainable development are present among the goals environmental politic of state, which goal to build the program by providing for social participation, as the preparatory workshops with indigenous peoples, quilombola communities and farmers to insure the effective participation of these social segments in the REDD+ Jurisdictional of Tocantins (Mitye, 2023a).

Thus, we realized that the goal of the workshops is to prepare communities to hearings public which goal the to hear people and define a methodology for sharing benefits, in addition to developing an action plan to be implemented to meet the requirements for reducing deforestation and degradation.

In January 2023, the state government approved Law No. 4,111, which established the State Politic for Payment for Environmental Services (SPPES) for the biomes present in Tocantins and the Climate Deep (DeepClimate) linked to Law No. 4,131.

The first goal to "offer juridic legal certainty, viability of payment for environmental services (PES the detailing and determination of special rules about the legal regime of the PES" while the second is intended "to provide financial resources to support projects, programs and actions which aimed at reduction climate change and adapting to climate change and its effects" (Veloso, 2023a). In the same month, representatives of Semarh were in Brasília to participate in the meeting with the federal government, whose the discussion about the reduction of greenhouse gas (GHG) and the illegal deforestation, commitments provided for in REDD+ (Veloso, 2023b).

In February and March 2023, REDD+ to returned to be the highlighted in the agenda government's Tocatinense when it announced that the program would use the resources collected from the sale of carbon credits to encourage agriculture in the state (Lázaro, 2023a).

Right way was done a meeting with the Earth Innovation Institute (EII) “to learn about the learning about organization's partnership in the support technical and legal to the state in the process of certifying and offering jurisdictional carbon credits” (Mitye, 2023b).

The state government and the international institute already signed a memorandum in 2018 to establish the partnership. However, in 2023, the agreement had new discussions.

In May 2023, during Agrotins (Tocantins Agricultural Technology Fair), Semarh presented information about REDD+, showing the actions that the government was creating to enter the market international carbon. According to data released by the secretariat, the state government has “a stock of more than 240 million tons of forest carbon accumulated by reducing of deforestation and forest degradation in the biomes, Cerrado and Amazon” (Mitye, 2023c).

At the end of May's month, the state governor signed in Geneva, Switzerland, agreement commercial and technical with the company Mercuria Energy Trading S/A for the qualification and certification of REDD+ resulting from the reduction of GHG, degradation and deforestation. With this agreement, Tocantins became the first state in Brazil to sell carbon credits at the market international voluntary. According to the EPBR Agency (2022), a specialist in news about oil, gas and energy, the partnership only occurred because was establishment a Society Especific of Purpose Company (SEP), called Tocantins Carbono, with the state-owned Tocantins partnerships and Mercuria. The intention of the Environment Secretariat was to complete and finish the process within eight months.

Finally, actions highlight themselves directly related to the reduction of greenhouse gas emissions resulting from deforestation and forest degradation, as the adherence government's state for the Action Plan to combat deforestation of the Cerrado, whose main commitment is to fight for the conservation of the biome. In August 2023, Semarh deepned its actions together with traditional and indigenous peoples present in Tocantins. The project “Foco no Fogo” visited indigenous villages, providing informations which aimed at reducing illegal burning and forest fires, mainly in the regions where the communities are located (Veloso, 2023c).

While the Leaders quilombola leaders participated in a forum promoted by the state government, in which was made a proposal to delegate the leading the decisions about the development of the Jalapão region to the peoples of there. During the forum, the jurisdictional REDD+ program was discussed and pointed out as a potential for

financing the actions of quilombola peoples and traditional communities" (Lázaro, 2023b).

### Some considerations

It is essential to emphasize which, although these government actions are motivated by good intentions, they have a character intrinsically limited and compensatory.

This occurs due to the contradictions inherent to the predatory development model which, to continue to prevail in the Amazon region. In other words, public politics finish functioning as a kind of counterpart in a game in which the Amazon finds itself in an unfavorable position. In this context, the region perpetuates its historic status of "colony" in the face of the hegemonic interests of capitalism, in one of the largest planet's natural resource frontiers.

This criticism highlights that, in some cases, the projects REDD+ may allow those polluting entities to offset their carbon's emissions without effectively to reduce their destructive activities to environment, which develop the purpose to reduce of climate change and of forest conservation. Therefore, the controversy about carbon credits in the context of REDD+ highlights the need for monitoring of actions, in methods of carbon's accounting and, finally, the lack of transparency and of control, by third parties, to guarantee that these credits, actually promote the reduction of emissions and the protection of forests, instead of simply to conceive a permission to continue polluting.

The goal this article didn't was to finish the subject; we search throughout this research was to watch what ways and how the governance actions, that have the participation of the population in the process decision-making of carbon credits are incorporated in scope of Program REDD+ Jurisdicional of Tocantins.

Recommend strongly the adoption of a state politic of REDD+ policy in the state of Tocantins, with focus scientific and high-quality methods. The prospect of the State to lead governance initiatives is strategically advantageous, because will make it possible a continuous process of improvement, allowing the progressive incorporation of data, more recents and methods more precises (Ministry of the Environment, 2016).

The research carried out provides a valuable contribution to the analysis and continuous improvement of strategies aimed to the reducing greenhouse gas emissions resulting from deforestation and forest degradation in Tocantins and can serve as a

guide to promote a governance more effective and equitable in the management of forest resources and in to reduction of climate change.

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**RESUMO**

O artigo busca refletir sobre governança na institucionalização das políticas ambientais no governo do estado do Tocantins com foco nas ações para a redução das emissões de gases de efeito estufa resultantes do desmatamento e da degradação florestal a partir do Programa Jurisdicional de Redução de Emissões pelo Desmatamento e Degradação (REDD+) do estado do Tocantins. A partir de pesquisa teórica com análise bibliográfica e documental foi construída uma linha do tempo das ações de governança voltadas para o desenvolvimento sustentável no Tocantins a partir da regulamentação da economia de baixa emissão de gases de efeito estufa. O estudo apontou que o êxito na institucionalização do REDD+ Jurisdicional Tocantins implica ampliar a participação social e a transparência das ações.

**PALAVRAS-CHAVE:** Governança; Desenvolvimento sustentável; Questões ambientais; Tocantins.

**RESUMEN**

El artículo busca reflexionar sobre la gobernanza en la institucionalización de políticas ambientales en el gobierno del estado de Tocantins, centrándose en acciones para reducir las emisiones de gases de efecto invernadero derivadas de la deforestación y degradación ambiental a partir del Programa Jurisdiccional de Reducción de Emisiones por Deforestación y Degradación (REDD+) en el estado de Tocantins. A partir de una investigación teórica con análisis bibliográfico y documental, se construyó una cronología de acciones de gobernanza orientadas al desarrollo sostenible en Tocantins basada en la regulación de la economía de bajas emisiones de gases de efecto invernadero. El estudio señaló que el éxito en la institucionalización de REDD+ Jurisdiccional Tocantins implica ampliar la participación social y la transparencia de las acciones.

**PALABRAS CLAVE:** Gobernanza; Desarrollo sostenible; Temas ambientales; Tocantins.