MARCO TEMPORAL



RISKS AND RIGHTS VIOLATIONS ASSOCIATED WITH THE *MARCO TEMPORAL* THESIS:

An Interdisciplinary Analysis from Law, Economics, Anthropology, and Climate Science











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INTRODUCTION

On June 7, 2023, Brazil's Supreme Court (STF) will resume the trial of Extraordinary Appeal No. 1,017,365, a trial that, by examining the constitutionality of what has become known as the *Marco Temporal* thesis or Time Limit Trick, will determine the future of Indigenous peoples in Brazil, of biodiversity, and of the global climate balance.

Marco Temporal is a political thesis transformed into an ad hoc constitutional interpretation mechanism that limits the rights of Indigenous peoples to their traditional lands through the application of an arbitrary, restrictive, and legally unfounded temporal cutoff. According to the thesis, the right of Indigenous peoples to their traditional lands only applies to lands they effectively occupied at the time of the promulgation of the Federal Constitution of Brazil in October 1988. In the absence of proven effective occupation, it would be necessary to demonstrate that the land was being disputed by Indigenous groups - for example, through the existence of a legal suit disputing possession - on that same date. Given that until 1988 Indigenous peoples were under a regime of tutorship which stripped away their civil and political rights and did not recognize their cultures and territories, things such as "effective occupation" or legal dispute is extremely hard to prove, if not impossible.

This interpretative thesis radically redefines the concept of original land rights enshrined in the Federal Constitution, hindering the recognition and protection of a large part of Brazil's Indigenous lands (ILs). Article 231 of the Federal Constitution recognizes the original right of Indigenous peoples to traditionally occupied lands and defines these lands as the set of areas used by Indigenous peoples for habitation, those used for their productive activities, those essential for the preservation of environmental resources necessary for their well-being, and those necessary for their physical and cultural reproduction, according to their uses, customs, and traditions. There is no mention in the Federal Constitution or even in the constituent debates that prompted it of a certain date of possession to access an original right that should be recognized - not constituted by the Brazilian State.

The *Marco Temporal* thesis is already responsible for the paralyzation and review of demarcation² processes around the country, directly impacting the lives of thousands of Indigenous people who, having their fundamental right to territory violated, face a series of physical and symbolic violence.

In judging the Extraordinary Appeal No. 1,017,365,³ the STF must take a definitive position on the constitutionality or otherwise of the *Marco Temporal* thesis. Such an appeal was lodged against a judgment of the Regional Federal Court of the 4th Region, which upheld a first-instance ruling in favor of the eviction action brought by the Santa Catarina Institute of the Environment against the Xokleng people of the Ibirama-La Klanõ Indigenous Land and the National Foundation of Indigenous

^{1 -} Document compiled by Ana Carolina Alfinito (FGV Direito SP and Amazon Watch), Giovanna Valentim (DCP/USP) and Maurício Terena (Apib) drawing on the contributions of Eloy Terena (Ministry of Indigenous Peoples), Oscar Vilhena (FGV Direito SP and Arns Commission), Manuela Carneiro da Cunha (USP, University of Chicago and Arns Commission), Carlos Nobre (IEA/USP) and Rodrigo Mariano Verá Yapua (CGY), Kenarik Boujikian (TJSP and AJD), Paulo Moutinho (Ipam), Juliano Assunção (PUC-Rio), Ana Patté (Ministry of Indigenous Peoples), Déborah Duprat (IBCCRIM) and Julia Neiva (Conectas Human Rights).

^{2 -} Demarcation is the name of the administrative process through which Indigenous lands are identified, recognized and secured by the Brazilian federal government. It is enshrined in Article 231 of the Brazilian Federal Constitution and regulated by Federal Decree 1775 of 1996. 3 - An Extraordinary Appeal - or *Recurso Extraordinaria (RE)* in Portuguese - is a specific type of legal suit that serves to take constitutional matters to Brazil's constitutional court for adjudication.



Peoples (Funai), based on *Marco Temporal*. On February 21, 2019, Rapporteur Minister Edson Fachin recognized the *general repercussion* of the controversy (Topic 1,031), emphasizing the relevance of "defining the constitutional legal status of possession relations in areas of traditional Indigenous occupation, in light of the rules brought by the Federal Constitution of 1988". This means that the decision made within this specific case will be applicable to similar cases across Brazil.

The impacts that any recognition of Marco Temporal by the STF would have on Indigenous peoples would be devastating - the thesis is the greatest threat to Indigenous rights and lives today. But these impacts are not limited to Indigenous peoples. Today we know that the demarcation and protection of Indigenous lands are fundamental for the preservation of forests and groves, biodiversity, a healthy environment, and global climate balance. These are issues that affect the rights of all Brazilian society and are of planetary relevance. In a time of fighting against climate change and against the loss of the earth's capacity to sustain life, the guarantee of the right to water, health, and the environment for present and future generations depends on strengthening Indigenous territorial and cultural rights. *Marco Temporal* points in the opposite direction.

On April 14th and May 10th, 2023, the National Coordination of Indigenous Peoples of Brazil (Apib), the Arns Commission, and the Law School of the Getúlio Vargas Foundation (FGV Direito SP) organized two debates on the legal, climatic, and environmental risks associated with *Marco Temporal*, inviting Indigenous leaders, experts, and investigators to discuss the topic from their research areas and promoting an interdisciplinary debate space.

These interdisciplinary debates demonstrated and concluded that the *Marco Temporal* is not a viable mechanism for guaranteeing Indigenous, economic, and environmental rights, be it from a legal, economic, social, climatic, or environmental perspective.

In the paragraphs below, we summarize the main conclusions of these debates, which systematically demonstrate, based on the best available science, that *Marco Temporal* violates the constitutional and international rights of Indigenous peoples, contributes to land chaos and grabbing of public lands, especially in the Amazon, promotes deforestation, threatens the environment, and undermines climate balance.

Marco Temporal is not grounded in the Federal Constitution nor in international treaties that address Indigenous rights and human rights.

Indigenous territorial rights provided for in Article 231 of the Brazilian Federal Constitution are fundamental rights protected by the provisions of Article 60, §4, of the same text, as indicated by Minister Edson Fachin in his vote in RE 1,017,365. Thus, setbacks, deficient protection, and initiatives to hinder, limit or abolish the demarcation of traditional lands - explicit objectives of *Marco Temporal* - are all prohibited.

Thus, setbacks, deficient protection, and initiatives to hinder, limit, or abolish the demarcation of traditional lands - the explicit objectives of the *Marco Temporal* - are all prohibited.

This prohibition is also supported by the various international commitments assumed by Brazil over the past decades, such as Convention 169 of the International Labor Organization (ILO), the American Declaration on the Rights of Indigenous Peoples, and the United Nations Declaration on Indigenous Peoples. These agreements mandate that the State must recognize and guarantee the right to permanent possession and exclusive enjoyment of Indigenous peoples over the lands they traditionally occupy and their natural resources, actively working towards these territories' physical and legal protection.

By ratifying ILO Convention 169, Brazil also committed to consult Indigenous peoples before adopting legislative or administrative measures that may affect them. If *Marco*

Temporal is confirmed, all Indigenous peoples in the country will be affected. Still, the Brazilian State still needs to build a mechanism for consultation and consensus building on the subject.

Without the right to a voice in such a crucial decision for their future, Indigenous rights to participation and self-determination are violated. This situation contradicts two other instruments of International Human Rights Law of which Brazil is a signatory: the International Covenant on Civil and Political Rights and the International Covenant on Economic, Social and Cultural Rights, whose first articles stipulate that "all peoples have the right to self-determination."The United Nations Declaration on the Rights of Indigenous Peoples consolidated the understanding that the right to self-determination of peoples recognized under International Law also applies to Indigenous peoples, with the specificity that access to traditional land is required to realize this right.

This scenario has raised the international community's concern with the *Marco Temporal* thesis for years. The UN Special Rapporteur on the Indigenous people's rights and fundamental freedoms, Francisco Cali Tzay, has already publicly spoken out against *Marco Temporal*, stating that the thesis denies "justice for many Indigenous peoples seeking recognition of their traditional land rights."⁴

The Inter-American Commission on Human Rights has also publicly opposed the adoption of this distorted interpretation of Article 231, warning that, in addition to producing harmful effects on Indigenous collective rights, it contradicts international human rights norms to which Brazil is bound.⁵

The jurisprudence of the Inter-American Court of Human Rights, in fact, dismisses any claim to limit, based on the passage of time, the access of Indigenous peoples to their traditional territory, and to limit territorial rights based on effective occupation. In the judgment "Indigenous Community Xákmok Kásek vs. Paraguay"⁶, the Court decided that,

Regarding the possibility of recovering traditional lands, on previous occasions, the Court has established that the spiritual and material base of the identity of Indigenous peoples is primarily sustained by their unique relationship with their traditional lands, which is why as long as this relationship exists, the right to claim these lands remains in force.

This understanding is in consonance with the Brazilian constitutional regime of Indigenous lands, which characterized the original right to the territory as inalienable, unavailable, and indefeasible. Given that this concept of traditionally occupied land is inscribed in the Brazilian Constitution and has the value of an irrevocable clause, it is not possible to change it based on supposedly legal arguments or through a bill. Attempting to do so violates the Federal Constitution and exposes the Brazilian state to international sanctions.

There is no doubt, therefore, that the *Marco Temporal* thesis is void of any legal basis, being absolutely political and serving the interests of those who seek to restrict Indigenous peoples' original rights and thus obtain economic advantages, illegally and unconstitutionally.

The judgment of the Xokleng Case is, essentially, the decision to remain faithful to the Federal Constitution and the *indigenato* thesis - which, in force since the colony and positive in Brazilian constitutional texts from 1934, establishes that Indigenous people have a *congenital right* to their territories, a right which is prior to the existence of the Brazilian state and that therefore can be *recognized* but is never *constituted by* the State⁷ - or to deviate from the project, enshrined by the original legislator, of a diverse society and promoter of dignity and social well-being - this indeed constituted on October 5, 1988.



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^{5 -} Available at: https://www.oas.org/pt/cidh/jsForm/?File=/pt/cidh/prensa/notas/2021/219.asp. Acess on 05/20/2023.

^{6 -} Inter-American Court of Human Rights. Case of the Indigenous Community Xákmok Kásek Vs. Paraguay. Merit, Reparations and Costs. Judgment of August 24, 2010. Series C No. 214 Available at: https://www.corteidh.or.cr/sitios/libros/todos/docs/cuadernillo11_2022_port.pdf. Acess on 05/20/2023.

^{7 -} For more information on the influence of *indigenato* in Brazilian indigenous legislation, see CUNHA, Manuela Carneiro da. Indians in Brazil: history, rights, and citizenship. São Paulo: Claro Enigma. 2012 and PERRONE-MOISÉS, Beatriz. Indigenous lands in colonial legislation. Review of the Faculty of Law, University of São Paulo, 95, 107-120. 2000. Available at: https://www.revistas.usp.br/rfdusp/article/view/67457.

The *Marco Temporal* prevents the demarcation of new Indigenous lands in Brazil and weakens the protection of already demarcated Indigenous lands.

The Federal Constitution stipulated a 5-year deadline for the Union to demarcate all Indigenous lands in Brazil. And yet, at least 242 Indigenous lands have not been demarcated today, with processes that have been dragging on for years, either in administrative procedures or in legal proceedings. Combined with the 490 Indigenous lands already sanctioned by the Presidency of the Republic, those to be demarcated represent 33% of the already identified Indigenous territories⁸ - not counting what may be identified in the future.

In this universe of lands awaiting recognition, which corresponds to a third of the traditional Indigenous lands, are those whose status is questioned based on the Marco Temporal. This is the case, for example, of Limão Verde Indigenous Land, in the state of Mato Grosso do Sul, which had its recognition suspended by the STF on the allegation that the Indigenous people did not prove occupation or contention over the territory in October 1988, despite the presentation of documents attesting to the claim to public agencies for the demarcation of the area since at least the 1960s. This is also the case of Guyraroká Indigenous Land, a Guarani Kaiowá territory also in Mato Grosso do Sul, and practically all Terena lands in that same state.9

Even before the decision on the merits of the Xokleng Case, which has been ongoing for over six years at the STF, it was possible to glimpse the results of a possible confirmation of the Marco Temporal thesis. Normative Opinion 001/2017/GAB/CGU/AGU, whose effects are suspended by an injunction, institutionalized the Marco Temporal within the Federal Public Administration, paralyzing the demarcation process of Indigenous lands and substantiating requests for review of processes in an advanced stage of demarcation, such as the Xukuru-Kariri Indigenous lands, in Alagoas, and Morro dos Cavalos, in Santa Catarina, which already have a declaratory ordinance, but had the approval obstructed by the opinion.

This argument reveals the perversity of the logic instituted by the Marco Temporal thesis: it is paradoxical and seeks to impose on Indigenous lands the civil regime of possession and property, purposely moving away from the option of the original legislator. It is paradoxical because it requires that Indigenous people be able to prove legal dispute over their lands if they did not occupy them in 1988, being that until that date, the interethnic field was structured by the tutelary regime, which prevented Indigenous people from accessing courts,

⁹ - ALFINITO VIEIRA; Ana; ELOY AMADO, Luiz H. The application of the Marco Temporal by the Judiciary and its impacts on the territorial rights of the Terena people. Magazine of OAB/RJ, v. 01, p. 02-32, 2018.



^{8 -} According to the Instituto Socioambiental, of these 242 lands, 125 are in the identification stage, 43 have already been identified and 74 have already been declared by the Ministry of Justice. 490 indigenous lands have been ratified by presidential decree. More information can be accessed at: https://pib.socioambiental.org/pt/Situa%C3%A7%C3%A3O_jur%C3%ADdica.das_Tis_no_Brasil hoje.



always depending on the Indigenous agency to represent them. And it deviates from the Federal Constitution because the permanent possession and exclusive enjoyment of Indigenous lands are based on the constitutional notion of territoriality - composed by the already mentioned criteria of habitation, presence of environmental resources indispensable to the group's well-being, physical and cultural reproduction, and use for productive activities - and not on mere occupation or legal title.

Beyond preventing the demarcation of Indigenous lands that are still awaiting recognition, the *Marco Temporal* jeopardizes lands that have already been demarcated. As mentioned above, the possibility of revising the demarcations that have already taken place is open. An ongoing study on the judicialization of Indigenous territorial rights at the STF revealed that the *Marco Temporal* is the cause of judicialization of 18 of the 53 TIs that have their demarcation questioned at the STF. That is, the *Marco Temporal* is responsible for more than a third of the processes of judicialization of the demarcation of TIs in recent decades.



10 - This data is one of the preliminary results of the research "The judicialization of the policy of recognition of indigenous lands in Brazil: characteristics, causes, and effects on the guarantee of rights of the original peoples", from the group Politics and Indigenous Peoples in the Americas, coordinated by Professor Leonardo Barros Soares, from the Federal University of Viçosa. Decisions involving 53 indigenous lands were analyzed, in 18 of them the Marco Temporal thesis was one of the factors that led to judicialization.

The Marco Temporal increases uncertainty and land insecurity, favors land grabbing and represents an obstacle to good governance and development of the Amazon.

The economic and social development of the legal Amazon depends on improving its institutions and governance, currently characterized by the absence of the state as a rights guarantor, land insecurity, and increasing rates of deforestation, crime, and violence. According to Juliano Assunção, professor in the Department of Economics at PUC-Rio and director of the Climate Policy Initiative, the Marco Temporal has two important economic implications, and both exacerbate the institutional and social problems faced in the Amazon: first, the Marco Temporal increases land uncertainty in rural areas, and second, it increases incentives for land grabbing, a practice associated with crime and violence.¹¹ Together, these dynamics prevent an improvement in governance, which requires an effort of territorial planning, contributes to land chaos, and push away good investors who could promote the sustainable development of the Amazon.

Deforestation is not associated with the development of the Amazon. It is still common to hear that the development of the Amazon requires the opening of new areas for agricultural production. However, data on the region's economic structure reveal that deforestation and agricultural production are not significant sources of employment and income for the Amazonian population. Most of the jobs in the Amazon are in the service sector, and the

jobs that are growing the most are in sales and commerce. The opening of forests and deforestation have very little to do with the generation of gross domestic product (GDP) and employment in the region.

There is no need to deforest more to produce more. At the global and national levels, research has repeatedly shown that deforestation and the expansion of areas dedicated to production are no longer requirements for the growth of agricultural production. The data show the opposite - that to generate development in the Amazon and from it, it is fundamental to stop deforestation and work on an agenda of forest restoration.12 Thus, regarding the world production of food, FAO data show that from 2001 onwards, global food production increased while the area dedicated to production decreased. In other words, the world is producing more while reducing the extent of areas dedicated to production - this is a gain in productivity. This is not just a theoretical possibility, it has existed for a long time.

Many Brazilian public policies are still looking at the forest as if it were an obstacle to growth, adopting measures that contribute to deforestation. And yet, we have already deforested an area much larger than the one we can produce. Brazil has a huge opportunity to increase production in open areas without the need to deforest new ones and even to reduce

 ^{11 -} Cf. Presentation held at Direito FGV-SP, on May 10, 2023, available at: https://www.youtube.com/live/ikDpti4qBuQ?feature=share [last acess on May 21 2023].
 12 - Stabile, M. C. C. et al. Solving Brazil's land use puzzle: Increasing production and slowing Amazon deforestation. Land use policy 91, 104362 [2020].

^{13 -} Cf. https://amazonia2030.org.br/wp-content/uploads/2023/05/Amz2030Desmata-mentoZero.pdf.

the area used for agricultural purposes. The forest protection agenda is perfectly compatible with development, the production of commodities, and the creation of employment.

If we look specifically at the Amazon, we see that 20% of the deforested area is currently abandoned.14 This shows that these areas were deforested unnecessarily. There are 7 million hectares abandoned, a huge waste, in addition to all the violence and conflicts associated with deforestation. None of this deforestation is associated with job and income generation. Deforestation and land grabbing of public lands over the past decades have not contributed to a dynamic economic sector in the Amazon. When we look at the region's youth, there is tremendous despair, very high unemployment, and a lack of systematic opportunity. The combination of discouraged youth, the absence of the state as a guarantor of rights, and the arrival of organized crime puts the region in a dramatic situation.

The Amazon needs land security and territorial planning. To face this complex context, it is necessary to improve management and governance instruments and reduce uncertainties

in the region, starting with territorial planning. The demarcation of Indigenous lands is fundamental to increasing security and reducing deforestation. By fostering land uncertainty and encouraging land grabbing, the Marco Temporal pushes good investors away from the Amazon and prevents the region's sustainable development. The Marco Temporal is a critical element in this conjuncture. It fosters expectations that Indigenous rights will not be recognized and protected, hinders territorial planning, and creates incentives for land grabbing. This has serious economic consequences. The development of the Amazon requires that the region attract good investors - people and companies who understand the Amazon and contribute to its future. It is very difficult to attract good investments in a situation where there is chaos from an institutional point of view, and the Marco Temporal contributes to this chaos. It does this by making it difficult to title public lands, fostering land grabbing, an activity tied to organized crime, and fostering social conflicts. As far as improving governance in the legal Amazon is concerned, burying the Marco Temporal once and for all is an important step.¹⁵

 $^{14\,}$ - Cf. https://amazonia2030.org.br/wp-content/uploads/2021/07/REL-AMZ2030-Prote cao-Florestal-3.pdf, last access on May 20 2023.

^{15 -} As stated in the report "Zero Deforestation and Territorial Management: Foundations for the Sustainable Development of the Amazon" (AMAZÔNIA 2030, p. 13), "The Amazon faces a severe problem of land rights ambiguity. This land uncertainty affects almost 30% of its territory, totaling 143.6 million hectares of non-allocated public areas, areas without land information, and irregularly occupied areas. Without a clear purpose, these areas are targets for invasions, land grabbing, and deforestation, accounting for 41% of

forest loss in the last decade. Besides facilitating forest destruction, the land ambiguity creates deleterious incentives that corrode the region's economic environment. This ambiguity is a significant obstacle, for example, for developing and consolidating efforts for forest restoration and carbon capture, a massive booming market. In addition, the lack of property rights does not encourage investment, and land insecurity promotes illegal invasions and land grabbing. Undefined land rights generate enormous costs for the region, making territorial management also a necessary condition for the sustainable development of the Amazon."

4

The *Marco Temporal* jeopardizes the myriad of environmental services generated by Indigenous lands and hinders the expansion of these services by slowing down the demarcation of Indigenous lands.

Indigenous Lands (IL) in the Brazilian Amazon cover a significant fraction of the region (27% of the area with forests). This biome contains 98% of the total area of demarcated IL in the country. These are important areas for the conservation of regional and global biodiversity and are responsible for generating a series of ecosystem services.

Indigenous lands constitute barriers against deforestation. Less than 2% of the historical deforestation in the Brazilian Amazon took place within Indigenous lands, while they occupy 25% of the region.¹⁷ These are the areas where deforestation occurs the least - between August 2021 and July 2022, for example, rural properties, which occupy an area corresponding to 17% of the Amazon, concentrated 28% of deforestation; the Conservation Units occupy an area corresponding to 6% of the Brazilian Amazon and in this same period concentrated 6% of deforestation. The latest bulletin from Imazon's Deforestation Alert System, referring to April 2023, detected that 83% of forest degradation occurred in private areas or at various stages of possession, while only 1% occurred in Indigenous lands.18 In addition, they are carbon dioxide warehouses, containing 13 billion tons of the main greenhouse gas.¹⁹ No other territorial regime protects the forest, biodiversity, and waters as much.

ILs harbor Brazil's cultural and social diversity, and this diversity protects the forests. It is estimated that over 180 different Indigenous peoples live in the Amazon, with languages, cultures, and cosmologies that differentiate them and make them unique. The low rate of deforestation inside the ILs is related to the traditional ways of territorial occupation of the Indigenous peoples, their way of using natural resources, customs, and traditions that, in most cases, result in the preservation of the forests and the biodiversity contained therein.20 A recent study by the Socioenvironmental Institute showed that Indigenous lands and conservation units where traditional occupation is allowed have higher rates of preservation of native vegetation and regeneration. This means that the presence of traditional communities - especially Indigenous ones - provide greater environmental protection than a simple demarcation of protected areas because people are the ones responsible for the environmental work of caring for and cultivating forests.21

The protection of Indigenous lands results in a series of socio-environmental benefits of different natures and on different scales.²² Professor Carlos Nobre organized into four categories the ways in which Indigenous lands contribute to the construction and sustenance

^{16 -} Available at: https://imazon.org.br/areas-protegidas-na-amazonia-brasileira-avancos-e-desafios-2/. Acess on 05/21/2023.

^{17 -} Walker, W. S. et al. The role of forest conversion, degradation, and disturbance in the carbon dynamics of Amazon Indigenous territories and protected areas. Proc. Natl. Acad. Sci. U. S. A. 117, [2020]; Soares-Filho, B. et al. Role of Brazilian Amazon protected areas in climate change mitigation. Proc. Natl. Acad. Sci. 107, 10821–10826 [2010].

^{18 -} Amorim, L., Santos, B., Ferreira, R., Ribeiro, J., Dias, M., Brandão, I., Souza Jr., C., & Veríssimo, A. Deforestation System Alerts [SAD] - April 2023. Belém: Imazon, 2023.

^{19 -} Available at: https://ipam.org.br/wp-content/uploads/2015/12/terras_ind%C3%ADgenas_na_amaz%C3%B4nia_brasileira_pdf. Acess on 05/21/2023. 20 - Walker et al. 2020.

 $^{21\,}$ - The full study can be seen here: https://acervo.socioambiental.org/sites/default/files/documents/m9d00064.pdf.

^{22 -} FAO and FILAC. 2021. Forest governance by Indigenous and tribal peoples. An opportunity for climate action in Latin America and the Caribbean. Santiago. FAO. https://doi.org/10.4060/cb2953en.

of living conditions on Earth: a. Indigenous lands produce ecosystem services of provision, including fresh water, food, fibers, and genetic resources; b. Indigenous lands produce environmental quality ecosystem services, such as air quality regulation, hydrological cycle regulation, biological control, erosion control, and pollination services; c. Indigenous lands produce supporting ecosystem services, such as nutrient cycling, soil formation, habitat for flora and fauna, and germplasm protection; and d. Indigenous lands produce cultural services, protecting and promoting cultural diversity; traditional knowledge; recreation and ecotourism; spiritual and religious values.

Indigenous peoples and their forests make it rain. The protection of forests produces water vapor that moves around the planet to create rain. Investing in the protection of Indigenous rights is investing in water production and hence in agricultural production. The Xingu

Indigenous Park (PIX) case is a good example. It is estimated that 40% of the rain units that supply the soybean farmers around the PIX come from the forests protected by the Indigenous people, i.e., the IL allows agricultural production to happen.²³

Indigenous peoples and their forests cool the earth. Continuing with the example of the PIX, it is known that a significant change in the climate of the upper Xingu region is already occurring, with rising average temperatures and delays in rains, which have even hindered soy production. A recent study revealed that, from 2000 to 2010, the average temperature in the region already increased by 0.5 degrees and that the average temperature difference inside the forest preserved by the Indigenous people and outside it can be up to 8 degrees - that is, the area outside the PIX, heavily impacted by deforestation, is up to 8 degrees hotter than inside the forest preserved by the Indigenous



3Bruno Kelly / Amazonia Real - Tl Yanomam

23 - Silvério, D. V. et al. Agricultural expansion dominates climate changes in southeastern Amazonia: The overlooked non-GHG forcing. Environ. Res. Lett. 10, 104015 [2015].

people.²⁴ Thus, if it weren't for the existence of the Indigenous park, the thermal discomfort would be enormous, and this is a problem for cattle raising.

Indigenous peoples and their forests protect biological diversity. Brazil houses between 15% and 20% of all the biological diversity on the planet.²⁵ A single tree in the Amazon has more species of ants than all of England.²⁶ According to the United Nations Food and Agriculture Organization, traditional territories cover 28% of the world's land surface and 80% of the planet's biodiversity.27 These figures are directly linked to food security and agrobiodiversity, as the decrease in species' genetic diversity exposes the remaining ones to pests and diseases that can collapse. These figures are directly linked to food security and agrobiodiversity, as the decrease in species' genetic diversity exposes the remaining ones to pests and diseases that can collapse entire production and consumption systems. A study by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES)28 identified that, in 2016, 559 of the 6,190 mammals used for food and agriculture had become extinct, while another 1,000 were at risk of extinction. In the context of worsening biodiversity loss, preserving the territories and the people who cultivate and protect threatened species is more necessary than ever.

The worsening of socio-environmental governance has a direct impact on increasing deforestation. Between 2019 and 2021, deforestation within Indigenous lands grew by 195% compared to the period from 2013-2018, and it was 30% more internalized than the one monitored in the three previous years. The authors of the study that identified these data point out that the growth of environmental devastation coincides with the weakening of governance and the protection of Indigenous lands and rights. The result of this increase in deforestation between 2019 and 2021 was the release of more than 56 million tons of carbon dioxide into the atmosphere - equivalent to 59% of the total amount released between 2013 and 2021.29

The sanction of ILs significantly impacts the protection of these lands. Sanctioned Indigenous lands have between 3 and 4 times less deforestation than non-sanctioned ones.³⁰ Sanctioning Indigenous land is fundamental for the maintenance of these lands and the socio-environmental services they bring to society.

The confirmation of the *Marco Temporal* thesis represents the break with the policy of territorial demarcation, and to break with the protection of Indigenous lands is to break with environmental policies. It is impossible to conceive of preserving and cultivating Brazilian socio-biodiversity without Indigenous peoples having their territorial rights assured.

^{24 -} SILVÉRIO, et al.. 2015.

^{25 -} Available at: https://www.unep.org/pt-br/noticias-e-reportagens/story/brasil-mega diverso-dando-um-impulso-online-para-biodiversidade. Acess on 05/21/2023.

^{26 - 1.} Wilson, E. O. The Arboreal Ant Fauna of Peruvian Amazon Forests: A First Assessment. Biotropica 19, 245 (1987).

^{27 -} Available at: https://news.un.org/pt/story/2019/08/1683741. Último Acess on 24/05/2023.

^{28 -} IPBES. [2019]. Global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services [Version 1]. Zenodo. https://doi.org/10.5281/zenodo.6417333.

^{29 -} Silva-Junior, C.H.L., Silva, F.B., Arisi, B.M. et al. Brazilian Amazon Indigenous territories under deforestation pressure. Sci Rep 13, 5851 [2023]. https://doi.org/10.1038/s41598-023-32746-7.

^{30 -} Data presented by Paulo Moutinho in a presentation held at the School of Law of the Getulio Vargas Foundation on May 10, 2023, available at: https://www.youtube.com/watch?v=ikDpti4qBuQ&t=6839s.

The Marco Temporal thesis contributes to global climate change by weakening Indigenous territorial rights.

The validation of Marco Temporal by the STF will have long-term effects on the increase in greenhouse gas emissions, especially in the Brazilian Amazon.

Indigenous peoples are the first to suffer from climate change³¹ - and the main ones responsible for preventing its acceleration. Indigenous lands play a role in regulating the climate and rainfall patterns, which brings benefits to the entire society. Specifically in the Amazon, these lands represent a barrier against deforestation and a sink for greenhouse gases.

Indigenous lands in the Amazon Basin contain 32.8% of the carbon that the forest stores, with 22.2% of this carbon found in lands that are not yet demarcated, that is, in areas more exposed to depredation - which would lead to the emission of 23 gigatons of CO2 into the atmosphere.³²

The total cost of ensuring the possession of traditional territories to their original owners is US \$5.58 per hectare. In return, over a 20-year period, the benefits of global carbon mitigation through these lands can reach up to US\$ 196/ha. This means that Brazil has the potential to reduce carbon emissions at a cost that ranges from US\$ 8.74 to US\$ 11.88 per ton of CO2 simply by ensuring Indigenous land ownership - a mitigation policy up to 42 times cheaper than carbon dioxide prevention policy that involves the capture and storage of fossil carbon through power and gas energy plants.³³

In addition to storing significant volumes of greenhouse gases, Indigenous lands are responsible for cooling the planet. They are part of the global water cycle - their trees transpire 5.2 billion tons of water daily - and the regional one - contributing to the rains in the South and Southeast regions through the so-called "flying rivers." The importance of these preserved territories is so great that if they were replaced by pastures or agricultural crops, the region's temperature would increase by 6.4°C and 4.2°C, respectively.³⁴

Given this data, there is no doubt that without the protection of Indigenous territories, it is impossible for Brazil to meet the climate targets to which it has internationally committed.³⁵ The greatest climate policy that the State can adopt is the demarcation of Indigenous lands.

Indigenous lands and their peoples are the main guardians of the Amazon Rainforest. To-day we know that the planet's future depends on this forest, one of the major contributors to the climate's maintenance and the Earth's habitability conditions. It is the Amazon that keeps the moving air humid; forms abundant rains in clean air; is capable of sustaining a beneficial water cycle, even under unfavorable external conditions; exports airborne rivers of vapor responsible for rain in distant regions;

^{31 -} OPAN - Report: Climate Change and the Indigenous Perception. 2018 https://www.redejuruenavivo.com/wp-content/uploads/2019/02/2a-ed_mudancas-climaticas_port_web.pdf 32 - https://www.edf.org/sites/default/files/tropical-forest-carbon-in-indigenous-territories-a-global-analysis.pdf. 33 - Walker et al. 2020.

³⁴ - Instituto Socioambiental. Demarcation of Indigenous Lands is decisive for halting deforestation and regulating the climate. 01/30/2018. https://site-antigo.socioambiental.

org/pt-br/blog/blog-do-monitoramento/a-demarcacao-das-terras-indigenas-e-decisiva-para-conter-o-desmatamento-e-manter-funcoes-climaticas-essenciais.

35 - A FOREST DECLARATION ASSESSMENT BRIEFING PAPER. Sink or swim: How Indigenous and community lands can make or break nationally determined contributions.

March 2022 https://climatefocus.com/wp-content/uploads/2022/06/Sink-or-swim-IPLC-lands-and-NDCs.pdf.



and, through the canopy of its trees, attenuates the energy of the winds and prevents extreme climate events, such as hurricanes.³⁶

Threatened by illegal activities, such as mining and logging, and, primarily, by the practice of land grabbing, Indigenous lands have resisted and contributed immensely to climate regulation across the planet. The confirmation of the unfounded *Marco Temporal* thesis is not only a blow to national *indigenist* policy and the fundamental rights of Indigenous peoples but also to environmental and climate policies, developed nationally and internationally, and to the future of all humanity.

^{36 -} NOBRE, Antonio Donato . The Amazon Climate Future -Scientific Assessment Report. ARA - Articulación Regional Amazônica http://www.pbmc.coppe.ufrj.br/documentos/futuro-climatico-da-amazonia.pdf.

CONCLUSIONS

Apolitical thesis without any constitutional backing, the *Marco Temporal* is not a viable mechanism for balancing interests and rights, whether from a social, economic, environmental, or climatic point of view - and therefore, it cannot be accepted by the Supreme Court.

The conditioning of the recognition of Indigenous peoples' original territorial rights on the occupation of their lands at certain date affronts not only the Federal Constitution but a series of international agreements and treaties of which Brazil is a signatory, exposing the country to international sanctions.

The incorporation of the *Marco Temporal* into the Brazilian legal framework will prevent future demarcations of Indigenous lands and weaken the protection of already demarcated lands. The history of territories that have had their demarcation barred or questioned based on this thesis is growing in the current context of uncertainty about the validity of the *Marco Temporal*. The eventual confirmation of this distorted interpretation of Article 231 of the Magna Carta will completely prevent access to land, a congenital right constitutionally guaranteed to Indigenous people since 1934.

The *Marco Temporal* will heavily impact the economy of the Amazon region. This is because this thesis generates land insecurity and encourages land grabbing, creating an environment that drives away good investors. In-

stead of more deforested areas for agricultural production, the region needs territorial planning and solid governance, which guarantees security and environmental preservation and generates opportunities for sustainable development for the Amazon inhabitants and for everyone in the country.

Indigenous lands represent barriers against deforestation, protect biodiversity, and provide a range of ecosystem services for Brazil and the world. The rain regime, air quality, and the existence of species resilient to climate change are the fruits of the relationship that Indigenous peoples have with their ancestral territories. Preventing these populations from having their right to land guaranteed threatens the planet's habitability.

These territories are also one of the last frontiers against climate change. The Indigenous lands of the Amazon store a tremendous amount of greenhouse gases and help regulate the temperature and rainfall regime of the region - and the world. Any viable solution to global climate change requires that the Amazon forest stand and preserve the rights of the millennial and secular peoples who occupy it.

The Supreme Federal Court, in judging RE 1.017.365, will decide on the fundamental rights of Brazilian Indigenous peoples, on the national project that derives from the 1988 Constitution, and above all, on the future of the planet.



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