THE FUTURE OF THE MERCOSUR-EUROPEAN UNION AGREEMENT UNDER THE PERSPECTIVE OF SUSTAINABLE DEVELOPMENT: AN ANALYSIS BASED ON THE FULFILLMENT OF THE PARIS AGREEMENT GOALS BY BRAZIL

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ABSTRACT

This article aims to critically analyze, from an environmental perspective, the possibility of approval and putting into effect the Free Trade Agreement signed between the European Union and Mercosur, in 2019. Bearing in mind that one of the commitments derived from the treaty concerns the fulfillment of the goals of the Paris Agreement on Climate Change, regarding the reduction of the emission of greenhouse gases and considering the current political-environmental panorama in Brazil, the question is: What are the prognoses about the future of the Agreement Mercosur-European Union, considering the current environmental, legal and political scenario regarding the probable non-compliance with the sustainability goals assumed by Brazil in the Paris Agreement, with regard to the reduction of greenhouse gas emissions and the forest devastation

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in the Legal Amazon? To guide the proposed research, the normative-descriptive and comparative analysis methods will be adopted, using the bibliographic research technique, of documentary nature.

Keywords: Amazon Rainforest; climate change; Mercosur-European Union Agreement; Paris Agreement; sustainability.

O FUTURO DO ACORDO MERCOSUL-UNIÃO EUROPEIA SOB A ÓTICA DO DESENVOLVIMENTO SUSTENTÁVEL: UMA ANÁLISE A PARTIR DO CUMPRIMENTO, PELO BRASIL, DAS METAS DO ACORDO DE PARIS

RESUMO

Este artigo tem como objetivo analisar, de forma crítica, sob o viés ambiental, a possibilidade de aprovação e colocação em vigência do Acordo de livre comércio celebrado entre a União Europeia e o Mercosul, em 2019. Tendo em vista que um dos compromissos derivados do tratado diz respeito ao cumprimento das metas do Acordo de Paris sobre Alterações Climáticas, quanto à redução da emissão dos gases de efeito estufa e, considerando o atual panorama político—ambiental no Brasil, questiona-se: Quais são os prognósticos sobre o futuro do Acordo Mercosul-União Europeia, considerando-se o atual cenário ambiental, legal e político referente ao provável descumprimento das metas de sustentabilidade assumidas pelo Brasil no Acordo de Paris, no tocante à redução da emissão de gases de efeito estufa e às devastações florestais na Amazônia Legal? Para guiar a pesquisa proposta, serão utilizados os métodos de análise normativo-descritivo e comparativo, valendo-se da técnica de pesquisa bibliográfica, de cunho documental.

Palavras-chave: Acordo de Paris; Acordo Mercosul-União Europeia; Floresta Amazônica; mudanças climáticas; sustentabilidade.

INTRODUCTION

The Free Trade Agreement between the Southern Common Market (Mercosur) and the European Union, approved in 2019 after more than 20 years of negotiation, is currently under review by the respective member states of the economic blocs in question for the purposes of signature and subsequent ratification.

Despite the aforementioned approval, which concerns the consolidation of the text of the treaty, it has been the target of numerous criticisms, especially by some European countries. As examples, we can mention France and Germany, which, concerned with the goals set forth in the Paris Agreement and with the deforestation of the Amazon Rainforest, disapprove of the Brazilian government's environmental policy.

Thus, this article aims to answer the following research problem: What are the prognoses about the future of the Mercosur-European Union Agreement? It considers the current environmental, legal, and political scenario regarding the probable non-fulfillment of the sustainability goals assumed by Brazil in the Paris Agreement, with regard to the reduction of greenhouse gas emissions and forest devastation in the Legal Amazon.

In Brazil, there is a scenario of Amazon forest degradation, threatening biodiversity as well as the local and global climate due to the high level of greenhouse gases (GHGs), resulting from the widespread deforestation of tropical vegetation, which act as sinks of trace gases. Given the high rates of deforestation have connections to changes in land use, triggered by the development of the agricultural sector, sometimes devoid of sustainable concerns, it is necessary to create and strengthen pro-environmental policies focused on this sector

Therefore, it is necessary to increase the budgets of the inspection agencies, such as the Brazilian Institute of Environment and Renewable Natural Resources (IBAMA) and the Chico Mendes Institute for Biodiversity Conservation (ICMBio). Furthermore, to increase the budgets of the programs aimed at creating economic and educational incentives capable of directing the inevitable search for progress, in a post-modern and globalized world, along paths guided by the concept of sustainability. Without these measures, the future of the Mercosur-European Union agreement will be heading towards a pre-announced failure.

To prove the veracity of the aforementioned work hypothesis, the normative-descriptive and comparative analysis methods will guide this article, making use of the bibliographical and documental research technique.

1 THE MERCOSUR-EUROPEAN UNION AGREEMENT

The Free Trade Agreement between Mercosur and the European Union is a broad-based treaty that includes commitments to cooperation, political dialogue and trade facilitation by expanding market access through tariff reductions and trade preferences (MADURO; VEIGA; RIOS, 2020). The Agreement, discussed since 1999, represents the integration of a market of about 780 million inhabitants, involving almost a quarter of the world's GDP, considering that Mercosur and the European Union together represent about 20 trillion dollars (BRAZIL, 2019a). For Brazil alone, the Ministry of Economy estimates that the treaty would have the potential to increase \$125 billion to the national GDP over 15 years, and could attract \$113 billion in investments to the country over that same period (BRASIL, 2019b).

Moreover, in addition to the economic issue, the agreement brings regulations in areas where there is a regulatory void in the South American bloc, thus having the potential to influence the creation of rules in Mercosur, forcing an update of its agenda to keep it compatible with the requirements of the treaty (MADURO; VEIGA; RIOS, 2020). Thus, effects are expected on standards related to the movement of goods and services between states parties, rules of origin³ (the Mercosur-EU and Mercosur regimes of origin adopt different methods and modalities), disciplines related to the making and protection of investments. Also, rules for the purchase of services and goods by governments, and rules related to sustainable development (even creating a link between trade, the environment and labor that does not yet exist in Mercosur's legal documents) (MADURO; VEIGA; RIOS, 2020).

Given the political complexities of setting up supranational organizations, the negotiations and deliberations between Mercosur and the European Union, which began in 1999, have lasted for more than 20 years, reaching and end only on June 28, 2019. ⁴ The greatest difficulties were

³ Rules of origin establish criteria to define where a product was made and are important for the application of trade policy measures such as trade preferences (preferential rules of origin), quotas, antidumping measures, and countervailing duties (non-preferential rules of origin).

⁴ Maduro, Veiga, and Rios (2020) explain that it is possible to glimpse three major negotiation stages in these two decades. (a) The first one began with the ratification of the Interregional Association Framework Agreement in 1999, when negotiations between the two blocs were announced. This stage ended in 2004, when negotiations were halted due to the parties' perception that the existing offers were insufficient. It is noted that, despite the interruption, relevant progress was made in this phase,

due, in particular, to the different levels of economic development of the blocks, which, moreover, showed little flexibility in the conformation of diverse objectives and interests concerning the construction of a free trade area (BOTERO; GUZMÁN, 2020).

However, despite the announcement of the end of the long and arduous negotiations, serious doubts remain about the future of the agreement, especially with regard to the next formal steps for the ratification and entry into force of the commitments made (MADURO; VEIGA; RIOS, 2020). The current focus is on the need for ratification of the treaty by the European Parliament and the parliaments of each of the EU and Mercosur member states, a factor that has threatened its entry into force. It turns out that, despite the advantages offered by the treaty to the European Union⁵, there is a scenario of great resistance by the parliaments of the bloc's members, mainly due to the great pressure exerted by the agricultural and environmentalist sectors combined with a strong protectionist ideology (VAUDANO, 2019).

The current focus is on the inadequate environmental policy lately adopted by the Brazilian government, which has led to results inconsistent with the determinations in favor of sustainable development provided for in the Agreement. The main issue is that the treaty determines, in article 6 of the chapter focused on sustainable development, that the parties recognize the importance of urgently addressing climate change. Thus, they must respect the guidelines of the United Nations Framework Convention on Climate Change (UNFCCC) and comply with the commitments made in the Paris Agreement to reduce greenhouse gas emissions (BRASIL, 2019c). Due to the negligence of Brazilian policy to protect the environment, European authorities fear that Mercosur will not be able to conform

with advances in issues related to access to different markets. (b) The second stage, in turn, took place between 2010 and 2016 and deserves an emphasis because it includes the period from the resumption of negotiations until the moment of the most intense negotiating impetus, in 2016. (c) It was in the third stage, between 2016 and 2019, that the greatest advances in the Agreement were made, having adjusted issues related to market access for goods, services, and government procurement. According to these authors, the success of the negotiations in this phase was due to the confluence of several factors. Examples of these factors are (c.1) the convergence between more liberal and less protectionist views by the economic teams of Brazil and Argentina, (c.2) the emergence of a trade war between the United States and China (main European trading partners), (c.3) the slowdown in world trade and (c.4) the European interest in regaining international prominence.

5 Advantages such as: reduction of customs barriers for key sectors of EU exports (cars and auto parts, machinery, chemicals, pharmaceuticals, clothing and footwear), simplification of customs procedures, greater access for sales of services, facilities for setting up businesses, access to public procurement, greater support for small and medium-sized companies (which currently have great difficulties in accessing foreign markets), new market opportunities for the European agricultural sector, maintenance of EU food safety standards, contribution to sustainable production (caring for the environment and working conditions) (EUROPEAN COMMISSION, 2019b).

to the express requirement of achieving joint development in a sustainable manner (AYUSO, 2020). Thus, although the negotiations reached an end, they may not lead to the treaty being in force in the near future, thus hindering considerable economic, social, and environmental development.

A detailed study of the concept of sustainable development and the way it is in the Free Trade Agreement between Mercosur and the European Union is necessary, especially regarding the need to fulfill the commitments made in the Paris Agreement. From this, we are able to identify the importance of Brazil adapting itself to the goals it has assumed in the climate agreement, both for the sake of the inter-bloc trade agreement and for the sake of planetary life, whose existence and quality depend on the reduction of GHG emissions in the Earth's atmosphere.

2 INTERNATIONAL CONCERNS FOR SUSTAINABLE DEVELOPMENT

Faced with the perception that technological and scientific advances were in the process of threatening the future of life on planet Earth (and, more specifically, the future of the human being itself) due to the increase in humankind's intervention over nature, our species began to have concerns about the limits of their actions in relation to non-human beings (JONAS, 2006). Until then, this question had little to do with ethical reflections. This was because the erroneous perception that natural resources would be infinite and that nature, immutable, would not suffer significant impacts from human action. ⁶ However, the theme rapidly gained importance when the profound systemic irradiation of the effects of human action on the surrounding universe began to gain understanding, with cumulative and irreversible consequences.

These concerns led the United Nations (UN) to proclaim the 1972 United Nations Declaration on the Human Environment (Stockholm Declaration), which represents a starting point for environmental soft law. With it, the search for sustainable development began to take shape in

⁶ Although, as explained by Liebell (2011), it would be possible to extract from John Locke's theory of property a limitation to individual rights by the rules of fair play (enough and as good), the prohibition of waste (spoilage) and the requirement of support to the poor (sufficiency). According to Liebell, the second treatise of Locke's Two Treatises of Government, especially with regard to the "enough and as good proviso," connects equality, justice, and the common good to the natural world. Embora, como explicado por Liebell (2011), seria possível se extrair da teoria da propriedade de John Locke uma limitação a direitos individuais pelas regras de jogo limpo (enough and as good), pela proibição do desperdício (spoilage) e pela exigência de apoio aos pobres (sufficiency). De acordo com Liebell, o segundo tratado da obra "Two Treatises of Government" de Locke, especialmente no que se refere ao "enough and as good proviso", conecta a igualdade, a justiça e o bem comum ao mundo natural.

international law, which later culminated in the creation of an international regime based on this idea.

However, it was only in the following decade, in the Brundtland Report, prepared by the World Commission on Environment and Development that the term "sustainable development" appeared. The term appeared to designate development capable of meeting present human needs without compromising the ability of future generations to meet theirs. According to the Report,

Humanity has the ability to make development sustainable to ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs. The concept of sustainable development does imply limits – not absolute limits but limitations imposed by the present state of technology and social organization on environmental resources and by the ability of the biosphere to absorb the effects of human activities. But technology and social organization can be both managed and improved to make way for a new era of economic growth. (WCED, 1987).

Thus, the concept of sustainable development can be a principle that demands that human society act to realize material and immaterial development in order to ensure, in the present and in the future, the right to well-being (FREITAS, 2016).

It is noteworthy that the principle of sustainable development has continued to evolve since then, being present in a series of international documents of great importance. Examples of these documents are (a) the 1992 Rio Declaration on Environment and Development, (b) the 1992 Agenda 21, (c) the 2002 Johannesburg Declaration on Sustainable Development, (d) the 2002 Johannesburg Plan for the Implementation of Sustainable Development, (e) the Ministerial Declaration of the United Nations Economic and Social Council on "Creating an environment at the national and international levels conducive to the generation of full and productive employment and decent work for all, and its impacts on sustainable development," 2006, (f) the Outcome Document of the United Nations Conference on Sustainable Development, entitled "The Future We Want," 2012, and (g) the document "Transforming our World: the 2030 Agenda for Sustainable Development," of 2015. ⁷

Thus, we have an international scenario shaped by the perception that

⁷ Likewise, it is noteworthy that the theme was addressed from other perspectives in other international documents, such as the United Nations Guidelines for Consumer Protection, in the 1999 and 2015 versions, which are dedicated to guiding States, the supplier, the consumer and civil society on how to achieve sustainable consumption and production. On the subject, see Cipriano (2020, p. 153-166).

human actions, given their potential to cause serious environmental imbalances, can have disastrous repercussions on society and, consequently, on the human well-being that depends on social structures. Given the great risk of self-destruction, society has begun to act in such a way as to constitute mechanisms capable of enabling its survival. This is a global issue, in which all international actors have certain degrees of responsibility and attributions, in a context in which acting in dissonance with sustainable objectives is a true attack against all peoples.

2.1 Climate change and the creation of the UNFCCC

When it comes to concerns for the well-being of future generations, mitigation and adaptation to climate change resulting from global warming is of great importance (and there are other issues such as air and water pollution, food insecurity, soil degradation and the destruction of the ozone layer). In this regard, the special report of the Intergovernmental Panel on Climate Change (IPCC), published in 2018, states that

Human activities are estimated to have caused approximately 1.0°C of global warming above pre-industrial levels, with a *likely* range of 0.8°C to 1.2°C. Global warming is likely to reach 1.5°C between 2030 and 2052 if it continues to increase at the current rate. (*high confidence*) (IPCC, 2018).

Global warming is related to the increase in the atmospheric concentration of GHG⁸ (NOBRE, 2001), which, according to the Climate Analysis Indicators Tool (CAIT), has intensified due to the increase in anthropogenic emissions, which reached the amount of 49.36 GtCO2e⁹ in 2016 alone (CLIMATEWATCH, 2020). Due to the geometry of their molecules and the wavelength of the infrared rays emitted by the sun, these gases can absorb part of this infrared radiation, which ends up being redistributed in the earth's atmosphere in the form of heat, triggering a radioactive forcing and global warming. ¹⁰ This creates a serious energy imbalance that leads

⁸ The so-called greenhouse gases are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), chlorofluorocarbons (CFCs), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6).

⁹ GtCO₂e is the abbreviation for the unit of measurement "gigatonnes of carbon dioxide equivalent". It is the measure that represents the other greenhouse gases (GHGs) in the form of CO2 concerning their global warming factor or potential (Global Warming Factor – GWF – or Global Warming Potential – GWP).

¹⁰ There is a constant flow of energy into the Earth's atmosphere in the form of sunlight, about 30% of which is reflected off the Earth, and the rest is absorbed by the Planet. As outer space is extremely cold, the heat energy of the celestial bodies is lost as infrared light, creating a temperature balance.

to changes in the global climate, with dire consequences for life on Earth.

As a brief illustrative list of the negative impacts of climate change, we can mention the increased frequency and intensity of flooding due to sea level rise, the intensification of hurricanes associated with more destructive storm surges, the intensification of droughts, and the rise of temperatures to unsustainably high levels. In addition, the increased incidence of forest fires due to intensified droughts and heat, as well as the increased proliferation of infectious diseases due to the expanded spread of pathogens and transmitting organisms (KASWAN, 2017). Furthermore, climate change affects the economy in the most basic aspects for human survival, threatening access to water, food, health, and the use of land and the environment (STERN, 2007).

Given this devastating prognosis, a so-called international regime¹¹ on climate change was formed, supported by three pillars: (a) common but differentiated responsibility; (b) intergenerational equity¹²; and (c) the precautionary principle¹³. These are three basic principles of the regime, established in the United Nations Framework Convention on Climate Change (UNFCCC)¹⁴ in 1992, based on concerns about sustainability already expressed in the Stockholm Declaration and the Brundtland Report.

a) The principle of common but differentiated responsibilities indicates that the entire international community holds the responsibility to protect the global climate system, but the attributions of each member should be distributed according to their singularities. This considers each country's past contributions to the problem (such as historical GHG emissions) and its current capacity to respond to climate change (FARBER; CARLARNE, 2018).

There is a simultaneous warming and loss of energy, which provides the proper temperature for our ecosystem to function. The term "radiative forcing" refers to the change in this energy flux, either increasing the earth's temperature or decreasing it (SHINE et al., 1990).

¹¹ On the development of an international environmental law, which encompasses climate issues, see: ANTUNES, 2020.

¹² Regarding common but differentiated responsibility and intergenerational equity, it is noted that principle 1 of Article 3 of the United Nations Framework Convention on Climate Change (UNFCCC) states that "The Parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities. Thus, developed country parties should take the lead in combating climate change and its adverse effects." (UNITED NATIONS, 1992).

¹³ Regarding the precautionary principle, the UNFCCC expresses in principle 3 of Art. 3 that "parties should take precautionary measures to anticipate, prevent, or minimize the causes of climate change and mitigate its adverse effects. Where there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for postponing such measures, taking into account that policies and measures to deal with climate change should be cost-effective so as to ensure global benefits at the lowest possible cost." (UNITED NATIONS, 1992).

¹⁴ The UNFCCC was adopted at the United Nations headquarters in New York on May 9, 1992. Currently, the Convention has 197 parties.

b) The principle of intergenerational equity, in turn, is an unfolding of the principle of sustainability, and encompasses the notion that the present generation holds an environmental legacy received from the previous one, which shall be preserved for future generations. In light of intergenerational equity, future generations have an interest in enjoying a healthy natural environment, with the same diversity of resources, the same environmental quality, and with the same possibilities of access to cultural and natural resources that the current generation received from the previous one (CAR-VALHO, 2008).

The precautionary principle deals with the need to act (or not act) even in situations of uncertainty regarding the probabilities and magnitudes of the consequences of past, present or future situations. Roughly speaking, this principle applies when the risk is so high that total scientific certainty should not be required before taking corrective action. Its application occurs, basically, when there is the possibility of lasting or irreversible damage to the environment. In addition, when the benefit derived from a certain activity is disproportionately smaller than the negative environmental impact that it could cause (KISS, 2004).

These three principles, by governing the international confrontation to climate change, were the basis for the construction of important international legal instruments after the creation of the UNFCCC, such as the Kyoto Protocol and the Paris Agreement.

Having said this, it is worth presenting below a brief notion of what these instruments are. This will enable an understanding of the position of both in the international regime on climate change, especially the Paris Agreement, currently in force, which has raised questions from the international community about the positions of the UNFCCC signatory states regarding the confrontation of the climate crisis. This contextualization will allow us to better understand the impact that compliance with these treaties has on the Mercosur-European Union agreement.

2.2 The advent of the Kyoto Protocol and the Paris Agreement

Because of the creation of the UNFCCC, the signatory states to the Convention began meetings called the Conference of the Parties (COP), in which they began negotiations to build a legal instrument aimed at establishing mechanisms to achieve the goal of mitigating the effects of climate change (FARBER; CARLARNE, 2018).

The creation of this instrument was achieved as early as 1997, in Japan, during the 3rd COP, after important negotiations carried out in its predecessors (COP 1, held in Berlin, and COP 2, held in Geneva). This was the Kyoto Protocol, which aimed to make developed countries ensure, individually or collectively, the limitation of their anthropogenic GHG emissions, so as to reduce them by at least 5% below 1990 levels in the commitment period from 2008 to 2012 (UNFCCC, 1997).

Aiming to make this goal tangible in a capitalist and developmental world, the Protocol, which came into force in 2005, enabled the use of several market-based mechanisms, aimed at relaxing the obligations assumed by developed countries, with an emphasis on the Emissions Trading (ET), the Clean Development Mechanism (CDM) and the Joint Implementation (JI). ¹⁵

However, between 1997 and 2005, any optimistic prognosis regarding the Kyoto Protocol was stopped by a drastic change in world geopolitics. Emissions, until then concentrated in developed countries, started to increase sharply in countries with emerging economies, especially China. The more lenient requirements established by the Kyoto Protocol on these countries, as well as the fear of the world's great powers (mainly the United States) of being harmed in an economic competition, have slowed the progress in the attempts to reduce global GHG emissions. With this, the future of the Kyoto Protocol became uncertain, which made clear the need to think of new strategies to combat global warming (FARBER; CARLARNE, 2018).

From this perception, a series of negotiations began, which culminated in 2015 in the Paris Agreement, the successor to the Kyoto Protocol. The Paris Agreement is an international instrument with a more flexible and inclusive approach than its predecessor, which aims to facilitate global cooperation to address climate change. The central point is that the Paris Agreement, unlike the Kyoto Protocol, did not adopt a binding "top-down" approach for all signatory countries, but a "bottom-up" model, in which the

^{15 (}a) Emissions Trading (ET), known as "cap-and-trade", is a mechanism by which governments can set a limit on total GHG emissions in their jurisdictions, issuing a number of permits for this purpose. Companies can trade these permits, constituting the so-called carbon market. (b) The Clean Development Mechanism (CDM), in turn, works by granting economic benefits to developing countries that have successful GHG emission reduction projects. These countries are also granted certificates that can be used to fulfill the emission reduction commitments they have undertaken internationally. (c) Finally, Joint Implementation (JI) is the mechanism in which developed or transition economy countries (excluding developing countries) can submit projects to reduce GHG emissions, which, if approved, generate credits (emission reduction units – ERU) that can be bought and sold among these countries (FARBER; CARLARNE, 2018).

signatories themselves were in charge of establishing their commitments to reduce their emissions (FARBER; CARLARNE, 2018). With this, the Agreement sought to avoid the reluctance of key countries to make commitments to the UNFCCC, moving away from the idea that ratifying the Agreement would mean submitting to the order of an international organization.

To operationalize this new bottom-up architecture, the UNFCCC created Nationally Determined Contributions (NDCs), through which Parties – in accordance with their common but differentiated responsibilities – must undertake and communicate efforts to help strengthen the global response to the threat of climate change in the context of sustainable development and poverty eradication efforts. The text of the Agreement states that NDCs must be ambitious enough to contribute to keeping the global average temperature increase below 1.5°C or at least 2°C above pre-industrial levels (levels that would already significantly reduce the risks and impacts of climate change) (UNFCCC, 2015).

Specifically with regard to Brazil, the Paris Agreement includes, among other issues, the country's commitment to reduce its net GHG emissions by 37% from the levels presented in 2005 by 2025, as well as the obligation to halt deforestation in the Brazilian Amazon and reforest 12 million hectares by 2030 (EC, 2019b).

Therefore, the global community has established mechanisms that reflect the awareness that a development based on an immediate understanding of risks can lead to the degradation of the well-being of present and future generations (whose very existence is threatened). This is the core of the international regime on climate change, which, although not binding on the signatories of the UNFCCC due to the sovereignty of its members, has served as an important parameter for the creation and maintenance of international bonds. Not being part of the UNFCCC, or not complying with the commitments assumed before the organization, can mean a true isolation in relation to the global community, which seeks to develop in a sustainable way based on structures whose maintenance and evolution are incompatible with bonding to outdated models, based on a radical anthropocentric conception.

3 THE MERCOSUR-EUROPEAN UNION AGREEMENT AND THE NEED TO FULFILL THE COMMITMENTS MADE IN THE PARIS AGREEMENT

Integration processes necessarily evolve gradually, passing through various stages to perfect their normative instruments. It is a fact that the states, with their autonomous societies and diverse characteristics, do not immediately assume forms capable of entering into a complex mechanism that is functionally cohesive and plural. In this sense, the processes involve long-term development goals, establishing a scenario in which the concept of sustainability, as the only possibility of lasting growth, cannot be waived.

Mercosur, from its inception, has been concerned with the establishment of rules aimed at environmental preservation for future generations. In this sense, the 1991 Treaty of Asunción, the bloc's founding instrument, states that the member states should seek, in addition to accelerating economic development with social justice, the effective use of available resources. Subsequently, the 1992 Canela Declaration was signed, in which the States Parties, together with Chile, proclaimed their commitment to use natural resources rationally and to base their development on the principle of sustainability.

On June 22, 2001, the member states approved the Mercosur Framework Agreement on the Environment (AQMAM), which established general rules of environmental law to guide the content of future legal instruments of the bloc. This was intended to achieve the goal of building a common market through a sustainable integration process, articulating the economic, social, and environmental dimensions (VIEIRA; BEN, 2020).

However, since then, Mercosur's environmental legislation has not developed as expected, developing slowly since the establishment of the AQMAM. Despite the above, it is worth noting that in 2019, there was the enactment of Resolution No. 36, which elevated sustainable consumption as a fundamental principle for consumer protection in the integrated scope. The adoption of this principle aims to maximize the use of raw materials and renewable energy, in order to preserve the quality of life of Mercosur consumers in the future. ¹⁶

As for the European Union, the Single European Act of 1987 expresses the bloc's goal of developing without compromising the quality

For more details on the subject, see: VIEIRA, 2020, p. 243-257.

of the environment by adopting preventive measures and the rational use of natural resources (EUROPEAN UNION, 1987). The Amsterdam Treaty reiterated it in 1997, emphasizing the importance of harmonious, balanced, and sustainable economic development (EUROPEAN UNION, 1997), while also listed the precautionary principle as one of the foundations of the bloc's environmental policy¹⁷ (EUROPEAN UNION, 1997). In 2000, the right to a healthy environment was formally elevated to the status of a fundamental right of the European people with the promulgation of the Charter of Fundamental Rights of the European Union (EUROPEAN UNION, 2000).

Seven years later, several changes were made to the treaties of the European Union through the Lisbon Treaty of 2007 (in force since 2009). With the Lisbon Treaty, sustainable development assumed clear importance in European politics, which became committed to "promoting measures at international level to deal with regional or worldwide environmental problems, and in particular combating climate change" (ASSEMBLEIA DA REPÚBLICA, 2008).

When it comes to climate change specifically, both blocs are already expressing concerns, but there are much more normative and concrete actions on the European Union side. While in MERCOSUR there is only a declaration of the health ministers of the member states and associated countries on climate change (MERCOSUR, 2018), in Europe a real "Green Deal" is taking shape, consisting of a set of policies and strategies aimed at zero net GHG emissions in the bloc by 2050, without hindering its economic growth (EC, 2021). With this, Europe seeks to develop in a sustainable and inclusive way, taking advantage of clean opportunities in the midst of the environmental and climate crisis.

To execute this policy, the European Commission has proposed amending Regulation (EU) 2018/1999 (on the Governance of the Energy and Climate Action Union), to convert this commitment into a legal obligation (EUROPEAN COMMISSION, 2020). The Commission also outlined a 2030 plan in which it reinforced its target to reduce emissions by up to 55% by 2030 (EC, 2020a), and entered into a climate pact with the people and society to encourage their action in this regard (EC, 2019a).

¹⁷ The inclusion of the precautionary principle in European law is important because it is the principle that requires public or private managers to take measures proportionate to the degree of uncertainty involved in implementing undertakings or in occurring events. The precautionary principle thus refers to the existence of obligations to act or not to act in advance in scenarios of incomplete information, a factor that distinguishes it from the prevention principle, provided for in the Single European Act, which focuses on obligations to act or not to act in advance in scenarios of greater certainty.

In view of these concerns (even if at different levels of development in both integration processes), the Mercosur-European Union Agreement foresees that its execution must be in accordance with the principle of sustainable development. Through the agreement, both blocks commit to improving their laws and policies to ensure an effective level of environmental protection (including the rational use of forest resources), in addition to reaffirming their commitments to implement the protocols and multilateral environmental treaties they have ratified. Among these treaties are those that form the international climate change regime, and Article 6 of the Mercosur-European Union Agreement expressly states that the parties must effectively implement the guidelines of the UNFCCC and the Paris Agreement.

Thus, the importance of sustainable development and the climate crisis in the integration processes of the European Union and Mercosur becomes clear, a characteristic reflected in the treaty negotiated between them. We also notice the great influence that the international regime on climate change has been exerting on international relations, to the extent that violations of its directives are in the process of making it impossible, or at least delaying the ratification of an agreement with broad socioeconomic repercussions, such as the Free Trade Agreement between Mercosur and the European Union. This is an effect of a globalized society aware of the risk of collapsing due to the environmental imbalance it has caused, which, in the midst of this scenario, is beginning to see integration between nations based on sustainability as the only way to permanent socioeconomic development.

4 THE OBSTACLES TO THE RATIFICATION OF THE MERCOSUR-EUROPEAN UNION AGREEMENT IN LIGHT OF BRAZIL'S NON-COMPLIANCE WITH THE PARIS AGREEMENT

Several groups have opposed the Mercosur-European Union agreement since negotiations began, due to fears about its repercussions. The European agricultural sector, for example, fears competition from products of South American origin, such as oranges and beef (EUROPEAN UNION AGREEMENT..., 2018). There are also strong objections from environmental groups and supporters of indigenous peoples, claiming that the agreement would lead to increased forest devastation due to low tariffs

on meat imports by Europe. They argue that such incentives would be of exclusive interest to large corporations, and that there are no rules and mechanisms sufficiently efficient to preserve the environment and protect human rights (WATTS, 2019).

As of now, the clause in Article 6, coupled with the fact that the Agreement needs to be ratified by the parliaments of all EU Member States and by the European Parliament (in addition to Mercosur's national parliaments), has opened the door for pressure against the treaty to produce more forceful effects, concretely threatening its entry into force. The point is that Brazil, Mercosur's largest partner, has notoriously taken decisions that go against the commitments made in the Paris Agreement.

Brazil, upon ratifying the climate agreement, committed itself through its NDCs to reduce national GHG emissions by 37% below 2005 levels (GWP-100) by 2025. As a subsequent contribution, Brazil has pledged to reduce its emissions by 43% (GWP-100¹⁸) below 2005 levels by 2030.¹⁹ To do so, the country aimed to increase the share of biofuels and renewable energy in its energy mix, strengthen low-carbon agriculture, promote new patterns of clean industrial technologies, improve transport efficiency in urban areas, and strengthen policies on forestry and land utilization change (LUT).

To achieve these goals, the country needs to seek efficient ways to implement its already existing National Policy on Climate Change (PNMC), formalized by Law n. 12,187/2009. According to art. 12 of this law, Brazil commits to reduce between 36.1% and 38.9% of its projected emissions by 2020 (in relation to the emissions estimates imagined in 2009, the year the policy was adopted); a general goal to be achieved through the fulfillment of specific goals determined in art. 18 of Decree n. 9.578/2018 (which regulates the PNMC Law).

These specific objectives include, basically, (a) reducing by 80% the annual deforestation rates in the Legal Amazon in relation to the average verified between the years 1996 to 2005, (b) reducing by 40% the annual

¹⁸ GWP-100 stands for Global Warming Potential over 100 years. The GWP is determined by the ability of each gas to absorb heat from the atmosphere (radiative efficiency) in a given time (usually 100 years). A large GWP indicates a large absorption capacity and a long lifetime of the gas in the atmosphere. Thus, the higher the GWP of a gas, the greater its potential contribution to global warming, since energy absorption implies a greater and longer heat retention in the atmosphere. It should be noted that the determination of the GWP of greenhouse gases is part of the calculation of their equivalence in CO_2 (arriving at the measure of "carbon equivalent"), where 1 GWP is equivalent to one unit of carbon dioxide.

¹⁹ The Brazil's NDC is rated as "insufficient" for meeting the Paris Agreement goal of stabilizing global warming below 1.5 °C or at least 2 °C relative to the pre-industrial era (SEEG, 2020a).

deforestation rates in the Cerrado Biome in relation to the average verified between the years 1999 to 2008, (c) the expansion of energy supply from alternative renewable sources, (d) the recovery of 15 million hectares of degraded pastures, (e) the expansion of the crop-livestock-forest integration system by 4 million hectares, (f) the expansion of the practice of direct planting in the straw by 8 million hectares, (g) the expansion of the biological fixation of nitrogen in 5.5 million hectares of cultivated areas, (h) the expansion of the planting of forests in 3 million hectares, (i) the expansion of the use of technologies for the treatment of 4.4 million m³ of animal waste and (j) the increased use, in steelmaking, of charcoal from planted forests and the improvement of the efficiency of the carbonization process.

To articulate the fulfillment of these objectives, Decree No. 9.578/2018 instituted, in its article 17, the plans for mitigation and adaptation to climate change. These plans are: (a) the Action Plan for Prevention and Control of Deforestation in the Legal Amazon (PPCDAm), (b) the Action Plan for the Prevention and Control of Deforestation and Burning in the Cerrado (PPCerrado), (c) the Ten-Year Expansion Energy Plan (PDE), (d) the Sectoral Plan for Mitigation and Adaptation to Climate Change for the Consolidation of a Low Carbon Emission Economy in Agriculture (ABC Plan), and (e) the Sectoral Plan for Reduction of Emissions from Steelmaking.

However, in practice, we see that Brazilian climate governance has failed to pursue these goals. In this regard, the Climate Observatory exposes that Brazil was responsible for emanating 2.17 GtCO2e (GWP) in 2019, a 9.6% increase from the previous year, in which 1.98 GtCO2e had been emitted (SEEG, 2020a). This is the highest amount of emissions achieved by Brazil in the last thirteen years, which elevated it to the position of sixth largest global emitter in 2019 (fifth if the European Union, consisting of 27 member states, is excluded) (SEEG, 2020a).

This increase is mainly due to land use change and forest devastation (ARMENTERAS et al., 2017) in the Brazilian territory in 2019, which caused the emission of 0.968 GtCO2e (GWP) in the year, representing a 23% increase compared to 2018 (SEEG, 2020a). The point is that forests (especially tropical forests), by removing CO2 from the atmosphere and storing it in their vegetation biomass (GIBBS et al. 2007), function as large sinks of this gas (CERRI et al., 2006), which ends up being released in large quantities due to devastation (NOBRE; NOBRE, 2002). Therefore, forest devastation has the consequence of increasing the atmospheric concentration of CO2, contributing to the increase in terrestrial temperature

and climate change (BAKER; SPRACKLEN, 2019).

Taking this into consideration, and given the notorious wildfires in the Brazilian territory in 2020 (DANTAS, 2019), we realize that the national emissions forecasts for this year are no better than those of the previous year. The System of Estimates of Emissions and Removals of Greenhouse Gases (SEEG) shows that, although global GHG emissions will reduce by up to 6% in 2020 due to the slowdown in global production resulting from the COVID-19 pandemic, the rise in deforestation in Brazil is expected to raise the country's emissions by 10% to 20% in the year (SEEG, 2020b).

This scenario shows that Brazil will fail to reduce by 80% the annual deforestation rates in the Legal Amazon in relation to the average verified between 1996 and 2005, a goal assumed in article 18 of Decree No. 9.578/2018 (regulator of the PNMC Law), which should be met in 2020. Consequently, the country will not be able to meet the ultimate goal of reducing between 36.1% and 38.9% of its projected emissions by 2020, and this is a considerable deficit for the implementation of the first phase of the Brazilian NDC, scheduled to begin in 2021. It turns out that the reduction of 36.1% and 38.9% of emissions by 2020 (in relation to the trajectory of emissions imagined in 2009) would be crucial for Brazil to achieve the 37% reduction by the year 2025 in relation to 2005, so that failing to meet it means starting from a position further away than planned.

Furthermore, it is noteworthy that Brazil should have presented, in 2020, a plan that ratified or expanded its second NDC, through which the country committed to reduce its emissions by 43% (GWP) below 2005 levels by 2030. However, Brazil did not present any plan until then, so as not only to be in breach of its first NDC, but also of the entire Paris Agreement (SEEG, 2020a).

All these alarming forecasts have direct repercussions on the Mercosur-European Union Agreement due to the provision that all parties are obliged to implement the UNFCCC guidelines and comply with the commitments made in the Paris Agreement. Using this clause, parliaments of the European Union Member States have expressed their opposition to ratifying the terms of the inter-bloc agreement due to Brazilian environmental policy (SEEG, 2020a).

In addition to the parliaments of the European Union Member States, the European Parliament – while recognizing the importance of the Agreement with Mercosur, given its potential to create an open market beneficial to all parties – notes the existence of the binding clauses on

sustainable development. On this point, the European Parliament was categorical in officially declaring that the shortcomings in environmental protection and Mercosur's execution of the Paris Agreement make ratification of the Agreement in its current state unfeasible (EUROPEAN PARLIAMENT, 2020).

This establishes a serious obstacle to the Treaty between Mercosur and the European Union, which could compromise decades of complex negotiations or at least delay its entry into force. This possibility requires that the Mercosur member states, especially Brazil, deepen their regulations on the topics considered inconsistent with the commitments negotiated with the European Union. As for Brazil, a national policy aimed at mitigation and adaptation to the effects of climate change (the PNMC) already exists. The country lacks the adequate execution of this policy to the reality of the increase of deforestation and CO2 emissions in its territory, which passes, in principle, through the increase of budgets directed to the confrontation of forest devastation and the orientation of governmental attributions to the execution of already existing programs.

5 POSSIBLE SOLUTIONS WITHIN THE PLAN OF ACTION FOR PREVENTION AND CONTROL OF DEFORESTATION IN THE LEGAL AMAZON (PPCDAM)

The high rate of Brazilian CO₂ emissions due to deforestation resulting from land use change denotes a serious failure in the execution of the National Policy on Climate Change (PNMC), especially with regard to the Action Plan for Prevention and Control of Deforestation in the Legal Amazon (PPCDAm), established in art. 17 of Decree n. 9.578/2018. This situation highlights the insufficiency of the Brazilian government's articulated action around the four axes of the PPCDAm, which are (a) land and territorial planning, (b) environmental monitoring and control, (c) promotion of sustainable productive activities, and (d) implementation of normative and economic instruments (BRASIL, 2017).

With regard to land planning, there is a need to expand the creation of conservation units and differentiated settlements, as well as the recognition of indigenous and local peoples' lands in forest areas that are under pressure from deforestation. With regard to conservation units, we notice that their establishment and consolidation plays an important role in the protection of critical areas, such as those located near agricultural and cattle

ranching frontiers or targeted by timbermen (BRASIL, 2013). Regarding the recognition of traditional peoples' lands, it is linked to low rates of deforestation (FEARNSIDE, 2017), a result of the knowledge and cultural practices of these peoples, who occupy their territories and manage their resources harmoniously with the environment (BRASIL, 2019d).

As for environmental monitoring and control, it is necessary to increase the financial and human resources directed to on-site inspections by IBAMA and ICMBio²⁰, which need to operate in remote locations, with great difficulty of access. The compilation of evidence of deforestation in the Amazon is considerably faster, given the use of the DETER and DETER "intense" satellite systems, which map areas and issue rapid alerts of changes in vegetation cover (although in a limited manner due to the low resolution of the images/sensors used and the restrictions provided by cloud cover). However, although deforestation hotspots are efficiently detected, inspection agents often do not arrive in time to identify the offenders, which makes it impossible to hold them accountable (AIACHE, 2012). In this way, the availability of naval and aerial vehicles and the increase of environmental agencies' teams are crucial for the broad identification of those responsible for forest degradations.

Besides the intensification of inspection and monitoring actions by the environmental agencies, there is a need to improve the speed of the administrative processes managed by IBAMA and ICMBio, aimed at the investigation of facts and the imposition of sanctions, as well as the licensing of enterprises (resulting in the granting or denial of licenses). It requires to increase the judgment and investigation capacity of the environmental agencies, which demands an increase in financial resources to expand the number of employees assigned to these functions. Thus, it becomes possible to quickly (or at least reasonably!) carry out administrative proceedings, while at the same time respecting the right of defense of the charged parties and the principles of prevention and precaution in favor of a healthy and balanced environment.

As for the third axis, related to the promotion of sustainable productive activities, there is a need to promote credit lines aimed at financing sustainable productive activities. The best way is to optimize the construction of a virtuous circle in the economy of the poorest municipalities and

²⁰ It is noteworthy that the financing of measures aimed at combating the devastation of the Amazon forest is possible, and there are even funds with large amounts of resources earmarked for this purpose. These are the Amazon Fund, established by Decree No. 6,527 of August 1, 2008, and the Climate Fund, established by Decree No. 9,578 of November 22, 2018, which seek to raise resources aimed, respectively, at projects designed for the Legal Amazon and actions to combat climate change.

with the lowest human development indexes (HDI) in the Amazon region, to develop them socially and economically while preserving the environment for the present and future generations.

With this purpose, currently the Amazon Sustainable Financing Program (FNO – Amazônia Sustentável), the National Program for the Strengthening of Family Agriculture (PRONAF) and the Constitutional Financing Fund of the North (FNO)²¹ stand out. These are funds available for financing sustainable economic activities, the use of which should be stimulated. This stimulus can occur, for example, through the expansion of the number of technological reference units (URTs), whose function is to execute programs for training technical agents and disseminate concepts related to the efficient use of natural resources through sustainable agricultural technologies (CORDEIRO *et al.*, 2015).

With regard to the fourth axis, which refers to the implementation of regulatory and economic instruments for the mitigation of deforestation, we find that it is transversal in relation to the others (encompassing strategies already present in the others). This axis, however, acquired its own contours due to the perception that the previous mechanisms were limited, which demanded the improvement of the normative, economic and fiscal factors (BRASIL, 2016).

As useful initiatives to combat deforestation through normative and economic instruments, we cite, for example, low-carbon forest management measures through instruments such as green bonds, the proposition of preference criteria for certified wood, and the incentive for the consumption of sustainable products via tax exemptions and the establishment of differentiated minimum prices (BRASIL, 2016).

Moreover, we emphasize the need to develop an efficient system to identify trades and processing industries that operate without requiring proof of licensing from their suppliers. Thus, it is possible to hold responsible agents whose practices are in disagreement with the precepts of sustainability, while discouraging the illegal extraction of natural resources.

At the same time, economic incentives should be applied to those who properly account for the origin²² of the goods used in their production line, so that it is more worthwhile to act on behalf of the environment than to

²¹ Until recently, there was also the "Arco Verde Operation", instituted by Decree n. 7.008, of November 12, 2009, which aimed to promote sustainable production models in municipalities considered a priority for the control and reduction of deforestation in the Legal Amazon. The Federal Government through Decree n. 10.473 of August 24, 2020, however, canceled the operation.

²² On consumers' right to information and access to more sustainable products, see: Hohendorff (2020, p. 150-157).

make immediate profits with disastrous consequences in the long term. In addition, it is emphasized that consumers should have the right to know the origin of what they are buying, which demands the clarification of product profiles, the preparation of environmental reports by industries, the implementation of consumer information centers, the implementation of transparent eco-labeling programs, and the creation of product information hotlines (UN, 2016).

Lastly, it is noteworthy that in the recent past (between 2003 and 2010) Brazil managed to reduce its CO₂ emissions (SEEG, 2020a) while achieving GDP growth (IBGE, 2020), developed its agriculture, and reduced hunger and poverty (FAO, 2021). The dichotomy between development and environmental preservation is misleading, and there are even in-depth studies showing that the monetary and social cost of unbridled development will be much lower in a scenario with the implementation of mitigating and adaptive measures for the effects of climate change than in a scenario where such measures are neglected (STERN, 2007).

About it, Freitas highlights the existence of great opportunities in the pursuit of sustainable development, which is nothing more than a development of lasting character, "with high inclusion and decent work, replacing the matrix based on the economy of fossil fuels and the vices of the degraded policy" (FREITAS, 2016). Among the advantages of development guided by sustainability, we mention potential for job creation due to the emergence of new job functions typical of a clean market, the improvement in the quality of human health due to the reduction of pollution. In addition, the establishment of more efficient public transportation systems, the development of new technologies, and the supply of resources using safer sources.

The sensitization of the government and society, as a whole, to scientific information for the understanding that the future of humanity is threatened by the actions of the human being itself, a situation that demands action in favor of the preservation, for future generations, of the living conditions that the current generation bequeathed from the previous ones. It requires an understanding that there is no dichotomy between development and sustainability, which is, in fact, the minimum condition for social subsistence. The gradual dissolution of ignorance as to the existence of alternative means for the development of society is necessary, and the possibility of adopting concrete measures for the establishment of continuous growth, guided by the understanding that human and environmental

well-being is the minimum condition to be met for any objective aimed at from now on, is notorious.

CONCLUSION

The present study sought to answer the research problem linked to the prognoses about the future of the Mercosur-European Union Agreement, given the current environmental, legal, and political scenario surrounding Brazil's likely failure in fulling the sustainability goals assumed in the Paris Agreement, concerning the reduction of GHG emissions and in view of the forest devastation in the Legal Amazon.

In summary, the Paris Agreement, in relation to Brazil, establishes the commitment to reduce GHG emissions by 37% (GWP-100) by 2025 and 43% (GWP-100) by 2030, both in relation to 2005 levels. To meet these targets, it would be essential that the country meet its obligations to reduce Amazon deforestation by 80% per year, as foreseen in its National Policy on Climate Change (PNMC), as well as restore 12 million hectares of forest by 2030.

As has become evident, the achievement of such goals is a *conditio sine qua non* for the implementation of the trade agreement between Mercosur and the European Union, which has led to numerous positions contrary to its signature and ratification by some European parliaments and the European Parliament itself. Such positions are due both to the scenario of environmental devastation that has been carried out by Brazil, especially in the Legal Amazon, and to the difficulties presented by the country to reduce between 36.1% and 38.9% of its GHG emissions (as projected by the PNMC for 2020), a crucial goal to meet the commitments made in the Paris Agreement.

In spite of legal measures guiding the adoption of public policies towards sustainable development, such as the solutions addressed by the National Policy on Climate Change (PNMC), and by the Action Plan for the Prevention and Control of Deforestation in the Legal Amazon (PPCDAm), there is an increase in the Amazon Forest degradation scenario. The unrestrained development of the agricultural sector, as well as in the levels of GHG emissions motivates it.

Therefore, the working hypothesis initially presented is confirmed, in the sense that it is necessary to strengthen the pro-environmental policies already in place in Brazil, increasing, in addition, the budgets of the inspection agencies and of the programs aimed at the creation of economic and educational incentives, capable of implementing environmental preservation allied with economic development. Thus, further measures, which value the adoption of more sustainable practices resulting, consequently, in the reduction of GHG emissions and the conservation of the Amazon, it seems that the Mercosur-European Union agreement will not obtain the necessary ratifications for its entry into force, under the watchful eye of nations concerned with meeting the goals of the Paris Agreement.

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