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# Geographical Indications as an Instrument of Public Policies and Environmental Governance

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## ABSTRACT

Geographical Indications are an intellectual property right characterized by being a product or service coming from a certain region, which, in the Brazilian case, has either become known as a center of production, extraction or manufacture, or because of its unique natural and human characteristics. Given this, the protection of the environment can emerge as one of its important functions, from the moment that, to maintain the status quo of natural factors, such as climate, soil, vegetation and many others that are proper to the region and essential for the effectiveness of the product or service, it is necessary to develop elements of environmental protection. Thus, this article intends to study and prove that Geographical Indications can be used for the protection of the environment through the promotion of public policies and environmental governance.

**Keywords:** geographical indications; environmental public policies; natural resources governance.

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# Geographical Indications as an Instrument of Public Policies and Environmental Governance

Indicações Geográficas como Instrumento de Políticas Públicas e Governança Ambiental

Emilio Elias Melo de Britto

## ABSTRACT

*Geographical Indications are an intellectual property right characterized by being a product or service coming from a certain region, which, in the Brazilian case, has either become known as a center of production, extraction or manufacture, or because of its unique natural and human characteristics. Given this, the protection of the environment can emerge as one of its impotent functions, from the moment that, to maintain the status quo of natural factors, such as climate, soil, vegetation and many others that are proper to the region and essential for the effectiveness of the product or service, it is necessary to develop elements of environmental protection. Thus, this article intends to study and prove that Geographical Indications can be used for the protection of the environment through the promotion of public policies and environmental governance.*

**Keywords:** geographical indications; environmental public policies; natural resources governance.

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## RESUMO

As Indicações Geográficas são um direito de propriedade intelectual que se caracterizam por ser um produto ou serviço proveniente de uma determinada região, que, no caso brasileiro, ou se tornou conhecida como centro de produção, extração ou fabricação, ou em razão de suas características naturais e humanas únicas. Diante

disso, a proteção do meio ambiente pode emergir como uma de suas impotentes funções, a partir do momento em que, para manter os *status quo* dos fatores naturais, como clima, solo, vegetação e muitos outros que são próprios da região e essenciais para a efetivação do produto ou serviço, se faz necessário o desenvolvimento de elementos de proteção ambiental. Sendo assim, este artigo pretende estudar e comprovar que as Indicações Geográficas podem ser utilizadas para a proteção do meio ambiente através da promoção de políticas públicas e de governança ambiental.

**Palavras chaves:** indicações geográficas; políticas públicas ambientais; governança de recursos naturais.

## I. INTRODUCTION

Geographical Indications are characterized by being a product or service coming from a certain region, which has either become known as a center of production, extraction or manufacture, or because of its unique natural and human characteristics. The first are called Indications of Origin; and the second, Designations of Origin.

The Signs of Origin, as Geographical Indications are also named, have, in addition to these two characteristics – which will be studied in due course – several functions that are usually attributed to them. The first, is the function of origin, since these products or services, in order to be produced or provided, need to respect specific rules and norms of procedure. In view of this, a second function arises, which is of quality. Thus, once proper standards are followed, there is a reflection on the quality of the product itself, since a series of rules of procedure, hygiene, technical

specifications, among others, must be observed, so that there is no mischaracterization of the geographical indication itself. Finally, there is also a function of distinctiveness, once the seal of origin ends up distinguishing and making unique the certified product or service, through a Geographical Indication.

Although it is not usually or typically assigned to the institute of Geographical Indication, a new function can be assigned to it: that of protecting the environment. The very elements that characterize them, especially the Designations of Origin – the human and natural factors, which will be seen in detail later – need to remain invariable, to guarantee the maintenance or the very existence of the products or services.

Thus, environmental protection emerges as a function, from the moment that, to maintain the *status quo* of natural factors, such as climate, soil, vegetation and many others that are proper to the region and essential for the Geographical Indication, efforts from all social and economic sectors of that locality are necessary, so that such characteristics remain static. Therefore, it would not be enough not to harm the environment; actors involved must protect it, at the risk of making the existence of the Geographical Indication unviable.

In this way, this work is aimed at studying and proving that the protection of the environment is, yes, a function of the Geographical Indication and that this judicial institute can be used in the promotion of public policies and *Environmental Governance*.

## II. METHODOLOGY

Regarding the methodology, the present study used the deductive method. Thus, it began with the general premises regarding Geographical Indications, Environmental Public Policies and Natural Resources Governance, in order to, after analyzing the challenges imposed by this new reality of climate change, conclude about the possibility or not of applying the proposed hypothesis.

As for the purpose/objective, this is an explanatory work, because the object of this research is intended to identify which factors contribute to identify the challenges and possible solutions, in the face of litigation caused by the intersection between Geographical Indications, Environmental Public Policies and Natural Resources Governance, which are currently verified.

Regarding the approach, the present thesis adopts the qualitative approach, since the analysis will be made subjectively, through a broad study of the object, by the action- research. Qualitative research is understood as one that works with reality data, which cannot be quantified, operating through the comprehension, interpretation and treatment of data, about the essence or nature of the object of research.

As for the procedure, the present research is characterized as bibliographic and documental, because it seeks to understand what is in the state of the art, making use of the existing information both in the doctrine and in the jurisprudence, to verify the possibility to apply the above pointed issue, but also to use documents to better understand the problems pointed out.

## III. GEOGRAPHICAL INDICATIONS

In current Brazilian legislation, there is not, as will be seen, a definition of the concept of Geographical Indication. The norm is limited to indicating and conceptualizing the species of possible geographical indications in the Brazilian State.

The normative text in which the referred concepts are inserted is Law No. 9,279 of May 14, 1996, that<sup>1</sup> regulates the rights and obligations related to Intellectual Property. That is, GI's, in Brazil, are a modality of Intellectual Property<sup>2</sup>. In this step,

<sup>1</sup> BRAZIL. National Law No. 9,279, Industrial Property Law (LPI), of May 14, 1996. It regulates rights and obligations relating to industrial property. Available at: [http://www.planalto.gov.br/ccivil\\_03/leis/l9279.htm](http://www.planalto.gov.br/ccivil_03/leis/l9279.htm). Accessed: 28 Jan 2022.

<sup>2</sup> REIS, Livia Liberato de Matos. Indicação Geográfica no Brasil: determinantes, limites e possibilidades. 2015. 270 f.

that law was responsible for the harmonization between the national legal system and the TRIPS agreement<sup>3</sup>.

Among the novelties provided by the TRIPS Agreement, in regard to nomenclature, was significant the adhesion of the expression Geographical Indication and the institution of Designations of Origin<sup>4</sup>. It is also worth mentioning an interesting particularity, about which the national legislation provides not only products, but also services, both for Indication of Origin, as for Designation of Origin, distancing itself, at this point, from international legislation<sup>5</sup>.

Thus, the aforementioned law, in article 176, states that: "The Indication of Origin or the Designation of Origin constitutes a Geographical Indication". As can be seen starting from a simple reading of the normative text, there is no proper reference for what is, in Brazilian legislation, a Geographical Indication<sup>6</sup>. This task ends up being transferred to the doctrine, which does not collaborate with the chimera of conceptual harmonization.

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Tese (Doutorado) – Instituto de Geociências, Universidade Federal da Bahia, Salvador, 2015, p. 82.

<sup>3</sup> CHIMENTO. Marcelo Rutowitsch. Indicação Geográfica na imprensa: cenários e desafios. 2015. 219 f. Tese (Doutorado) - Programa de Doutorado em Propriedade Intelectual e Inovação, Coordenação de Programas de Pós-Graduação e Pesquisa – Instituto Nacional da Propriedade Industrial – INPI, 2015, p. 38.

<sup>4</sup> FRÓES, Carlos Henrique de Carvalho. Indicações geográficas e marcas constituídas por nome de lugares. Revista da Associação Brasileira de Propriedade Intelectual. Rio de Janeiro, n. 56, jan.-fev. 2002. p. 66-68.

<sup>5</sup> GURGEL, V. Aspectos jurídicos da Indicação Geográfica. In: LAGES, V.; LAGARES, L.; e BRAGA, C. (orgs.). Valorização de Produtos com Diferencial de Qualidade e Identidade: Indicações Geográficas e certificações para competitividade nos negócios. Brasília: Sebrae, 2006. p. 65. Disponível em: <https://www.gov.br/agricultura/pt-br/assuntos/sustentabilidade/indicacao-geografica/arquivos-publicacoes-ig/desenvolvimento-sustentavel-indicacao-geografica-valorizacao-de-produtos-2007.pdf>. Acesso em: 03 jul. 2015.

<sup>6</sup> GONÇALVES, Marcos Fabrício Welge. Propriedade Industrial e Proteção dos nomes geográficos: indicação geográfica, indicação de procedência e denominações de origem. Curitiba: Juruá Editora, 2008, p. 52.

The law, therefore, leaves us no alternative but to proceed with the analysis of the concept of GI species. In article 177, there is reference to the first of them, which is the Indication of Origin, as stated in the text of the legal provision: "The geographical name of the country, city, region or locality of its territory, which has become known as a center of extraction, production or manufacture of a certain product or provision of a certain service, is considered an Indication of Origin."

In article 178, there is mention to the second, that is, the Designation of Origin: "Designation of origin is considered the geographical name of a country, city, region or locality of its territory, which designates a product or service whose qualities or characteristics are due exclusively or essentially to the geographical environment, including natural and human factors."

Marcos Fabricio Welge Gonçalves states that "a preliminary analysis, in these two figures, allows us to define as Geographical Indication the geographical name that designates product or service".<sup>7</sup>

The primary difference between these two GI species lies in the fact that Denominations of Origin require for a quality or characteristic that is peculiar to a product or service to exist, that is linked to its origin, including, in this aspect, factors not only natural, but also human<sup>8</sup>.

Thus, two aspects which deserve to be highlighted in the concept of Denominations of Origin are perceived. The first refers to the qualities or characteristics that designate the product or service. And the second aspect is that these qualities or characteristics must be exclusively or essentially attributed to the geographical environment, including natural factors (soil, climate, humidity, geological formation, wind, flora, fauna, etc.) and human factors (culture, know-how, etc.).

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<sup>7</sup> *Ibid.*

<sup>8</sup> LOCATELLI, Liliana. Indicações Geográficas: a proteção jurídica sob a perspectiva do desenvolvimento econômico. Curitiba: Juruá, 2008, p. 229.

If there is no characteristic/quality that derives from human or natural factors linked to the geographical environment, that grants peculiarity (*a plus*) to a product or service and, therefore, distinguishes them from their peers in the market, there will not even be a Denomination of Origin<sup>9</sup>.

Already the Indications of Origin require only a notoriety or recognition of the origin of a particular product or service<sup>10</sup>. Functionally, there is a relation between the geographical name and the products or services, since that one must serve to nominate, as stated in article 177 of Law No. 9,279/1996, a "center of extraction, production or manufacture of a certain product or provision of a certain service".

This connection can, in turn, be established in three different ways, as the site or region can be a center of extraction, production, or manufacturing. Therefore, there is no influence, according to the definition in the Brazilian legislation, of geographical or human factors on the products or services<sup>11</sup>. The geographical name, in the Indications of Origin, in the words of Pontes de Miranda, only situates the product<sup>12</sup>.

Once this conceptual point is overcome, we move on to the core of this work, which is the study of the use of Geographical Indications as an instrument of public policies and Environmental Governance.

#### IV. GEOGRAPHICAL INDICATIONS AS AN INSTRUMENT OF PUBLIC ADAPTATION POLICIES

According to Celina Souza, there is not a single or better concept of what a Public Policy is<sup>13</sup>. However, some doctrinaires venture to define it. Thomas Dye, in 1984, said that is whatever the

government chooses or not to do<sup>14</sup>. However, according to Peter Bachrach and Morton S. Baratz in 1962, doing nothing about a problem would also be a form of public policy.<sup>15</sup>

Harold Lasswell goes further and states that, when talking about public policies, one must, with regard to their decisions and analyses, answer the following questions: who wins what, why and what difference does it make?<sup>16</sup>. It would also be, according to Celine Souza, when "democratic governments translate their purposes and electoral platforms into programs and actions, which will produce results or changes in the real world."<sup>17</sup>

In recent years, the increase of temperature in the planet, caused by high emissions of greenhouse gases in the atmosphere, has been recurrent in international discussion panels. As a consequence, climate change has been constantly present in the news, because of atypical natural events, all over the planet.

To illustrate, in Brazil, for example, floods have occurred more frequently, throughout the country. In addition, hurricanes, typhoons, heat waves, harsh winters, droughts and substantial temperature differences are noticed, everywhere in the world. These natural phenomena are the so-called climatic extremes, which cause serious consequences not only to natural ecosystems, but also to man and his well-being<sup>18</sup>.

Such changes in climate have caused an unprecedented environmental crisis, but their origin is not only due to natural events. It must also be understood under the social bias, since, as Julia Lopes da Silva and Patrícia Rodrigues

<sup>9</sup> GONCALVES, *op. cit.*, p. 57.

<sup>10</sup> LOCATELLI, *op. cit.*

<sup>11</sup> GONCALVES, *op. cit.*, pp. 55-56.

<sup>12</sup> MIRANDA, Pontes de. *Tratado de Direito Privado*, v. 16 e

<sup>17</sup> Campinas: Bookseller, 2002, p. 343.

<sup>13</sup> SOUZA, Celina. *Políticas Públicas: uma revisão da literatura*. *Sociologias*, Porto Alegre, ano 8, nº 16, jul/dez 2006, p. 24.

<sup>14</sup> DYE, Thomas D. *Understanding Public Policy*. Englewood Cliffs, N.J.: PrenticeHall, 1984.

<sup>15</sup> BACHRACHB, P. e BARATZ, M. S. "Two Faces of Power", *American Science Review* 56, 1962, pp. 947-952.

<sup>16</sup> LASWELL, H.D. *Politics: Who Gets What, When, How*. Cleveland, Meridian Books. 1936/1958.

<sup>17</sup> SOUZA, Celina, *op. cit.*, p. 26.

<sup>18</sup> MARENKO, J. A.; NOBRE, C. A.; SELUCHI, A. E.; CUARTAS, A.; ALVES, L. M.; MEDIONDO, E. M.; OBREGÓN, G.; SAMPAIO, G. A seca e a crise hídrica de 2014 – 2015 em São Paulo. *Revista USP*, 106, 31-44, 2015. <https://doi.org/10.11606/issn.2316-9036.voi106p31-44>

Amora explain,<sup>19</sup> it stems from a series of sociopolitical factors, such as public policies, international agreements and geopolitical disputes.

These choices of society, based on decision-making, individual and collective engagement, in addition to today's international relations that generate direct effects on climate, also provoke a serious ethical crisis, since the actions taken now can compromise the future of the species on the planet<sup>20</sup>.

Climate change is not, however, a reality of the present. In the past, over the course of the 4.5 billion years of earth, there have been several radical changes in climate. Periods of climatic stability were interspersed with large glaciations; warm periods, caused by the greenhouse effect and even desertification<sup>21</sup>. These changes, therefore, are events that occur naturally and normally on the planet, resulting from geological factors<sup>22</sup>.

<sup>19</sup> SILVA, J. L.; SAMORA, P. R. Os impactos da crise hídrica sobre a população do município de Campinas/São Paulo (2012-2016). *Revista Brasileira de Gestão Urbana*, pp. 1-14, 2019. Disponível em: <https://doi.org/10.1590/2175-3369.011.e20170210>. Acesso em: 01 jan 2022. As autoras trazem um exemplo: "merece destaque é a dificuldade de acesso à moradia digna por grande parte da população em função da lógica capitalista que opera nas cidades, o que causa diversas alterações dinâmicas e estruturais aos centros urbanos e aos ecossistemas naturais. Em função disso, inúmeras consequências são observadas em todo o país, como ocupação de áreas ambientalmente sensíveis, desmatamento, poluição, enchentes, periferização etc., que estão interligadas e atingem tanto o meio ambiente quanto a sociedade. Constatata-se, portanto, a necessidade de integração de ações mais adequadas e menos destrutivas, de forma a garantir a manutenção das cidades e dos ecossistemas".

<sup>20</sup> BOFF, Leonardo. Sustentabilidade: o que é: o que não é. Petrópolis: Vozes, 4. ed., 2015.

<sup>21</sup> EEROLA, Toni Tapani. Mudanças Climáticas Globais: Passado, Presente e Futuro. Apresentação no Fórum de Ecologia e no evento Mudanças Climáticas: Passado, Presente e Futuro, organizados pelo Instituto de Ecologia Política na Universidade do Estado de Santa Catarina (UDESC), Florianópolis, em 2003. Disponível em: [https://cetesb.sp.gov.br/proclima/wp-content/uploads/sites/36/2014/04/erola\\_mc.pdf](https://cetesb.sp.gov.br/proclima/wp-content/uploads/sites/36/2014/04/erola_mc.pdf). Acesso em: 14 mar. 2022.

<sup>22</sup> YOUNG, G.M. The geologic record of glaciation: relevance to the climatic history of Earth. *Geoscience Canada* 18, 100-106. MURCK, B.W.; SKINNER, B.; PORTER, S.C. Environmental geology. New York : John Wiley & Sons, Inc., 1996, 535 p. MERRITS, D. ; DE WET, A. ; MENKING, K.

However, during the current geological era, Holocene ("Recent Totality"), human activities have gradually grown, to the point of "becoming a significant geological force," capable of being compared to the "great forces of earth." The expansion of human activity on earth, the great process of urbanization, the great use of natural resources and the impacts on the soil and atmosphere, in a global and generalized way, attribute to human beings a prominent role in Geology and Ecology, at a level that is given to the current geological era the denomination of "Anthropocene"<sup>23</sup>.<sup>24</sup>

Although it is not known exactly where the "Anthropocene" begins, João Ribeiro Mendes proposes to consider its beginning, in the last part of the eighteenth century, which, according to the author, was when the effects of human activity on earth began to be<sup>25</sup> noticed.

Alongside the causes, climate change is occurring and is a reality. The Intergovernmental Panel on Climate Change's (IPCC) Sixth Assessment Report 2022 states that impacts of climate change are increasingly being felt in all regions of the planet, not just the poorest. The truth is that climate change is already underway and will not be stopped or annulled. What is needed, now, is to understand which planet one wants to live in: with more or less impacts and risks caused by climate change<sup>26</sup>.

Environmental geology. An Earth system science approach. New York : W.H. Freeman and Company, 1997, 452 p. EEROLA, T. Climate changes at the Neoproterozoic-Cambrian transition. In : ZHURAVLEV and RIDING, R. (Eds.) The Ecology of the Cambrian Radiation. Columbia University Press, New York, 2001, pp. 90-106.

<sup>23</sup> This term was consolidated by Paul Crutzen & Eugene Stoermer in the year 2002, through the article The "Anthropocene".

<sup>24</sup> MENDES, J. O "Antropoceno" por Paul Crutzen & Eugene Stoermer. Anthropocenica. *Revista De Estudos Do Antropoceno E Ecocritica*, 1, 2020. Disponível em: <https://doi.org/10.21814/anthropocenica.3095>. Acesso em: 13 mar. 2022.

<sup>25</sup> *Ibid.*

<sup>26</sup> IPCC, 2022 : Climate Change 2022 : *Impacts, Adaptation and Vulnerability* Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [H.-O. Pörtner, Roberts DC, Tignor M.S., Poloczanska E.S., Mintenbeck K., A. Alegría, Craig M.D.,

In this way, climate change is a global threat and is, according to Anthony Giddens, "a more urgent, more serious and deeper dimension of the environmental crisis of the twenty-first century."<sup>27</sup>

Given this, the changes in climate that occurred in recent decades should be the object of concern for the State, and, therefore, the construction of effective national and international public policies needs to turn its eyes to this issue<sup>28</sup>.

In this step, the State must act as catalyst and facilitator, in addition, in regard to climate change, join efforts to obtain guarantees, which, according to Anthony Giddens, can be achieved through a more direct action of the State<sup>29</sup>.

In his book, the cited author lists a series of actions in which the State can guide its actions. Among them, helping the population to think in advance, with planning; deal with the risks of climate change, together with the other risks existing in the contemporary society, as such environmental risk intersects with others, at the local, national and international level; promote the "political and economic convergence, as the main driving forces of climate change and energy policy".<sup>30</sup>

The author goes on to state that the State must intervene in the markets, so that the polluter-pays principle, which represents the internalization of negative externalized, is institutionalized and "act against business interests that aim to stop initiatives related to climate change"; leave the agenda regarding climate change at the top of the list of political objectives, maintaining agreements between opposing political parties, so that an environmental policy is always maintained<sup>31</sup>.

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Langsdorf, S. Lösche, V. Möller, A. Okem, B. Rama (eds.)]. Cambridge University Press.

<sup>27</sup> GIDDENS, Anthony. *A política da mudança climática*. Trad. de Vera Ribeiro. Rio de Janeiro: Zahar, 2010. p. 7.

<sup>28</sup> BOLSON, Simone Hegele. Climate change and the politics of adaptation by Anthony Giddens : in search of a preventive model to combat the effects of climate change in the semi-arid region of Northeast Brazil. *Revista Direito Ambiental e sociedade*, v. 2, n. 1, 2012, p. 81. (p. 77-96)

<sup>29</sup> GIDDENS, Anthony, *op. cit.*, p. 106 ss.

<sup>30</sup> *Ibid.*

<sup>31</sup> *Ibid.*

What's more, it needs to "develop an appropriate economic and fiscal framework to move toward a low-carbon economy; prepare for adaptation to the consequences of climate change and integrate local, regional, national and international aspects of the climate change policy"<sup>32</sup>.

Thus, Giddens, when relating such policies that can be developed by governments, highlights the impact and magnitude of the consequences of climate change in humans, an issue that he points out to be urgent. However, before entering into public policies, which reconcile with the epistemological scope of this work, some concepts should be analyzed.

There are two types of actions that can be taken to reduce the impacts of human activities on climate<sup>33</sup>. The first of these is through mitigation actions, combating the causes<sup>34</sup>, using, for example, clean development mechanisms – CDM. The second, through the implementation of measures to adapt to climate change, reducing socio-environmental vulnerabilities<sup>35</sup> and preparing to face the effects<sup>36</sup>.

Regarding adaptation, Carlos Afonso Nobre describes, in a generalized way, that it refers to "adjustments in ecological or socioeconomic systems, in response to current or projected climate changes, resulting from practices, processes, measures or structural changes".<sup>37</sup>

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<sup>32</sup> *Ibid.*

<sup>33</sup> ANDRADE, Helenice Vieira de. Mapeamento das Políticas Estaduais de Adaptação das Cidades às Mudanças Climáticas no Brasil. *Rev. Geogr. Acadêmica* v.11, n.2, 2017. Disponível em: <https://revista.ufrr.br/rga/article/view/4358/2366>. Acesso em: 14 mar. 2022.

<sup>34</sup> RODRIGUES FILHO, Saulo et al. O CLIMA EM TRANSE: POLÍTICAS DE MITIGAÇÃO E ADAPTAÇÃO NO BRASIL (CLIMATE IN TRANCE: MITIGATION AND ADAPTATION POLICIES IN BRAZIL). *Revista Brasileira de Climatologia*, [S.l.], v. 19, out. 2016. ISSN 2237-8642. Disponível em: <<https://revistas.ufpr.br/revistaabclima/article/view/48874/29382>>. Acesso em: 16 abr. 2022. doi:<http://dx.doi.org/10.5380/abclima.v19i0.48874>.

<sup>35</sup> ANDRADE, Helenice Vieira de, *op. cit.*

<sup>36</sup> RODRIGUES FILHO, Saulo et al *op. cit.*

<sup>37</sup> NOBRE, Carlos Afonso et al. Vulnerabilidade, impactos e adaptação à mudança do clima. In: *Mudança do Clima. Cadernos NAE: nº 3*. Brasília: Núcleo de Assuntos Estratégicos da Presidência da República, Secretaria de Comunicação de Governo e Gestão Estratégica, 2005, p. 149.

In a more tangible form, it can be defined as the "adjustments and changes to be made in food production and agriculture, human health care systems, housing programs and infrastructures", with the objective that the coexistence of "societies with climate events resulting from global warming and climate change do not endanger human life".<sup>38</sup>

In this way, adaptation to climate change must be dealt with in a local way, in whose sphere its effects are felt more vigorously, being also the instance in which people, through the modification of "human settlements, agricultural practices and aspects related to ways of life and subsistence in different localities", have adapted to climatic variations in the course of history. However, this adaptation to climate change must always be supported by the policies of the higher hierarchical levels<sup>39</sup>.

Given this, it is questioned what the perspectives for the adoption of Public Policies that aim to adapt or mitigate climate change are.

According to Ricardo Ojima and Eduar do Marandola Jr, Public Mitigation Policies are only palliative, not being able to generate a change in the pattern of consumption, production or urban management. On the contrary, adaptation policies are capable, since they are long-term measures aimed at establishing a sustainable model<sup>40</sup>. Moreover, adaptation is linked to the idea of climate justice, by understanding that "the causes of climate change, its impacts and the adaptive

and response capacity are not equally distributed in the world".<sup>41</sup>

However, despite the definitive insertion of environmental issues in the agenda of the States, we observed both at national and international level, an accented adoption of public policies aimed at mitigation<sup>42</sup>.

It is in this context that Geographical Indications emerge, as an appropriate instrument for the implementation of public adaptation policies. This intellectual property asset, by valuing the production of agricultural products and services, enables the insertion of the dynamics of sustainability in the production systems and in the environment, in addition to allowing a socio-economic, cultural and ecosystem preservation development in their regions of origin<sup>43</sup>.

In this way, Geographical Indications, understood as products or services of certified origin, establish high standards of quality and origin, allow sustainable practices to be introduced within the mode of production and consumption, in order to enable policies to combat climate change to be addressed, from a local perspective, with the preservation of economic development and regional cultures.

Added to this, there is the fact that they are consolidated products and of recognized history, allowing public policies aimed at them to be long-term and more likely to establish a sustainable model and climate justice.

Corroborating these assertions, the IPCC's Sixth Assessment Report evidences, in its summary for public policy promoters, that viability options for adapting to climate change include "strengthening local and regional food systems and community-based adaptation, improving lives and livelihoods,

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<sup>38</sup>MARTINS, Rafael D'Almeida. Equidade na adaptação às mudanças climáticas. *Política & Sociedade*; Florianópolis Vol. 10, Ed. 19, 2011, p. 336.

<sup>39</sup> *Idem*. Governança climática nas cidades: reduzindo vulnerabilidades e aumentando resiliência. *Revista Geográfica Acadêmica*, (UFG), v. 4, p. 5-18, 2010. Disponível em:<<http://www.http://pt.slideshare.net/martinsrafael/governanca-climatica-nas-cidades-reduzindo-vulnerabilidades-avertindo-resiliencia>. Acesso em 23 mar. 2022.

<sup>40</sup> OJIMA, R., MARANDOLA Jr., E. Indicadores e políticas públicas de adaptação às mudanças climáticas: vulnerabilidade, população e urbanização. *Brazilian Journal of Environmental Sciences (Online)*, (18), 16-24, 2010. Disponível em: [http://rbciamb.com.br/index.php/Publicacoes\\_RBCIAMB/article/view/364](http://rbciamb.com.br/index.php/Publicacoes_RBCIAMB/article/view/364) MORE CITATION FORMATS. Acesso em: 23 mar. 2022.

<sup>41</sup> RODRIGUES FILHO, Saulo et al., *op. cit*, p. 83.

<sup>42</sup> *Ibid.*, pp. 82-84.

<sup>43</sup> YOKOBATAKE, Kazuo Leonardo Almeida; LOPES, Keny Samejima Mascarenhas; PINHEIRO, Rafael Silvio Bonilha. DENOMINAÇÃO DE ORIGEM E INDICAÇÃO GEOGRÁFICA DE PRODUTOS AGRÍCOLAS. IX Fórum Ambiental da Alta Paulista, v. 9, n. 7, 2013, p. 70-79.

particularly of marginalized and low-income (high-confidence) groups.<sup>44</sup>

The report also provides for effective adaptation solutions, coupled with public policies that support "cultivar improvements, agroforestry, community-based adaptation, agricultural and landscape diversification, and urban agriculture."<sup>45</sup>

<sup>44</sup> IPCC, 2022: Summary for Policymakers [H.-O. Pörtner, D.C. Roberts, E.S. Poloczanska, K. Mintenbeck, M. Tignor, A. Alegría, M. Craig, S. Langsdorf, S. Löschke, V. Möller, A. Okem (eds.)]. In: Climate Change 2022: Impacts, Adaptation, and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [H.-O. Pörtner, D.C. Roberts, M. Tignor, E.S. Poloczanska, K. Mintenbeck, A. Alegría, M. Craig, S. Langsdorf, S. Löschke, V. Möller, A. Okem, B. Rama (eds.)]. Cambridge University Press, pp. 23-25. "Considering climate change impacts and risks in the design and planning of urban and rural settlements and infrastructure is critical for resilience and enhancing human well-being (high confidence). The urgent provision of basic services, infrastructure, livelihood diversification and employment, strengthening of local and regional food systems and community-based adaptation enhance lives and livelihoods, particularly of low-income and marginalised groups (high confidence). Inclusive, integrated and long-term planning at local, municipal, sub-national and national scales, together with effective regulation and monitoring systems and financial and technological resources and capabilities foster urban and rural system transition (high confidence). Effective partnerships between governments, civil society, and private sector organizations, across scales provide infrastructure and services in ways that enhance the adaptive capacity of vulnerable people".

<sup>45</sup> *Ibidem*. Effective adaptation options, together with supportive public policies enhance food availability and stability and reduce climate risk for food systems while increasing their sustainability (medium confidence). Effective options include cultivar improvements, agroforestry, community-based adaptation, farm and landscape diversification, and urban agriculture (high confidence). Institutional feasibility, adaptation limits of crops and cost effectiveness also influence the effectiveness of the adaptation options (limited evidence, medium agreement). Agroecological principles and practices, ecosystem-based management in fisheries and aquaculture, and other approaches that work with natural processes support food security, nutrition, health and well-being, livelihoods and biodiversity, sustainability and ecosystem services (high confidence). These services include pest control, pollination, buffering of temperature extremes, and carbon sequestration and storage (high confidence). Trade-offs and barriers associated with such approaches include costs of establishment, access to inputs and viable markets, new knowledge and management (high confidence) and their potential effectiveness varies by socio-economic context, ecosystem zone, species combinations and

In addition, public policies should include "agroecological principles and practices, a management based on fishing and aquaculture ecosystems", and should also be guided by other approaches that work with natural processes, as they help and maintain security, nutrition, health and well-being, livelihoods and biodiversity, sustainability and ecosystem services<sup>46</sup>.

Thus, we verified that solutions to adapt to climate change must be developed on guidelines that privilege the food systems; in products or services that convey trust and have quality and safety, that is, certificates; observe the regional and local mode of production; protect biodiversity and be sustainable.

As seen, Public Policies that assist in adapting to climate change are also developed within the scope of Geographical Indications.

## V. THE ROLE PLAYED BY GI IN THE NATURAL RESOURCES GOVERNANCE PROCESS

At this point, we will address how GI can stand out as an important intellectual property asset that effectively participates in the governance of natural resources.

But what, especially, is this governance about? By initial understanding, it is stated that it relates to the concept of collaboration. It is, in essence, the formation of collaborative networks, which unite different sectors and actors, such as the Market, the State and the Civil Society, in order to achieve objectives that are common to all<sup>47</sup>.

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institutional support (medium confidence). Integrated, multi-sectoral solutions that address social inequities and differentiate responses based on climate risk and local situation will enhance food security and nutrition (high confidence). Adaptation strategies which reduce food loss and waste or support balanced diets<sup>33</sup> (as described in the IPCC Special Report on Climate Change and Land) contribute to nutrition, health, biodiversity and other environmental benefits (high confidence).

<sup>46</sup> *Ibidem*.

<sup>47</sup> KAPUCU, N. ; YULDASHEV, F. ; BAKIEY, E. Collaborative Public Management and Collaborative Governance : Conceptual Similarities and Differences. European Journal of Economic and Political Studies, 2(1), 2009, p.39-60

In the 1990s, the concepts of "collaborative public administration", "network administration" and "new public administration" emerged, demonstrating a change of course in the way of administering the public good. With this, the importance of collective decision-making is highlighted, removing the public administration from the solitary task of managing the State and transitioning to a collaborative model<sup>48</sup>.

Kapucu, Yuldashev and Bakiev go further and propose an even broader concept than just collaborative management. For them, collaborative governance aims at the participation of citizens, through mechanisms and institutions, of social problems, in a decentralized and non-hierarchical way, and also counting on partnership and e-governance projects<sup>49</sup>.

It would be, therefore, the union of several social actors or "stakeholders" (social actors of interest) in the process of discussion and decision-making. According to Ribeiro, "it is about building an institutional system of cooperative actions between Levels of Government and between these and the actors of the Civil Society and the Market."<sup>50</sup>

Moreover, the evolution of society and the intense participation, as said, of a multiplicity of actors, in the various sectors of life, make it almost impossible for governments to continue to play a primary role in the decision-making process, exempted from a corporate, territorial, urban, digital, environmental governance, among others<sup>51</sup>.

Thus, the concept of governance today, according to Ralf-Eckhard Türke, adapts perfectly to the complexity, dynamism and diversity of the

<sup>48</sup> *Ibidem*.

<sup>49</sup> *Ibidem*.

<sup>50</sup> RIBEIRO, Luiz Cesar Queiróz. Metrópoles, Reforma Urbana e Desenvolvimento Nacional. Sociedade e Estado, 2007, p. 26. Disponível em: <https://silo.tips/download/metropoles-reforma-urbana-e-desenvolvimento-nacional-lui-z-cesar-queiroz-ribeiro>. Acesso em: 19 abr 2022.

<sup>51</sup> GATTO, Deividson Brito; CLAUZET, Mariana; LUSTOSA, Maria Cecília. Governança Ambiental e Indicação Geográfica: O Caso da Denominação de Origem Manguezais das Alagoas. DRd – Desenvolvimento Regional em debate (ISSN 2237-9029) v. 9, Ed. esp. 2, p. 229-247, dez. 2019, p. 231.

modern society, in which social conditions are complex and multivariate.<sup>52</sup>

With regard specifically to Environmental Governance, which is the institute in which this work is specifically inserted, the concept follows the same pattern. In this way, the complexity of environmental problems makes the decision-making processes in relation to them demand greater coordination, which brings together not only the State, but also the whole society<sup>53</sup>.

Maria Carmen Lemos and Arun Agrawal ensure that the term Environmental Governance refers to the set of processes, mechanisms and organizations, through which political actors influence environmental actions and results. They also affirm that governance is the same as government, but the result of joint actions between states, communities, companies and NGOs<sup>54</sup>.

In addition, international agreements, national policies and their legislation, local decision-making structures, transnational institutions and

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<sup>52</sup> TÜRKE, R. Governance : systemic foundation and framework. Berlin : Springer, 2008, p. 1. 'Complexity', 'Dynamics', and 'Diversity' are omnipresent in today's discourse on governance. They refer to the fact that social conditions in modern societies are perceived as multi-layered and complicated. Social issues are being addressed by multiple actors ; governments are not necessarily playing a primary role anymore. A multiplicity of actors is involved, expressing individual interests yet having unequal capacities to exert influence. Resolutions for governing issues are the result of various interacting factors that are rarely wholly known. Knowledge, experiences, and interests are dispersed over many actors constantly changing their roles and relationships. Actor dependencies and constellations increasingly differ from global to local and from sector to sector. Diversity cumulates as these processes gain speed as well as intensity.

<sup>53</sup> MOURA, A. M. M. Governança ambiental no Brasil: instituições, atores e políticas públicas. Brasília: Ipea, 2016. Disponível em: [https://www.ipea.gov.br/portal/images/stories/PDFs/livros/livros/160719\\_governanca\\_ambiental.pdf](https://www.ipea.gov.br/portal/images/stories/PDFs/livros/livros/160719_governanca_ambiental.pdf). Acesso em: 16 abr 2022.

<sup>54</sup> LEMOS, M. C. ; AGRAWAL, A. Environmental Governance. Annual Review of Environment and Resources, 31(1), 2006, p. 297–325, p. 298-299

environmental NGOs are part of the Environmental Governance process<sup>55</sup>.

Therefore, for Environmental Governance to be effective, there is no need for only State institutions to be involved. Consumers, corporations and non-governmental organizations can and should also exercise power and authority over policy-making and decision-making processes on environmental issues. In this process of reformulation of Environmental Governance, both multinational institutions and the emergence of new actors on a local scale favor the development of environmental decisions<sup>56</sup>.

However, says Albert Weale that governments continue to maintain their importance for environmental protection, since they meet the so-called vital conditions for there to be a proper governance of biodiversity, to implement sustainability and to get closer to environmental goals<sup>57</sup>.

Policies aimed at the management of natural resources perform two important functions. The first refers to the strategic role of promoting positive results through its use and the second is to reduce negative impacts on the biodiversity<sup>58</sup>.

<sup>55</sup> *Ibidem*. "More specifically, we use "environmental governance" to refer to the set of regulatory processes, mechanisms and organizations through which political actors influence environmental actions and outcomes. Governance is not the same as government. It includes the actions of the state and, in addition, encompasses actors such as communities, businesses, and NGOs. Key to different forms of environmental governance are the politicoeconomic relationships that institutions embody and how these relationships shape identities, actions, and outcomes (4–6). International accords, national policies and legislation, local decision-making structures, transnational institutions, and environmental NGOs are all examples of the forms through which environmental governance takes place".

<sup>56</sup> LIVERMAN, Diana. Who governs, at what scale, and at what price? Geography, environmental governance, and the commodification of nature. *Ann. Assoc. Am. Geogr.*, v. 94, 2004, p. 734–738, p. 735.

<sup>57</sup> WEALE, A. Governance, government and the pursuit of sustainability. In: ADGER, W.; JORDAN, A. (Eds.). *Governing Sustainability*. Cambridge : Cambridge University Press, 2009, p. 55-75.

<sup>58</sup> GATTO, Deividson Brito ; CLAUZET, Mariana ; LUSTOSA, Maria Cecilia, *op. cit.*, p. 233.

As stated in previous points, Biodiversity has "intrinsic value of biological diversity and of the ecological, genetic, social, economic, scientific, educational, cultural, recreational and aesthetic values of the biological diversity and its components", as stated by the Convention on Biological Diversity itself, in its preamble<sup>59</sup>. However, countries such as Brazil, which are rich in biodiversity, do not have many examples of success in the commercial use of active ingredients that are linked to it<sup>60</sup>.

In this same section, Carlos A. Joly *et tal* affirms that development of products linked to biodiversity should be a vocation for the Brazilian, maintaining, however, a role of mere exporter of raw material. In the same vein, they state that the "added value to the products from the Brazilian biodiversity is still very low, since they are used and marketed in their raw form".<sup>61</sup>

How to change this reality? How to add value to biodiversity and enable this wealth to effectively generate more opportunities? The answer lies in the development of Environmental Governance.

The exclusivity, attributed to governments, in the organization and implementation of decisions in this sector has not been effective, to the extent that new problems linked to the economy, society, but mainly to the environment, require, as said, a joint networked response. In Brazil, more specifically, Environmental Governance is very poorly structured<sup>62</sup>.

There is no other alternative, other than the entry of other non-state actors, who ally themselves with the States, so that new techniques of

<sup>59</sup> BRAZIL. Decree No. 2,519, of March 16, 1998. Promulgates the Convention on Biological Diversity, signed in Rio de Janeiro on June 5, 1992. Available at : [http://www.planalto.gov.br/ccivil\\_03/decreto/D2519.htm](http://www.planalto.gov.br/ccivil_03/decreto/D2519.htm). Accessed: 20 Apr 2022.

<sup>60</sup> GATTO, Deividson Brito; CLAUZET, Mariana; LUSTOSA, Maria Cecilia, *op. cit.*, p. 233.

<sup>61</sup> JOLY, C. A.; ALHADDAD, C. F. B.; VERDADE, L. M.; OLIVEIRA; M. C.; BOLZANI, V. S.; BERLINCK, R. G. S. Diagnóstico da pesquisa em biodiversidade no Brasil. *Revista USP*, v. 89, 2011, p. 114-133, p. 126.

<sup>62</sup> BREDARIOL, T.; VINHA, V. Instituições e governança ambiental: uma revisão teórica. *Revista Iberoamericana de Economía Ecológica*, v. 24, 2015, p. 153-162, p. 154.

command and control of the biodiversity are implemented, thus exercising a decentralized response<sup>63</sup>.

In this way, the construction of systems that are multicenter and hybrid bring great importance to "local agendas of sustainable development and achievement of good Environmental Governance".<sup>64</sup> Thus, the ultimate goal of Environmental Governance, according to Nathan J. Bennett and Terre Satterfield, is for it to be robust, that is, legitimate, connected, and polycentric.<sup>65</sup>

It is at this very point that Geographical Indications are inserted, insofar as they are goods or services that are produced, extracted or manufactured at a local level, that use raw material from local biodiversity, through local communities, and that collaborate with social and economic development also at the local and/or regional level. Thus, they must participate, together with other state and non-state actors, in the decision-making process and environmental organization.

Geographical Indications are embodied, therefore, in the possibility of adding value to natural resources, through the commercialization of products or services, and not only of raw material.

To analyze this contribution, Maria Carmen Lemos and Arun Agrawal, from the University of Michigan, in the United States, observed some trends, through four themes, that corroborate the roles of communities, State and Market, in the process of Environmental Governance, focused, more closely, on the importance of Geographical Indications.

The analysis begins with the theme of Globalization and Environmental Governance.

The authors claim that Globalization interconnects the world. However, in regard to the

<sup>63</sup> GATTO, Deividson Brito; CLAUZET, Mariana; LUSTOSA, Maria Cecilia, *op. cit.*, p. 234.

<sup>64</sup> *Ibid.*

<sup>65</sup> BENNETT, N.J.; SATTERFIELD, T. Environmental Governance : A practical framework to guide design, evaluation, and analysis. *Conservation Letters*, 2018, p. 1-13, p. 9.

economy, this movement profoundly impacts environmental processes at all levels – local, regional, national and global and such a context, that is, produces positive and negative consequences for the environment.

From the negative point of view, the interconnection and interdependence between markets can lead to the intensification of the use and depletion of natural resources, given the increase in demand. As a consequence, more waste can be released into nature.

From the positive point of view, there can be a greater spread of good environmental policy initiatives, thus contributing to the development of a new Environmental Governance regime, through institutions and organizations. As an example, the authors cite that "more efficient use and transfer of technology, freer flow of information, and new institutional arrangements based on public-private partnerships have the potential to contribute positively to Environmental Governance".<sup>66</sup>

Through the positive perception of globalization, Geographical Indications emerge as a commercial asset of goods and services, which are specific to a given territory, thus being able to promote the conservation of natural resources and, even more, cause a decrease in the negative points that permeate the so-called globalizing movement<sup>67</sup>.

Another important topic is about individual and market instruments (*Market- and Agent-Focused Instruments*). As explained earlier, the new governance model reduces the participation of the State in the process of organization and

<sup>66</sup> LEMOS, M. C. ; AGRAWAL, A., *op. cit.*, p. 300. "Observers of globalization also argue in favor of its potentially positive impacts on economic equity and environmental standards through a virtuous circle and the diffusion of positive environmental policy initiatives. Clearly, the globalization of environmental problems has contributed to the creation and development of new global regimes, institutions, and organizations dedicated to environmental governance. More efficient use and transfer of technology, freer flow of information, and novel institutional arrangements based on public-private partnerships have the potential to contribute positively to environmental governance".

<sup>67</sup> GATTO, Deividson Brito; CLAUZET, Mariana; LUSTOSA, Maria Cecilia, *op. cit.*, p. 235.

decision-making regarding the environment, causing non-State actors to participate more actively, thus stimulating new market and individual mechanisms.

There is no longer dependence on organizational and hierarchical control, what is intended now is to "mobilize individual incentives in favor of environmentally positive results, through a careful calculation and modulation of costs and benefits associated with specific environmental strategies." As an example, one can cite ecotaxes and subsidies based, on a combination of regulation and market incentives, voluntary agreements, certification, eco-labeling, and informational systems<sup>68</sup>.

It is in this context that Geographical Indications come in, as a market instrument, since they constitute products and services that have a certificate of origin, that obey quality standards and have as one of their functions the protection of the Environment<sup>69</sup>.

To Lemos and Agrawal, there would be a superiority in relation to these instruments, because of their economic efficiency in implementation. However, for them to reach the maximum of their potential, in benefit of the environment, an institutional leadership of the State is necessary<sup>70</sup>. Thus, according to Deividson Brito Gatto, Mariana Clauzet and Maria Cecília

<sup>68</sup> LEMOS, M. C.; AGRAWAL, A., *op. cit.*, pp. 305-307. "Primary sector commodities such as coffee, timber, and energy provide familiar examples of ecolabeling and certification schemes (81-83). Both ecolabeling and certification schemes are forms of voluntary agreements wherein producers agree to meet environmental standards related to production and marketing activities. Such standards may be the result of work by third party actors, an industry association, or even the government. The operation of these schemes hinges upon the idea that consumers are willing to express their preferences related to cleaner energy or greener products through their choices in markets and through a willingness to pay higher prices. Perceptions about environment-friendly preferences among consumers have led many corporations to adopt certification mechanisms and advertising campaigns that represent both real and cosmetic shifts in how corporate actors govern their environmental actions".

<sup>69</sup> This function will be analyzed in more detail in the next chapter.

<sup>70</sup> LEMOS, M. C.; AGRAWAL, A., *op. cit.*, p. 305-308.

Lustosa, Geographical Indications in Brazil are an example of "institutional development of protection of this registry with positive repercussions in the regional economy".<sup>71</sup>

Decentralized *Environmental Governance* is another hot topic. According to Lemos and Agrawal, it is at a subnational level that most of the important changes occur with regard to Environmental Governance. Previously, it was thought that maintaining centrality in the processes of using natural resources avoided market failures and the negative externalities they were associated with.

However, facts such as disbelief in the actions of the State – up to now considered the reliable guardian of nature – the fall of the economies that depended on a centralized state, the pressure exerted by the greater integration of economic activities across national borders, the decline of international aid, and the fiscal crises in many developing countries emphasized the ability of communities and other smaller-scale social formations to manage natural resources<sup>72</sup>.

Given this, Geographical Indications emerge as an important intellectual property asset, since its own constitution is based on the request for registration by subnational actors, which demonstrates an autonomy in relation to the former centralizing actor<sup>73</sup>.

Finally, the cross-sectional scale (*Cross-Scale Environmental Governance*), which refers to the multi-cited complexity of environmental problems, which, due to, has multiscale - spatial, sociopolitical and temporal- characteristics.

<sup>71</sup> GATTO, Deividson Brito; CLAUZET, Mariana; LUSTOSA, Maria Cecilia, *op. cit.*, p. 233.

<sup>72</sup> LEMOS, M. C.; AGRAWAL, A., *op. cit.*, p. 302-305. "Three distinct justifications for decentralization of environmental governance are available. It can produce greater efficiencies because of competition among subnational units; it can bring decision making closer to those affected by governance, thereby promoting higher participation and accountability; and finally, it can help decision makers take advantage of more precise time- and place-specific knowledge about natural resources".

<sup>73</sup> GATTO, Deividson Brito; CLAUZET, Mariana; LUSTOSA, Maria Cecilia, *op. cit.*, p. 236.

Initially, with regard to space, it is known that problems related to the environment have a ubiquitous nature, that is, they do not know political borders. Thus, environmental disasters that occur in Brazil, for example, can be felt all over the planet. Therefore, it may be a dissociation in the causes and consequences of environmental problems.

Socially, in second place, "cross-scale environmental problems affect and are affected by institutionalized decision-making at the local, subnational, national, and transnational levels." In this way, multilevel governance mechanisms neutralize this fragmentation.

Regarding the temporal aspect, in turn, Lemos and Agrawal highlight two major obstacles. One is what they call "*contemporism*," which refers to the "tendency to disregard the well-being of future generations and believe in the power of technology and technological change to take care of environmental degradation and scarcity," and the uncertainties about the long-term causes and effects in the environment<sup>74</sup>.<sup>75</sup>

Thus, in relation to Geographical Indications, this trend also applies, to the extent that it has the power to stimulate non-state actors to be interested in the conservation of the environment, since it is who confers value to goods and services. Thus, for this property asset to exist, natural factors must remain constant over time<sup>76</sup>.

<sup>74</sup> LEMOS, M. C.; AGRAWAL, A., *op. cit.*, p. 309. Contempocentrism, in part a consequence of high market discount rates, is the tendency to disregard the welfare of future generations and believe in the power of technology and technological change to take care of environmental degradation and scarcities. It means humans are likely to "spend" the environment now and discount the future heavily (33, 104). Coupled with the seeming high costs of action that will shift existing trajectories of economic development, the uncertainty surrounding the science of causes and effects of environmental degradation often leads to a "do nothing until we know more" attitude—strongly reflected in the contemporary policy positions of some nations that are the largest emitters of greenhouse gases. Many of the impacts of global climate change on humans and ecosystems are still undetermined, and the design and implementation of policies necessary to reduce emissions are both economically and politically quite costly.

<sup>75</sup> *Ibid.*, pp. 308-309.

Well. The four trends described highlight the reconfiguration of Environmental Governance, which provides the emergence of alternative institutional forms, notably those that recognize the "social roles played by communities, states and markets, and/or in the result of the existing relations between these actors." It is in this field that Geographical Indications emerge, as an important asset not only of intellectual property, but also of Environment.

## VI. CONCLUSIONS

Thus, they possess the aforementioned intellectual property right – Geographical Indications, the ability to enable public policies to protect the Environment to be practiced. However, as described, public mitigation policies are palliative, not having the capacity to generate a change in the pattern of consumption, production or urban management.

Contrary to what happens with mitigation policies, adaptation policies are more effective, since they are measures that tend to observe a long-term perspective, thus aiming to establish a sustainable model. In addition, adaptive policies are linked to the idea of climate justice, since it identifies which really the causes of climate change are, as well as their impacts, adaptive and response capacity, not being equally distributed in the world.

Geographical Indications are configured as a suitable and appropriate instrument in the implementation of public policies of adaptation, because, in addition to valuing the production of agricultural products and services, they also enable the insertion of the dynamics of sustainability in production systems and the environment, also allowing for a socio-economic, cultural and ecosystem preservation development, in their regions of origin.

That said, Geographical Indications allow the introduction of sustainable practices within the mode of production and consumption, aiming to

<sup>76</sup> GATTO, Deividson Brito; CLAUZET, Mariana; LUSTOSA, Maria Cecilia, *op. cit.*, p. 236.

enable policies which combat climate change to be approached from a local perspective, with the preservation of economic development and regional cultures.

Added to this is the fact that they are consolidated products of recognized history, allowing public policies aimed at them to be long-term and more likely to establish a sustainable model and climate justice. Therefore, public policies that help to adapt to climate change are also developed within the scope of Geographical Indications.

As for the issue of Environmental Governance, which, in order to be effective, requires, in addition to the State institutions for being involved, consumers, corporations and non-governmental organizations can and should also exercise power and authority over the processes of policy formation and decision-making in environmental issues.

Thus, in the process of reformulating Environmental Governance, both multinational institutions and the emergence of new actors on a local scale favor the development of environmental decisions. In this way, the construction of systems that are multicenter and hybrid ends up by bringing great importance to the local guidelines for sustainable development, which legitimizes, connects and further strengthens the system.

In this way, Geographical Indications are goods or services produced, extracted or manufactured at a local level, using raw material from the local biodiversity, through local communities, and collaborating with the social and economic development also at the local and/or regional level. Thus, they must participate, together with other state and non-state actors, in the decision-making process and environmental organization.

Added to this agenda is the possibility that Geographical Indications have to add value to natural resources, through the commercialization of products or services, and not only of the raw material.

With this desideratum, some justifications stand out and allow Geographical Indications to appear as an important instrument of Environmental Governance. The first refers to a commercial asset of goods and services, which are specific to a given territory, thus being able to promote the conservation of natural resources and, even more, cause a decrease in the negative points that permeate the so-called globalizing movement. The second stands out as a market instrument, since they constitute products and services that have a certificate of origin, that obey to quality standards and that have as one of their functions the protection of the environment.

According to the third justification, Geographical Indications emerge as an important intellectual property asset, since their own constitution is based on the request for registration by subnational actors, which demonstrates an autonomy in relation to the former centralizing actor. Finally, they have the power to encourage non-state actors to take interest in the conservation of the environment, since it is the environment that gives value to goods and services. Thus, for this property asset to exist, natural factors must remain constant over time.

Therefore, Geographical Indications can appear as an instrument of environmental public policy and in the governance of natural resources.

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