

Biodiversity Law: Weaknesses in Fighting Biopiracy of Indigenous Traditional Knowledge

Hermison Ricardo Bioni¹, Leonice Domingos dos Santos Cintra Lima², Denise Regina Costa Aguiar³, Marco Antonio de Andrade Belo⁴

¹Universidade Brasil, Programa de Pós-graduação em Ciências Ambientais, São Paulo/SP
ricobionioab[at]gmail.com

²Universidade Brasil, Programa de Pós-graduação em Ciências Ambientais, Fernandópolis/SP
leonice.lima[at]universidadebrasil.edu.br

³Universidade Brasil, Programa de Pós-graduação em Ciências Ambientais, São Paulo/SP.
denise.aguiar[at]universidadebrasil.edu.br

⁴Universidade Brasil, Programa de Pós-graduação em Ciências Ambientais, Descalvado/SP.
marco.belo[at]universidadebrasil.edu.br

Abstract: *Biopiracy is the illegal practice of appropriating biological resources and associated traditional knowledge, which causes economic and environmental damage to the country. In this context, this research aims to analyze the Brazilian Biodiversity Law, which provides guides for access to genetic heritage and associated traditional knowledge of indigenous communities, highlighting the effects on the protection of intellectual property of these peoples in the face of biopiracy. The descriptive - deductive method was used to understand the main controversial points of the law. The study is focused in emphasis on current legislation. Thus, the research concludes that the Brazilian Biodiversity Law do not offer the necessary security to guarantee the protection of indigenous communities in the following aspects: it did not typify the crime of biopiracy; created confusing rules on benefit - sharing; established a system of identification of traditional knowledge, determined a gradation of administrative sanctions. A reform of Law 13.123/15 seems to be necessary to achieve the intended protection.*

Keywords: Associated Traditional Knowledge. Indigenous Communities. Genetic heritage

1. Introduction

Biopiracy can be understood as the illegal use of natural resources and traditional knowledge, causing economic and environmental damage to the country, such as loss of biodiversity, ecological imbalance, weakening of indigenous cultures. The word Biopiracy does not find a place in Brazilian legislation, not even in any international legal instrument. It is, in fact, a doctrinal concept referring to the unauthorized appropriation of genetic heritage, as well as traditional knowledge associated with biodiversity. (PANCHERI, p.453).

In order to protect traditional and indigenous peoples in the world, The Convention on Biological Diversity (CBD) ¹ emerges as an indispensable tool for the conservation of biodiversity and protection of indigenous communities, regulating the access to these resources and knowledge, without underestimating economic issues, trying to create a symbiosis in order to achieve sustainable development. On the other hand, the Nagoya Protocol² instrumentalizes the means of access and the sharing of benefits supported by the CBD.

However, Brazil ratified the Nagoya Protocol only in 2020. Thus, the public policies proposed in the mold of current need changes to adapt to international protective standards. In Brazil, the Biodiversity Law regulates the access to the genetic heritage and associated traditional knowledge of indigenous communities, as well as protecting the sharing of benefits arising from the appropriation of this knowledge.

The new legal framework for biodiversity, constituted by Law 13.123/15, has the mission of promoting the sustainable use of Brazilian biodiversity and bringing legal security to its users. This law provides for access to genetic heritage, protection and access to associated traditional knowledge, and benefit sharing for the conservation and sustainable use of biodiversity. The sustainable use of biodiversity is now considered the basis of the bio economy. (FIGUEIROA et al, 2019)

This research analyzes Brazilian Biodiversity Law (13.123/15), seeking to identify possible failures in the protection of biological resources and associated traditional knowledge of indigenous communities.

2. Materials and Methods

This is a review study supported by legislation and scientific studies on biopiracy and indigenous peoples. The search was carried out on Google Academic platforms and on the Brazilian Digital Library of Theses and Dissertations (BDTD) with the key words: biopiracy, appropriation of indigenous knowledge, Biodiversity Law. Initially, articles were selected based on titles and abstracts. Those dealing

¹International Treaty signed during the United Nations Conference on Environment and Development in the city of Rio de Janeiro, between June 5 and 14, 1992.

²Supplementary International Agreement to the CBD, adopted on October 29, 2010 in the city of Nagoya.

with: a) pedagogical issues were discarded; b) regional themes; c) agroforestry systems; d) themes about biology and history. Seven articles were used for the review, covering the period from 2007 to 2019 and relevant legislation from 1988 to 2020.

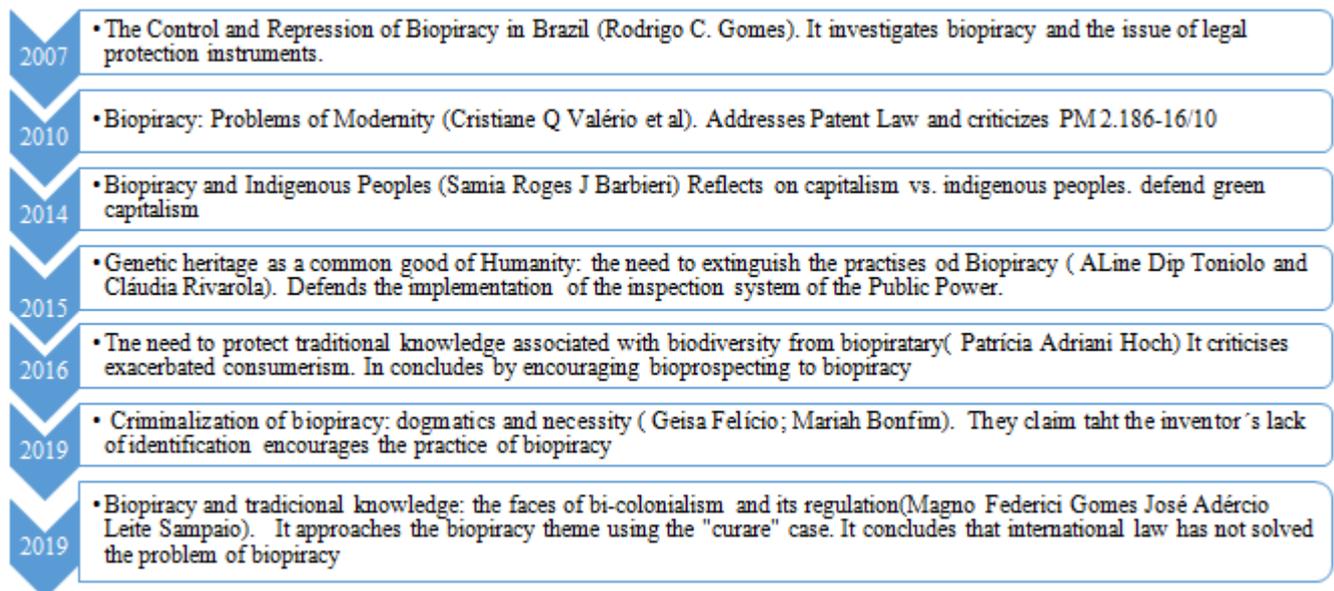


Figure 1: Synoptic of Selected Scientific Publications

Source: written by the authors (2021)

As a legal basis for the selection of fundamental elements for the analysis of the Law under study, legal statutes, conventions and international agreements were selected, of which Brazil is a signatory, and were organized by way of presentation, in chronological order in Figure 2.

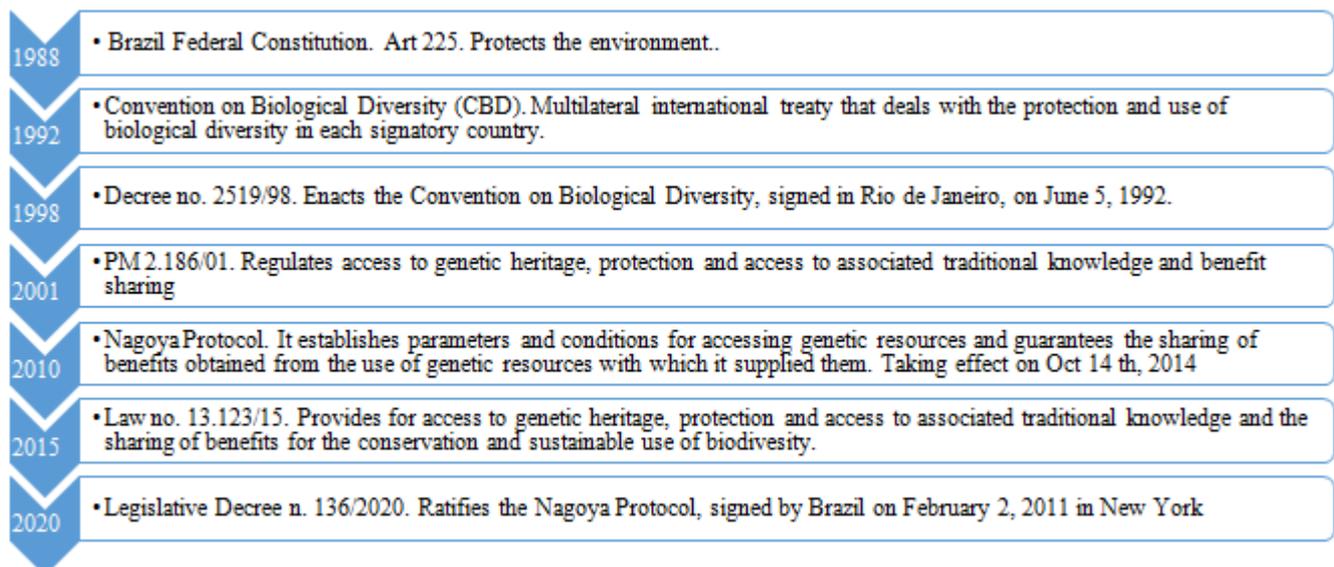


Figure 2: Evolutionary Synoptic of Legislation, Agreements and Conventions

Source: written by the authors (2021)

3. Results and Discussion

The practice of biopiracy of indigenous knowledge seems to take shape due to the weaknesses of the Brazilian Biodiversity Law (13.123/15) and the abundance of Brazilian biodiversity.

Initially, it should be considered that biopiracy is a problem that affects not only the Sovereign State as a protector and regulator of access to genetic heritage or traditional knowledge. (RUBIN, 2018)

Biopiracy threatens the cultural heritage of nations with large companies having exclusive control over this knowledge and technology, without legally having the permission of the communities that discovered them or of the countries of where they come from. It directly affects the culture of peoples, since once a product derived from this cultural knowledge is patented, populations can no longer exploit it. (FELÍCIO, 2019, p.31)

The lack of legislation that defines the rules for the use and collection of Brazilian natural resources facilitates the action

of biopirates who, when punished, receive the penalties provided for in Crimes against fauna and flora, which are insufficient to inhibit the crime of biopiracy. (VALÉRIO, 2010)

The Convention on Biological Biodiversity CBD, an international treaty, to which Brazil is a signatory, sought to regulate issues inherent to the sovereignty of countries, the conservation of biological biodiversity, sustainable development, and the fair and equitable distribution derived from the use of natural resources, in particular guaranteeing the rights of traditional communities. Although it is imperative to recognize that the CBD emerges as an international instrument that fights against biopiracy, it is clear that it did not manage to determine how the protection of natural resources and associated traditional knowledge would be, perhaps how the benefits obtained from its appropriation would be shared.

Brazil was one of the first countries in the world to adopt national legislation to implement the principles of the CBD through the Provisional Measure 2.186 - 16/2001. Although it was created to regulate access to genetic resources and associated traditional knowledge, it had a series of gaps that did not provide the security it intended, such as: the MP could not distinguish between for-profit and non-profit research.

In 2015, was sanctioned the Biodiversity Law (13.123/15), which provides guides for access and benefit-sharing, obtained from genetic resources and associated traditional knowledge, in an attempt to ensure the sustainable use of biodiversity and combat biopiracy.

Despite efforts to fill gaps of the provisional measure, the law left indigenous communities even more vulnerable to attacks by biopirates. Although the law has expanded the participation of the indigenous peoples in the Genetic Heritage Management Council (CGEN)³, did not guarantee their effective participation, since the culture and language of these peoples do not allow a real understanding of the themes addressed in the assemblies.

The Biodiversity Law seems to have retroacted in the protection of the indigenous peoples against economic exploration. When analyzing, for example, the art.8, § 3rd, a classification is created for the recognition of associated traditional knowledge: a) those that have already been identified in scientific publications; b) those registered in registers or databases; c) those that are properly described in cultural inventories.

Art.9, § 2nd shows that the obligation to obtain the prior and informed consent of the holders of knowledge is linked to the necessary identification of such knowledge, since if they are "not identified", the waiver is automatic.

Moreover, the Law 13.123/15 considers as valid the informed consent obtained from a simple signature in term, audiovisual recording of consent, among others. It was not observed that prior consent is the result of a long process that must guarantee the full participation of the affected communities. Therefore, the simple acceptance of a signed term may not reveal the true will of the contracting part, since it does not demonstrate that all doubts were clarified and the terms widely known for decision-making. A simple formal document, which can be obtained even non-verbally, does not protect indigenous and communities that will be exposed to biopiracy practices.

Another point to be highlighted is the confusion proposed by the law regarding the sharing of benefits. There seem to be many gaps regarding this division, especially in identifying which traditional community would be the real holder of a given knowledge, since this knowledge are transferred from one community to another over time.

Already in art.17, § 1st and 2nd, the law conditions the sharing of benefits exclusively to the manufacturer of the finished product or the producer of the reproductive material, making the indigenous community take the business risk. Besides that, the art.17, § 5th the exempts micro and small businesses from benefit sharing.

Finally, the administrative sanctions proposed by the Biodiversity Law appear to be ineffective. Criminal sanctions are unfeasible because, in Brazil, there is no typification of the crime of biopiracy. Concerning to civil sanctions, a gradation will take into account: the seriousness of the case, the offender's background, offender's recidivism and the economic situation of the party, which leads to a consider reduction of the penalties, encouraging the practice of biopiracy.

4. Final Considerations

Biopiracy is a problem that has to be faced. It must be considered that this practice not only appropriates from the elements of the biodiversity, but also the knowledge of the indigenous communities. With this practice, indigenous peoples end up losing control over their cultural heritage, compromising the sovereignty and identity of these peoples

Brazilian legislation seems to be weak and the public policies fail to protect the genetic and cultural heritage of indigenous communities. In this sense, Brazil only came to regulate the access and manipulation of genetic material and the traditional knowledge associated with them, through the Provisional Measure, which was later suppressed by Law 13.123/15, however, it creates rules that make protection difficult.

The law seems not to have followed the guidelines of the international treaties, since it brings many restrictions to the recognition of traditional knowledge and even more, creates a hierarchy of knowledge to be protected.

Furthermore, there is a weakening of norms that regulate the informed consent procedure, since the cultural peculiarities of indigenous communities are completely disregarded. The

³ Created through PM 2.186-16/01, It is the body responsible for granting authorizations for access to genetic heritage and associated traditional knowledge, upon prior authorization

procedures for obtaining the concession for the use of indigenous knowledge also are not protective, since the law accepts informal consent as valid. With regard to benefit sharing, the law creates classification rules for it to be carried out.

The study reveals that the administrative sanctions brought by the Brazilian Biodiversity Law do not prevent the practice of biopiracy. The research concludes that an urgent reform of the Brazilian Biodiversity Law is needed to make the protection of indigenous peoples effective.

5. Thanks

This research was carried out with the institutional support of the UNIESP through the granting of the Scholarship for Professor Training/Master's in Environmental Sciences, related to Support Program for Professor Degrees – PTDO, to which we express our thanks.

References

- [1] BARBIERI, Samia Roges Jordy. **Biopirataria e povos indígenas**. 1. Ed. São Paulo: Almedina, 2014. ISBN 978 - 85 - 63182 - 87 - 6
- [2] BASTOS JUNIOR, Luiz Magno Pinto. **A Convenção sobre Diversidade Biológica e os institutos de controle das atividades ilegais da bioprospecção**.
- [3] BRASIL. CONSTITUTION OF THE FEDERATIVE REPUBLIC OF BRAZIL – 1988. Poder Legislativo. Diário Oficial da União de 05/10/1988, P.1.
- [4] BRASIL. LAW Nº 13.123, DE 20 DE MAIO DE 2015. Poder Executivo. Diário Oficial da União de 21/05/2015, P.1.
- [5] BRASIL. Provisional Measure 2.186 - 16/2001. Poder Executivo. Diário Oficial da União de 24/08/2001, P.11.
- [6] BRITO, Ana Carolina Lucena Brito; POZZETTI, Valmir César. **Biodiversidade, conhecimentos tradicionais associados e repartição de benefícios**. Revista de Direitos Difusos, v.69 nº 1, 2018.
- [7] FELICIO, Geisa Maria Bomfim. **Criminalização da Biopirataria: dogmática e necessidade**. Universidade Estadual Paulista Júlio de Mesquita Filho. University of São Paulo. Faculty of Human and Social Sciences, 2019
- [8] FIGUEIROA, Ricardo Gomes et al. **Os impactos da Lei da Biodiversidade na Pesquisa**. E - ISSN 23126 - 8080. PIDCC, Year IX, Volume 01 nº 02, p.026 - 042 Aracaju, 2020
- [9] GOMES, Magno Frederici; SAMPAIO, José Adércio Leite. **Biopirataria e Conhecimentos Tradicionais: as faces do Bi colonialismo e sua Regulação**. v.16, nº 34. Veredas do Direito – Direito Ambiental e Desenvolvimento Sustentável. Dom Helder Câmara Superior School, PUC Minas and Faculdade Arnaldo Janssen, 2019
- [10] GOMES, Rodrigo Carneiro. **O Controle e a Repressão da Biopirataria no Brasil**. Jurisp Mineira, Belo Horizonte, a.58, nº 183, p.19 - 38m 2007.
- [11] HOCH, Patrícia Adriani. **A necessidade de proteção dos conhecimentos tradicionais associados à biodiversidade frente à biopirataria**. XII National Seminar. Social and Public Demands in Contemporary Society. II National Exhibition of Scientific Papers, 206. ISSN 2447 - 8229.
- [12] PANCHERI, Ivanira. **Biopirataria: Reflexões sobre um tipo penal**. Doctoral thesis presented to the Faculty of Law of the University of São Paulo, under the supervision of Prof. Incumbent Vincent Greco Filho. São Paulo, 2013.
- [13] RUBIM, Larissa Campos. **A LEI Nº 13.123/2015, O Combate da Biopirataria e os Direitos de Povos e Comunidades Tradicionais: Inquietações à Luz do Direito Internacional Ambiental sobre a Distribuição Equitativa de Benefícios**. Proceedings of the II Cycle of Ibero - American Lectures. ISBN 978 - 85 - 5722 - 112 - 3, 2018.
- [14] TONIOLO, Aline Dip; RIVAROLA, Claudia. **O patrimônio genético como um bem comum da humanidade: a necessidade de extinguir as práticas de biopirataria**. Revista Eletrônica Direito e Política, Stricto Sensu Graduate Program in Legal Science at UNIVALI, Itajaí, v.10, n.1, 2015 special edition. ISSN 1980 - 7791.
- [15] VALÉRIO, Cristiane Quebin et al. **A Biopirataria: problemas da modernidade**. Anais do VI Seminário de Pesquisa em Turismo do Mercosul. Saberes e fazeres no turismo: Interfaces. Universidade de Caxias do Sul/RS.2010.